

**MUNI UNIVERSITY**

**BIDDING DOCUMENT**

**FOR**

**FRAMEWORK CONTRACTS FOR SUPPLIES OR**

**SERVICES**

|  |  |
| --- | --- |
| Subject of Procurement: | **Supply of computers, printers, projectors, scanners, binding machines etc under Framework Contract (Re-advertised)** |
| Procurement Reference Number: | **MU/SPLS/2024-25/00015** |
| Procurement Method: | **Open Domestic Bidding** |
| Date of Issue: | **14th August, 2025** |

|  |  |
| --- | --- |
|  | **Muni University** |
| Office of the University Secretary  P.O. Box 725 Arua, Uganda  Tel: +256 476 420312/3/4;  Email: [pdu@muni.ac.ug](mailto:pdu@muni.ac.ug); Website: [www.muni.ac.ug](http://www.muni.ac.ug) |

**ABRIDGED BID NOTICE UNDER OPEN DOMESTIC BIDDING**

1. Muni University invites sealed bids from eligible bidders for:

|  |  |  |
| --- | --- | --- |
| ***No.*** | ***Procurement Reference No.*** | ***Subject of Procurement*** |
| *1.* | *MU/SPLS/2024-25/00015* | *Supply of**computers, printers, projectors, scanners, binding machines etc under framework*  *Contract* |

2. The Bidding document(s) shall be inspected and issued at **Muni University Procurement and Disposal Unit, Arua -Muni -Ocoko -Road, Arua Hill Division, P. O. Box 725, Arua**

3**.** The deadline for bid submission shall be at **11:00 am** on **5th September**, **2025.**

4. The detailed bid notice is available at the Entity’s website at [www.muni.ac.ug](http://www.muni.ac.ug).

Signature: ..........................................................

Name: Prof. Robert Kajobe

**Ag. UNIVERSITY SECRETARY/ ACCOUNTING OFFICER**

|  |  |
| --- | --- |
|  | **Muni University** |
| Office of the University Secretary  P.O. Box 725 Arua, Uganda  Tel: +256 476 420312/3/4; Fax: +256 476 420316  Email: [pdu@muni.ac.ug](mailto:pdu@muni.ac.ug); Website: [www.muni.ac.ug](http://www.muni.ac.ug) |

**BID NOTICE UNDER OPEN DOMESTIC BIDDING**

**SUPPLY OF COMPUTERS, PRINTERS, PROJECTORS, SCANNERS, BINDING MACHINES etc UNDER FRAMEWORK CONTRACT**

1. Muni University invites sealed bids from eligible bidders for:

|  |  |  |
| --- | --- | --- |
| ***No.*** | ***Procurement Reference No.*** | ***Subject of Procurement*** |
| *1.* | *MU/SPLS/2024-25/00015* | *Supply of computers, printers, projectors, scanners, binding machines etc under framework*  *Contract* |

1. Bidding will be conducted in accordance with the Open Domestic Bidding procedures contained in the Government of Uganda’s Public Procurement and Disposal of Public Assets Act 2003 and are open to all bidders.
2. Interested eligible bidders may obtain further information from Muni University and inspect the bidding document at the address at 7(a) below from 8:00 a.m. to 5:00p.m., on working days OR at the University website: [www.muni.ac.ug](http://www.muni.ac.ug).
3. The Bidding documents in English may be purchased by interested bidders on submission of a written application to the address at 7(a) below and upon payment of a non-refundable fee of **UGX 50,000 (Uganda Shillings fifty thousand only) for each framework contract item listed above**. The method of payment shall be by Bank through Muni University Zeepay portal: **https://payments.muni.ac.ug** and to print the payslip before proceeding to pay in any Bank.
4. Bids must be delivered to the address at 7(a) below at or before 11:00 am on Friday, 5th September, 2025. Late bids shall be rejected. Bids will be opened in the presence of the bidders’ representatives, who choose to attend at the address below at 7(b) at 11:30 am on 5th September, 2025.
5. There **shall be No** pre – bid meeting.
6. (a) Documents may be inspected, issued and delivered at:

**Muni University Procurement and Disposal Unit,**

**First Floor, Room 2.7, Administration block**

(b) Address of bid opening: **Muni University Board Room,**

**Ground Floor, Room 1.8, Administration block**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. The planned procurement schedule (subject to changes) is as follows:   |  |  | | --- | --- | | **Activity** | **Date** | | 1. Publish bid notice | 14th August, 2025 | | 1. Pre-bid meeting where applicable | *Not Applicable* | | 1. Bid closing date | 5th September, 2025 | | 1. Evaluation process | 8th September, 2025 – 19th September, 2025 | | 1. Display and communication of best evaluated bidder notice | *After clearance by the contracts committee* | | 1. Contract signature | *After expiry of at least 10 working days from display of the best evaluated bidder notice* *and Solicitor General’s approval*. | |

Note: Those who had applied and were successful need not to apply.

Prof. Robert Kajobe

**UNIVERSITY SECRETARY/ ACCOUNTING OFFICER**

**Standard Bidding Document**

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**Section 1. Instructions to Bidders**

**Part 1: Section 1. Instructions to Bidders**

**A General**

1. **Scope of Bid** 
   1. The Procuring and Disposing Entity indicated in the Bid Data Sheet (BDS), invites bids for the provision of Supplies or Services as specified in Section 6, Statement of Requirements. Bids are invited for an estimated quantity of Supplies or Services as specified in Section 6, Statement of Requirements, under a framework contract arrangement. The Instructions to Bidders should be read in conjunction with the BDS. The subject and procurement reference number, and number of lots of this Bidding Document are provided in the BDS.
   2. Throughout these Bidding Documents: (a) the term “in writing” means communicated in written form with proof of

receipt;

* + 1. if the context so requires, singular means plural and vice versa; and
    2. “day” means working day.

1. **Source of Funds** 
   1. The Procuring and Disposing Entity indicated in the BDS has an approved budget from Government funds towards the cost of the procurement named in the BDS. The Procuring and Disposing Entity intends to use these funds to place a contract for which these Bidding Documents are issued.
   2. Payments will be made directly by the Procuring and Disposing Entity for each calloff order and will be subject in all respects to the terms and conditions of the resulting contract placed by the Procuring and Disposing Entity.
2. **Corrupt Practices** 
   1. It is the Government of Uganda’s policy to require that Procuring and Disposing Entities, as well as Bidders and Providers observe the highest standards of ethics during procurement and the execution of contracts. In pursuit of this policy, the Government of Uganda represented by the Public Procurement and Disposal of Public Assets Authority (herein referred to as the Authority);
      1. defines, for the purposes of this provision, the terms set forth below as follows:
         1. “corrupt practice” includes the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
         2. “fraudulent practice” includes a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring and Disposing Entity, and includes collusive practices among Bidders prior to or after bid submission designed to establish bid prices at artificial, non competitive levels and to deprive the Procuring and Disposing Entity of the benefits of free and open competition;
      2. will reject a recommendation for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract;
      3. will suspend a Provider from engaging in any public procurement proceeding for a stated period of time, if it at any time determines that the Provider has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government contract.
   2. Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 3.2 and Sub-Clause 35.1 (a)(iii) of the General Conditions of Contract.
   3. In pursuit of the policy defined in Sub-Clause 3.1, the Procuring and Disposing Entity may terminate a contract for Supplies or Services if it at any time determines that corrupt or fraudulent practices were engaged in by representatives of the Procuring and Disposing Entity or of a Bidder or Provider during the procurement or the execution of that contract, without the Procuring and Disposing Entity having taken timely and appropriate action satisfactory to the Government to remedy the situation.
   4. In pursuit of the policy defined in Sub-clause 3.1, the Government of Uganda requires representatives of both the Procuring and Disposing Entities and of Bidders and Providers to adhere to the relevant codes of ethical conduct. The Code of Ethical Conduct for Bidders and Providers is available from the Authority and Bidders are required to indicate their acceptance of this Code through the declarations in the Bid Submission Sheet.
   5. Any communications between a Bidder and the Procuring and Disposing Entity related to matters of alleged fraud or corruption must be made in writing and addressed to the Accounting Officer of the Procuring and Disposing Entity.
3. **Eligible Bidders** 
   1. A Bidder, and all parties constituting the Bidder, shall meet the following criteria to be eligible to participate in public procurement:
      1. the bidder has the legal capacity to enter into a contract;
      2. the bidder is not:
         * 1. insolvent;
           2. in receivership;
           3. bankrupt; or
           4. being wound up
4. the bidder’s business activities have not been suspended;
5. the bidder is not the subject of legal proceedings for any of the

circumstances in (b); and

1. the bidder has fulfilled his or her obligations to pay taxes and social security

contributions.

* 1. A Bidder may be a natural person, private entity, government-owned entity, subject to ITB Sub-Clause 4.6, any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association, unless otherwise specified in the BDS, all parties shall be jointly and severally liable.
  2. A Bidder, and all parties constituting the Bidder including sub-contractors, shall have the nationality of an eligible country, in accordance with Section 5, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors for any part of the Contract including related services.
  3. A Bidder shall not have a conflict of interest. All Bidders found to be in conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if they:
     1. have controlling shareholders in common; or
     2. receive or have received any direct or indirect subsidy from any of them; or
     3. have the same legal representative for purposes of this bid; or
     4. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Procuring and Disposing Entity regarding this bidding process; or
     5. submit more than one bid in this bidding process, except for alternative offers permitted under ITB Clause 13. However, this does not limit the participation of subcontractors in more than one bid, or as Bidders and subcontractors simultaneously; or
     6. participated as a contractor or consultant in the preparation of the design or technical specifications of the Supplies or services that are the subject of the bid.
  4. A firm that is under a declaration of suspension by the Authority in accordance with ITB Clause 3.1 (c), at the date of the deadline for bid submission or thereafter, shall be disqualified.
  5. Government-owned enterprises shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law.
  6. Bidders shall provide such evidence of their continued eligibility satisfactory to the Procuring and Disposing Entity, as the Procuring and Disposing Entity shall reasonably request.

1. **Eligible Supplies or Services** 
   1. All Supplies or Services to be supplied under the Contract shall have as their country of origin an eligible country in accordance with Section 5, Eligible Countries.
   2. For purposes of this Clause, the term “Supplies” means goods, raw materials, products, equipment or objects of any kind and description in solid, liquid or gaseous form, or in the form of electricity, or intellectual and proprietary rights as well as services incidental to the provision of such supplies where the value of such services does not exceed the value of the supplies.
   3. The term “country of origin” means the country where the Supplies have been mined, grown, cultivated, produced, manufactured, or processed, or through manufacture, processing, or assembly, another commercially recognised article results that differs substantially in its basic characteristics from its imported components.
   4. The nationality of the Provider that produces, assembles, distributes, or sells the Supplies shall not determine their origin.
   5. If so required in the BDS, the Bidder shall demonstrate that it has been duly authorised by the Manufacturer of the Supplies to supply, in the Republic of Uganda, the Supplies indicated in its bid.

**B. Bidding Document**

1. **Contents of Bidding Document** 
   1. The Bidding Document consists of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB Clause 8.

**PART 1 Bidding Procedures**

* + - Section 1. Instructions to Bidders (ITB)
    - Section 2. Bid Data Sheet (BDS)
    - Section 3. Evaluation Methodology and Criteria
    - Section 4. Bidding Forms
    - Section 5. Eligible Countries

**PART 2 Statement of Requirements**

* + - Section 6. Statement of Requirements

**PART 3 Contract**

* + - Section 7. General Conditions of Contract (GCC) for the Procurement of Supplies or Services
    - Section 8. Special Conditions of Contract (SCC)
    - Section 9. Contract Forms
  1. The Bid Notice or any Pre-qualification Notice is not part of the Bidding Document.
  2. Bidders who did not obtain the Bidding Document directly from the Procuring and Disposing Entity will be rejected during evaluation. Where a Bidding Document is obtained from the Procuring and Disposing Entity on a Bidder’s behalf, the Bidder’s name must be registered with the Procuring and Disposing Entity at the time of sale

and issue.

* 1. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document, may result in the rejection of the bid.

1. **Clarification of Bidding Document** 
   1. A prospective Bidder requiring any clarification of the Bidding Document shall contact the Procuring and Disposing Entity in writing at the Procuring and Disposing Entity’s address indicated in the BDS. The Procuring and Disposing Entity will respond in writing to any request for clarification, provided that such request is received no later than the number of days prior to the deadline for submission of bids indicated in the BDS. The Procuring and Disposing Entity shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source. Should the Procuring and Disposing Entity deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure under ITB Clause 8 and Sub-Clause 24.2.
2. **Amendment of Bidding Document** 
   1. At any time prior to the deadline for submission of bids, the Procuring and Disposing Entity may amend the Bidding Document by issuing addenda.
   2. Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document directly from the Procuring and Disposing Entity.
   3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Procuring and Disposing Entity may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB Sub-Clause 24.2.

**C. Preparation of Bids**

1. **Cost of Bidding** 
   1. The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring and Disposing Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
2. **Language of Bid and Communications** 
   1. The medium of communication shall be in writing unless otherwise specified in the BDS.
   2. The bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring and Disposing Entity, shall be written in English unless otherwise specified in the BDS.
   3. Supporting documents and printed literature that are part of the bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the bid, such translation shall govern.
3. **Documents Comprising the Bid** 
   1. The bid shall comprise the following:
      1. the Bid Submission Sheet and the applicable Price Schedules, in accordance with ITB Clauses 12, 14, and 15;
      2. a Bid Security, in accordance with ITB Clause 21;
      3. written confirmation authorising the signatory of the bid to commit the Bidder, in accordance with ITB Clause 22;
      4. documentary evidence in accordance with ITB Clause 16 establishing the Bidder’s eligibility to bid;
      5. documentary evidence in accordance with ITB Clause 17 establishing that the Supplies or Services to be supplied by the Bidder are of eligible origin;
      6. documentary evidence in accordance with ITB Clauses 18 and 30, that the Supplies or Services conform to the Bidding Documents;
      7. documentary evidence in accordance with ITB Clause 19 establishing the Bidder’s qualifications to perform the contract if its bid is accepted; and
      8. any other document(s) required in the BDS.
4. **Bid Submission Sheet and Price Schedules** 
   1. The Bidder shall submit the Bid Submission Sheet using the form provided in Section 4, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested, which includes:
      1. the reference of the Bidding Document and the number of each addenda

received;

* + 1. a brief description of the Supplies or Services offered;
    2. the total bid price, based on the estimated quantities specified in Section 6, Statement of Requirements;
    3. any discounts offered and the methodology for their application;
    4. the period of validity of the bid;
    5. a commitment to submit any Performance Security required and the amount;
    6. a declaration of nationality of the Bidder;
    7. a commitment to adhere to the Code of Ethical Conduct for Bidders and Providers;
    8. a declaration that the Bidder, including all parties comprising the Bidder, is not participating, as a Bidder, in more than one bid in this bidding process; except for alternative bids in accordance with ITB Clause 13;
    9. confirmation that the Bidder has not been suspended by the Authority;
    10. a declaration on gratuities and commissions; and (l) an authorised signature.
  1. The Bidder shall submit the Price Schedule for Supplies or Services, using the format provided in Section 4, Bidding Forms. The Price Schedule shall include, as appropriate:
     1. the item number;
     2. a brief description of the Supplies or Services to be supplied;
     3. their country of origin and percentage of Ugandan content;
     4. the quantity, which shall be the estimated quantity specified in Section 6, Statement of Requirements;
     5. the unit prices;
     6. customs duties and all taxes paid or payable in Uganda;
     7. the total price per item;
     8. subtotals and totals per Price Schedule; and
     9. an authorised signature.

1. **Alternative Bids** 
   1. Alternative bids shall not be considered unless otherwise indicated in the BDS.
   2. Where permitted, alternative bids do not need to conform precisely to the Statement of Requirements, but must -
      1. meet the objectives and/or performance requirements prescribed in the Statement of Requirements;
      2. be substantially within any delivery or completion schedule, budget or other performance parameters stated in the solicitation document; and
      3. clearly state the benefits of the alternative bid over any solution which conforms precisely to the Statement of Requirements, in terms of technical performance, price, operating costs or any other benefit.
   3. A bidder may submit both a main bid which conforms precisely to the Statement of Requirements and an alternative bid.
   4. Where a bidder submits more than one bid, each bid shall be submitted as a completely separate bid and shall conform to the instructions for preparation and submission of bids in its own right, without any reliance on any other bid. In particular, each bid shall be separately signed, authorised, sealed, labelled and submitted in accordance with the instructions for submission of bids and shall be accompanied by a separate Bid Security, if so required. Such bids shall be labelled “Main Bid” and “Alternative Bid”.
   5. The evaluation of alternative bids shall use the same methodology, criteria and weights as the evaluation of main bids, except that the detailed technical evaluation shall take into account only the objectives and/or performance requirements prescribed in the Statement of Requirements.
2. **Bid Prices and Discounts** 
   1. The prices and discounts quoted by the Bidder in the Bid Submission Sheet and in the Price Schedules shall conform to the requirements specified below.
   2. All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. Items not listed in the Price Schedule shall be assumed to be not included in the bid, and provided that the bid is substantially responsive, the corresponding adjustment shall be applied in accordance with ITB Sub-Clause 31.3.
   3. The price to be quoted in the Bid Submission Sheet, in accordance with ITB Sub-Clause 12.1(c), shall be the total price of the bid, based on the estimated quantities specified, excluding any discounts offered.
   4. The Bidder shall quote any unconditional and conditional discounts and the methodology for their application in the Bid Submission Sheet, in accordance with ITB Sub-Clause 12.1(d) and ITB Sub-Clause 14.8 respectively.
   5. The terms EXW, CIF, CIP, and other similar terms shall be governed by the rules prescribed in the edition of Incoterms, published by The International Chamber of Commerce, as specified in the BDS.
   6. Prices quoted on the Price Schedule for Supplies or Services, shall be disaggregated, when appropriate as indicated in this sub-clause. This disaggregation shall be solely for the purpose of facilitating the comparison of bids by the Procuring and Disposing Entity. This shall not in any way limit the Procuring and Disposing Entity’s right to contract on any of the terms offered: (a) for Supplies;
      * 1. the price of the Supplies, quoted CIP or other Incoterm as specified in the BDS;
        2. all custom duties, sales tax, and other taxes applicable in Uganda, paid or payable, on the Supplies or on the components and raw materials used in their manufacture or assembly, if the Contract is awarded to the Bidder; and
        3. the total price for the item.

(b) for Services;

* + - 1. the price of the Services;
      2. all custom duties, sales tax, and other taxes applicable in Uganda, paid or payable, on the Services, if the Contract is awarded to the Bidder; and
      3. the total price for the item.
  1. Prices quoted by the Bidder shall be fixed during the Bidder’s performance of the Contract and not subject to variation on any account, unless otherwise specified in the BDS. A bid submitted with an adjustable price quotation shall be treated as non responsive and shall be rejected, pursuant to ITB Clause 30. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.
  2. If so indicated in ITB Sub-Clause 1.1, bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB Sub-Clause 14.4, provided the bids for all lots are submitted and opened at the same time.

1. **Currencies of Bid** 
   1. Bid prices shall be quoted in the following currencies:
      1. for Supplies or Services originating in Uganda, the bid prices shall be quoted in the currency of Uganda, unless otherwise specified in the BDS; and
      2. for Supplies or Services originating outside Uganda, or for imported parts or components of Supplies or Services originating outside Uganda, the bid prices shall be quoted in the currency of the expense or in the currency of the Bidder’s country unless otherwise specified in the BDS.
   2. Alternatively, the Procuring and Disposing Entity may request that prices quoted be expressed in the currency specified in the BDS. If the Bidder wishes to be paid in a currency or a combination of currencies different from the one in which it was requested to express its quotation, it shall as part of its offer:
      1. indicate its requirement to be paid in other currencies, including the amount in each currency or the percentage of the quoted price corresponding to each currency;
      2. justify, to the Procuring and Disposing Entity’s satisfaction, the requirement to be paid in the currencies requested; and
      3. utilise the rate of exchange specified by the Procuring and Disposing Entity to express its offer in the currency required by the Procuring and Disposing Entity. The source, date, and type of exchange rate to be used is indicated in the BDS, in accordance with ITB Clause 34, and shall not precede the bid submission deadline by less than twenty (20) days.
2. **Documents Establishing the Eligibility of the Bidder** 
   1. To establish their eligibility in accordance with ITB Clause 4, Bidders shall complete the eligibility declarations in the Bid Submission Sheet, included in Section 4, Bidding Forms and submit the documents required in Section 3 Evaluation Methodology and Criteria.
3. **Documents Establishing the Eligibility of Supplies or Services** 
   1. To establish the eligibility of the Supplies or Services, in accordance with ITB Clause 5, Bidders shall complete the forms included in Section 4, Bidding Forms.
4. **Documents Establishing the Conformity of the Supplies or Services** 
   1. To establish the conformity of the Supplies or Services to the Bidding Documents, the Bidder shall provide as part of its bid the documentary evidence specified in Section 5, Statement of Requirements.
   2. The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed description of the essential technical and performance characteristics of the Supplies or Services, demonstrating substantial responsiveness of the Supplies or Services to those requirements, and if applicable, a statement of deviations and exceptions to the provisions of the Statement of Requirements.
   3. Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Procuring and Disposing Entity in the Statement of Requirement, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Procuring and Disposing Entity’s satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Statement of Requirement.
5. **Documents Establishing the Qualifications of the Bidder** 
   1. To establish its qualifications to perform the Contract, the Bidder shall submit the evidence indicated for each qualification criteria specified in Section 3, Evaluation Methodology and Criteria.
6. **Period of Validity of Bids** 
   1. Bids shall remain valid for the period specified in the BDS after the date of the bid submission deadline prescribed by the Procuring and Disposing Entity. A bid valid for a shorter period shall be rejected by the Procuring and Disposing Entity as noncompliant.
   2. In exceptional circumstances, prior to the expiration of the bid validity period, the Procuring and Disposing Entity may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB Clause 21, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid.
7. **Bid Security** 
   1. Unless otherwise specified in the BDS, the Bidder shall furnish as part of its bid, a Bid Security in original form and in the amount and currency specified in the BDS.
   2. The Bid Security shall be, at the Bidder’s option, in any of the following forms:
      1. a demand guarantee;
      2. an irrevocable letter of credit;
      3. a cashier’s or certified check; or
      4. another security indicated in the BDS,

from a reputable source from an eligible country. The Bid Security shall be submitted either using the Bid Security Form included in Section 4, Bidding Forms, or in another substantially similar format. In either case, the form must include the complete name of the Bidder. The Bid Security shall be valid for twenty-eight days beyond the end of the validity period of the bid. This shall also apply if the period for bid validity is extended.

* 1. Any bid not accompanied by a substantially responsive Bid Security, if one is required in accordance with ITB Sub-Clause 21.1 shall be rejected by the Procuring and Disposing Entity as non-compliant.
  2. The Bid Security of all Bidders shall be returned as promptly as possible once the successful Bidder has signed the Contract and provided any required Performance Security.
  3. The Bid Security may be forfeited:
     1. if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Sheet, except as provided in ITB Sub-Clause 20.2; or
     2. if the successful Bidder fails to:
        1. sign the Contract in accordance with ITB Clause 43;
        2. furnish any Performance Security in accordance with ITB Clause 44; or
        3. accept the correction of its bid price pursuant to ITB Sub-Clause 31.5.

1. **Format and Signing of Bid** 
   1. The Bidder shall prepare one original of the documents comprising the bid as described in ITB Clause 11 and clearly mark it “ORIGINAL.” In addition, the Bidder shall submit copies of the bid, in the number specified in the BDS and clearly mark each of them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.
   2. The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorised to sign on behalf of the Bidder. This authorisation shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorisation must be typed or printed below the signature. All pages of the bid, except for unamended printed literature, shall be signed or initialled by the person signing the bid.
   3. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

**D Submission and Opening of Bids**

1. **Sealing and Marking of Bids** 
   1. The Bidder shall enclose the original and each copy of the bid, in separate sealed envelopes, duly marking the envelopes as “ORIGINAL” and “COPY.” These envelopes containing the original and the copies shall then be enclosed in one single plain envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected.
   2. The inner and outer envelopes shall:
      1. bear the name and address of the Bidder;
      2. be addressed to the Procuring and Disposing Entity in accordance with ITB Sub-Clause 24.1;
      3. bear the Procurement Reference number of this bidding process; and
      4. bear a warning not to open before the time and date for bid opening, in accordance with ITB Sub-Clause 27.1.
   3. If all envelopes are not sealed and marked as required, the Procuring and Disposing Entity will assume no responsibility for the misplacement or premature opening of the bid.
2. **Deadline for Submission of Bids** 
   1. Bids must be received by the Procuring and Disposing Entity at the address and no later than the date and time indicated in the BDS.
   2. The Procuring and Disposing Entity may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 8, in which case all rights and obligations of the Procuring and Disposing Entity and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
3. **Late Bids** 
   1. The Procuring and Disposing Entity shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB Clause 24. Any bid received by the Procuring and Disposing Entity after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
4. **Withdrawal and Replacement of Bids** 
   1. A Bidder may withdraw or replace its bid after it has been submitted at any time before the deadline for submission of bids by sending a written notice, duly signed by an authorised representative, which shall include a copy of the authorisation in accordance with ITB Sub-Clause 22.2. Any corresponding replacement of the bid must accompany the respective written notice. All notices must be:
      1. submitted in accordance with ITB Clauses 22 and 23 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” or “REPLACEMENT,” and
      2. received by the Procuring and Disposing Entity prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 24.
   2. Bids requested to be withdrawn in accordance with ITB Sub-Clause 26.1 shall be returned unopened to the Bidder.
   3. No bid may be withdrawn or replaced in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission Sheet or any extension thereof.
   4. Bids may only be modified by withdrawal of the original bid and submission of a replacement bid in accordance with ITB Sub-Clause 26.1. Modifications submitted in any other way shall not be taken into account in the evaluation of bids.
5. **Bid Opening** 
   1. The Procuring and Disposing Entity shall conduct the bid opening in the presence of Bidders` designated representatives who choose to attend, at the address, date and time specified in the BDS.
   2. First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorisation to request the withdrawal and is read out at the bid opening.

All other envelopes including those marked “REPLACEMENT” shall be opened and the relevant details read out. Replacement bids shall be recorded as such on the record of the bid opening.

Only envelopes that are opened and read out at the bid opening shall be considered further.

* 1. All other envelopes shall be opened one at a time, reading out: the name of the Bidder; the bid price, per lot where applicable, including any discounts; the presence of a Bid Security, if required; and any other details that the Procuring and Disposing Entity may consider appropriate. Only discounts and alternative offers read out at the bid opening shall be considered for evaluation. No bid shall be rejected at the bid opening except for late bids, in accordance with ITB Sub-Clause 25.1.
  2. The Procuring and Disposing Entity shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal and/or replacement; the bid price, per lot if applicable, including any discounts; and the presence or absence of a Bid Security, if one was required. The Bidders’ representatives who are present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to Bidders upon payment of a fee and displayed on the Procuring and Disposing Entity’s Notice Board within one working day from the date of the bid opening.

**E. Evaluation of Bids**

1. **Confidentiality** 
   1. Information relating to the examination, evaluation, comparison, and post-qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until information detailing the Best Evaluated Bidder is communicated to all Bidders.
   2. Any effort by a Bidder to influence the Procuring and Disposing Entity in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its bid.
   3. Notwithstanding ITB Sub-Clause 28.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Procuring and Disposing Entity on any matter related to the bidding process, it should do so in writing.

1. **Clarification of Bids** 
   1. To assist in the examination, evaluation, comparison and post-qualification of the bids, the Procuring and Disposing Entity may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Procuring and Disposing Entity shall not be considered. The Procuring and Disposing Entity’s request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring and Disposing Entity in the evaluation of the bids, in accordance with ITB Clause 31.4.
2. **Compliance and Responsiveness of Bids** 
   1. The Procuring and Disposing Entity’s determination of a bid’s compliance and responsiveness is to be based on the contents of the bid itself.
   2. A substantially compliant and responsive bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
      1. affects in any substantial way the scope, quality, or performance of the Supplies or Services specified in the Contract; or
      2. limits in any substantial way, inconsistent with the Bidding Document, the

Procuring and Disposing Entity’s rights or the Bidder’s obligations under the Contract; or

* + 1. if rectified would unfairly affect the competitive position of other Bidders presenting substantially compliant and responsive bids.
  1. If a bid is not substantially compliant and responsive to the Bidding Document, it shall be rejected by the Procuring and Disposing Entity and may not subsequently be made compliant and responsive by the Bidder by correction of the material deviation, reservation, or omission.

1. **Nonconformities, Errors, and Omissions** 
   1. Provided that a bid is substantially compliant and responsive, the Procuring and Disposing Entity may waive any non-conformity or omissions in the bid that does not constitute a material deviation.
   2. Provided that a bid is substantially compliant and responsive, the Procuring and Disposing Entity may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.
   3. Provided that a bid is substantially compliant and responsive, the Procuring and Disposing Entity shall rectify nonmaterial nonconformities or omissions. To this effect, the bid price shall be adjusted, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The cost of any missing items will be added to the bid price using the highest price from other Bids submitted.
   4. Provided that the bid is substantially compliant and responsive, the Procuring and Disposing Entity shall correct arithmetic errors on the following basis:
      1. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring and Disposing Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
      2. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
      3. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
   5. If the Bidder that submitted the best evaluated bid does not accept the correction of errors, its bid shall be rejected and its Bid Security may be forfeited.
2. **Preliminary Examination of Bids – Eligibility and Administrative Compliance** 
   1. The Procuring and Disposing Entity shall examine the legal documentation and other information submitted by Bidders to verify the eligibility of Bidders and Supplies or services in accordance with ITB Clauses 4 and 5.
   2. If after the examination of eligibility, the Procuring and Disposing Entity determines that the Bidder’s Supplies or Services are not eligible, it shall reject the bid.
   3. The Procuring and Disposing Entity shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 11 have been provided, and to determine the completeness of each document submitted.
   4. The Procuring and Disposing Entity shall confirm that the following documents and information have been provided in the bid. If any of these documents or information is missing, the offer shall be rejected.
      1. the Bid Submission Sheet, including:
         1. a brief description of the Supplies or Services offered;
         2. the price of the bid; and
         3. the period of validity of the bid;
      2. the Price Schedule;
      3. written confirmation of authorisation to commit the Bidder; and
      4. a Bid Security, if applicable.
3. **Detailed Commercial and Technical Evaluation** 
   1. The Procuring and Disposing Entity shall examine the bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.
   2. If, after the examination of the terms and conditions, the Procuring and Disposing Entity determines that the bid is not substantially responsive in accordance with ITB Clause 30, it shall reject the bid.
   3. The Procuring and Disposing Entity shall evaluate the technical aspects of the bid submitted in accordance with ITB Clause 18, to confirm that all requirements specified in Section 5, Statement of Requirements of the Bidding Document have been met without any material deviation or reservation.
   4. If, after the technical evaluation, the Procuring and Disposing Entity determines that the bid is not substantially compliant in accordance with ITB Clause 30, it shall reject the bid.
4. **Conversion to Single Currency**

34.1 For evaluation and comparison purposes, the Procuring and Disposing Entity shall convert all bid prices expressed in amounts in various currencies into a single currency, using the selling exchange rate established by the source and on the date specified in the BDS.

1. **Margin of Preference** 
   1. Unless otherwise specified in the BDS, a margin of preference shall not apply. Where a Margin of Preference applies, its application and detail shall be specified in Section 3, Evaluation Methodology and Criteria.
2. **Financial Comparison of Bids** 
   1. The Procuring and Disposing Entity shall financially evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially compliant and responsive.
   2. To financially evaluate a bid, the Procuring and Disposing Entity shall only use the criteria and methodologies defined in this Clause and in Section 3, Evaluation Methodology and Criteria. No other criteria or methodology shall be permitted.
   3. The Procuring and Disposing Entity’s financial comparison of bids may require the consideration of factors other than costs, in addition to the bid price quoted in accordance with ITB Clause 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Supplies or Services. The factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids, unless otherwise specified in Section 3, Evaluation Methodology and Criteria. The factors to be used and the methodology of application shall be indicated of Section 3, Evaluation Methodology and Criteria.
   4. To financially compare bids, the Procuring and Disposing Entity shall:
      1. determine the bid price, taking into account the costs listed of Section 3, Evaluation Methodology and Criteria;
      2. correct any arithmetic errors in accordance with ITB Sub-Clause 31.4;
      3. apply any unconditional discounts offered in accordance with ITB Sub-Clause 12.1(d);
      4. make adjustments for any nonmaterial nonconformities and omissions in accordance with ITB Sub-Clause 31.3;
      5. apply any non-cost factors in accordance with ITB Sub-Clause 36.3;
      6. convert all bids to a single currency in accordance with ITB Clause 34;
      7. apply any margin of preference in accordance with ITB Clause 35;
      8. determine the total evaluated price of each bid.
3. **Determination of Best Evaluated Bid(s)** 
   1. The Procuring and Disposing Entity shall compare all substantially compliant and responsive bids to determine the best evaluated bid or bids, in accordance with Section 3, Evaluation Methodology and Criteria.
4. **Post-qualification of the Bidder** 
   1. The Procuring and Disposing Entity shall determine to its satisfaction whether the Bidder that is selected as having submitted the best evaluated bid is qualified to perform the Contract satisfactorily.
   2. The determination shall be based upon an examination of the documentary evidence of the Bidder’s qualifications submitted by the Bidder, pursuant to ITB Clause 19, to clarifications in accordance with ITB Clause 29 and the qualification criteria indicated in Section 3, Evaluation Methodology and Criteria. Factors not included in Section 3 shall not be used in the evaluation of the Bidder’s qualification.
   3. An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Procuring and Disposing Entity shall proceed to the next best evaluated bid to make a similar determination of that Bidder’s capabilities to perform satisfactorily.
   4. If pre-qualification has been conducted, no post-qualification will be conducted but pre-qualification information shall be verified.
5. **Procuring and Disposing Entity’s Right to Accept or Reject Any or All Bids** 
   1. The Procuring and Disposing Entity reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders.

**F. Award of Contract**

1. **Award Procedure** 
   1. The Procuring Entity shall issue a Notice of Best Evaluated Bidder, place such Notice on public display for a prescribed period and copy the Notice to all Bidders prior to proceeding with contract award.
   2. The Procuring and Disposing Entity shall award the Contract to the Bidder whose offer has been determined to be the best evaluated bid, provided that the Bidder is determined to be qualified to perform the Contract satisfactorily.
   3. The Contract shall be a Framework Contract and shall not purchase the quantities specified, with the exception of any contract value specified as a minimum. Supplies or Services shall be purchased through call-off orders, in accordance with the Contract.
2. **Procuring and Disposing Entity’s Right to Vary Quantities at Time of Award** 
   1. At the time the Contract is awarded, the Procuring and Disposing Entity reserves the right to increase or decrease the estimated quantity or minimum value of Supplies or Services originally specified in Section 6, Statement of Requirements, provided this does not exceed the percentages indicated in the BDS, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Document.
3. **Notification of Award and Letter of Bid Acceptance** 
   1. Prior to the expiration of the period of bid validity, the Procuring and Disposing Entity shall notify the successful Bidder, in writing, that its bid has been accepted by issue of a Letter of Bid Acceptance.
   2. Until a formal contract is prepared and executed, the Letter of Bid Acceptance shall constitute a binding Contract.
4. **Signing of Contract** 
   1. Promptly after notification of contract award by the issue of a Letter of Bid Acceptance, the Procuring and Disposing Entity shall send the successful Bidder the Agreement and the Special Conditions of Contract.
   2. Within twenty-eight (28) days of receipt of the Agreement, the successful Bidder shall sign, date, and return it to the Procuring and Disposing Entity.
5. **Performance Security** 
   1. Within twenty-eight (28) days of the receipt of the Letter of Bid Acceptance from the Procuring and Disposing Entity, the successful Bidder shall furnish any Performance Security required in accordance with the GCC, using for that purpose the Performance Security Form included in Section 9, Contract Forms, or another form acceptable to the Procuring and Disposing Entity.
   2. Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the contract award and forfeiture of the Bid Security. In that event, the Procuring and Disposing Entity may award the Contract to the next best evaluated Bidder who is determined by the Procuring and Disposing Entity to be qualified to perform the Contract satisfactorily.

**Part 1:Section 2. Bid Data Sheet**

|  |  |
| --- | --- |
| **Instructions to** |  |
| **Bidders Reference** | **Data relevant to the ITB** |
|  | **A. General** |
| **ITB 1.1** | The Procuring and Disposing Entity is: **MUNI UNIVERSITY** |
| **ITB 1.1** | The subject of procurement is a framework contract for: **Supply of****computers, printers, projectors, scanners, binding machines etc****under framework for** a period of: **Eighteen (18) months renewable upon satisfactory performance**. |
| **ITB 1.1** | The Procurement Reference number of the Bidding Document is:  **MU/SPLS/2024-25/00015** |
| **ITB 1.1** | The number and identification of lots comprising this Bidding Document is: N/A  The proportion of each Lot that a Bidder may bid for is: N/A  The minimum and maximum number of Lots a Bidder may bid for is: N/A |
|  | **B. Bidding Document** |
| **ITB 7.1** | For clarification purposes only, the Procuring and Disposing Entity’s address is:  Attention: **University Secretary/Accounting Officer**  Street Address: **Arua- Muni- Ocoko Road**  Floor: **First Floor, Procurement & Disposal Unit, RM 2.7**  Town  **Arua**  Postal code/P. O. Box No. **725, Arua**  Country: **Uganda**  Telephone: **+256 (4714) 36755**  Facsimile number: -  Electronic mail address: **pdu@muni.ac.ug** |
| **ITB 7.1** | The Procuring and Disposing Entity will respond to any request for clarification provided that such request is received no later than **7 working** days prior to the deadline for submission of Bids. |
|  | **C. Preparation of Bids** |
| **ITB 10.1** | The medium of communications shall be in writing. |
| **ITB 10.2** | The language for the bid is **English.** |
| **Instructions to** |  |
| **Bidders Reference** | **Data relevant to the ITB** |
| **ITB 11.1(h)** | The Bidder shall submit with its bid the following additional documents:   * Submit a copy of the Bidder’s valid Trading licence for the year 2025; * Submit a copy of the Bidder’s Certificate of Registration/Incorporation; * Submit a copy of the Bidder’s valid Income Tax Clearance Certificate for the year, 2025 addressed to Muni University. * Submit a copy of the bidder’s registered and duly signed Powers of Attorney. * Submit a duly completed, signed and stamped Bid Submission Sheet including a brief description of the supplies or related services offered. * Submit a filled and stamped price schedule in the format provided. * Acceptance of bid validity period (until 5th December, 2025). * Submit a declaration of distribution coverage in terms of number fuel stations across the country and their locations. * Submit a complete documentation on how the proposed fuel card operates. * Submit a copy of references/recommendation letters from at least three (3) reputable organizations where they have rendered similar fuel card services in the last five (5) years. * Submit a signed copy of Code of Ethical Conduct in Business for Bidders and Providers, in the format provided. * Submit a copy of Memorandum and Articles of Association. * Submit a copy of the Bidder’s Tax Identification Number (TIN) registration certificate. * Must provide a Contact address: Physical, Postal, Telephone and Email address of the firm. * Submit evidence of payment for the bidding document (receipt or bank slip). * Submit a copy of duly signed and stamped Letter of Bid Securing Declaration in the format provided valid until 2nd January 2026. * Duly signed Vendor Information Form, listing all Directors of the company. |
| **ITB 13.1** | Alternative Bids **SHALL NOT** be permitted. |
| **ITB 14.5** | The Incoterms edition is: “Incoterms **2020”** |
| **ITB 14.7** | The prices quoted by the Bidder shall be: **FIXED.** **At the beginning of every month, the supplier shall advise the University of the pump price to be charged and the price shall be fixed during that period.** |
| **ITB 15.1(a)** | For Supplies or Services originating in Uganda the currency of the bid shall be: **Uganda Shillings.** |
| **ITB 20.1** | The bids shall remain valid up to **5th December, 2025** |
| **ITB 21.1** | A Bid Security **SHALL NOT** be required. |
| **ITB 22.1** | In addition to the original of the Bid, the number of copies required is: **Two** |
| **ITB 22.2** | The written confirmation of authorisation to sign on behalf of the Bidder shall consist of: **POWERS OF ATTORNEY**. |
|  | **D. Submission and Opening of Bids** |
| **ITB 24.1** | For bid submission purposes only, the Procuring and Disposing Entity’s address is  Attention: **University Secretary/Accounting Officer**  Street Address: **Arua- Muni-Ocoko Road**  Floor/Room number: **First Floor, Procurement & Disposal Unit, RM 2.7**  Town/City:  **Arua**  Postal Code: **P. O. Box 725, Arua**  Country:  **Uganda**  The deadline for bid submission is: `  Date: **5th September, 2025**  Time (local time): **11:00am** |
| **ITB 27.1** | The bid opening shall take place at:  Street Address: **Muni University, Administration Block**  Floor/Room number: **University Council Board Room, 1.8**  Town/City: **Arua**  Country:  **Uganda**  Date: **11:30am**  Time: **5th September, 2025** |
|  | **E. Evaluation of Bids** |
| **ITB 34.1** | The currency that shall be used for financial comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **Uganda shillings**  The source of exchange rate shall be: **Bank of Uganda.**  The date for the exchange rate shall be: **5th September, 2025** |
| **ITB 35.1** | A margin of preference **SHALL NOT** apply.  If a margin of preference applies, the application methodology and the level of margin shall be as stated in Section 3 Evaluation Methodology and Criteria. |
|  | **F. Award of Contract** |
| **ITB 41.1** | The percentage by which the estimated quantity or minimum value may be increased is: 10%  The percentage by which the estimated quantity or minimum value may be decreased is: 10% |

**Part 1: Section 3. Evaluation Methodology and Criteria**

**Procurement Reference Number: MU/SPLS/2024-25/00015**

**A Evaluation Methodology**

1. **Methodology Used** 
   1. The evaluation methodology to be used for the evaluation of bids received shall be Technical Compliance Selection.
2. **Summary of Methodology** 
   1. The Technical Compliance Selection methodology recommends the lowest priced bid, which is eligible, compliant and substantially responsive to the technical and commercial requirements of the Bidding Document, provided that the Bidder is determined to be qualified to perform the contract satisfactorily.
   2. The evaluation shall be conducted in three sequential stages –
      1. a preliminary examination to determine the eligibility of bidders and the administrative compliance of bids received;
      2. a detailed evaluation to determine the commercial and technical responsiveness of the eligible and compliant bids; and
      3. a financial comparison to compare costs of the eligible, compliant, responsive bids received and determine the best evaluated bid.
   3. Failure of a bid at any stage of the evaluation shall prevent further consideration at

the next stage of evaluation. Substantial responsiveness shall be considered a pass.

**B Preliminary Examination Criteria**

1. **Eligibility Criteria** 
   1. The eligibility requirements shall be determined for: -

(a) Eligible Bidders in accordance with ITB Clause 4; and

(b) Eligible Supplies or Services in accordance with ITB Clause 5.

* 1. The documentation required to provide evidence of eligibility shall include: -
     1. a copy of the Bidder’s valid Trading licence for the year 2025;
     2. a copy of the Bidder’s Certificate of Registration/Incorporation;
     3. a copy of the Bidder’s valid Income Tax Clearance Certificate for the year, 2025 addressed to Muni University.
     4. a copy of the bidder’s registered and duly signed Powers of Attorney.

1. a statement in the Bid Submission Sheet that the bidder meets the eligibility criteria stated in ITB 4.1;
2. a declaration in the Bid Submission Sheet of nationality of the Bidder;
3. a statement in the Bid Submission Sheet that the Bidder has no conflict of interest;
4. a declaration in the Bid Submission Sheet that the Bidder is not under suspension by the Public Procurement and Disposal of Public Assets Authority.
5. **Administrative Compliance Criteria** 
   1. The evaluation of Administrative Compliance shall be conducted in accordance with ITB Sub-Clauses 32.3 and 32.4. The following documents shall be provided:
6. Submit a completed, signed and stamped Bid Submission Sheet including a brief description of the supplies or related services offered.
7. Submit a filled and stamped price schedule in the format provided.
8. Acceptance of bid validity period (until 5th December, 2025).
9. Submit a declaration of distribution coverage in terms of number fuel stations across the country and their locations.
10. Submit a complete documentation on how the proposed fuel card operates.
11. Submit a copy of references/recommendation letters from at least three (3) reputable organizations where they have rendered similar fuel card services in the last five (5) years.

g) Submit a signed copy of Code of Ethical Conduct in Business for Bidders and Providers, in the format provided.

h) Submit a copy of Memorandum and Articles of Association.

(i) Submit a copy of the Bidder’s Tax Identification Number (TIN) registration certificate.

j) Must provide a Contact address: Physical, Postal, Telephone and Email address of the firm.

k) Submit evidence of payment for the bidding document (receipt or bank slip).

l) Submit a copy of duly signed and stamped Letter of Bid Securing Declaration in the format provided valid until 2nd January 2026.

m) Duly signed Vendor Information Form, listing all Directors of the company.

**C Detailed Evaluation Criteria**

1. **Commercial Criteria**

5.1 The commercial responsiveness of bids shall be evaluated in accordance with ITB Clause 33. The criteria shall be:

* 1. Submit a statement of acceptance of the conditions of the proposed contract;

1. **Technical Criteria** 
   1. Technical responsiveness shall be evaluated in accordance with ITB Clause 33.
   2. The Terms of Reference detail the minimum technical requirements. Responsiveness is determined by comparison of the specification offered to the specification required in Section 5 and the evaluation is conducted on a pass/fail basis. Substantial responsiveness shall be considered a pass.

**D Financial Comparison Criteria**

1. **Costs to be included in Bid Price**

7.1 The financial comparison shall be conducted in accordance with ITB Clause 36. The costs to be included in the bid price bid are:

* 1. for supplies; the unit and total delivered price based on the delivery terms requested and the estimated quantity specified. The bid with the lowest evaluated price, from among those which are eligible, compliant and substantially responsive shall be the best evaluated bid.
  2. for services, fees; re-imbursables and miscellaneous costs, for each activity. The bid achieving the highest combined technical and financial score shall be the Best Evaluated Bid.
  3. taxes, duties and levies;

1. **Non-cost Factors to be included in Evaluated Price** 
   1. The non-cost factors to be included in the evaluated price are: **N/A**

1. **Determination of Best Evaluated Bid or Bids** 
   1. (a) for supplies; the bid with the lowest evaluated price, from among those which are eligible, compliant and substantially responsive shall be the best evaluated bid.

(b) for services, the bid achieving the highest combined technical and financial score shall be the Best Evaluated Bid.

**Part 1:Section 4. Bidding Forms**

**Table of Forms**

**Bid Submission Sheet ................................................................................................................ 38**

*[This Bid Submission Sheet should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder]*

**Bid Submission Sheet**

Date: *[insert date (as day, month and year) of bid submission]*

Procurement Reference No: *[insert Procurement Reference number]*

To: *[insert complete name of Procuring and Disposing Entity]* We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document, including

Addenda No.: *[insert the number and issue date of each Addenda]*;

1. We offer to conform with the Bidding Document and in accordance with the response times specified in the Statement of Requirements, Bills of Quantities or Terms of Reference the following Supplies or Services under a framework contract arrangement *[insert a brief description of the Supplies or Services. Amend wording and attach relevant details if alternative response times are is proposed]*;
2. We understand that any resulting contract will be a framework contract, with estimated quantities, and that you will not be bound to purchase any Supplies or Services with the exception of any guaranteed minimum value;
3. The total price of our Bid, excluding any discounts offered in item (d) below, is: *[insert the total bid price in words and figures, indicating the various amounts and the respective currencies]*;
4. The discounts offered and the methodologies for their application are:

Unconditional discounts. If our bid is accepted, the following discounts shall apply. *[Specify in detail each discount offered (eg amount/percentage) and the specific item of the Statement of Requirements to which it applies.]*

Methodology of application of the unconditional discounts. The discounts shall be applied using the following method: *[Specify precisely the method that shall be used to apply the discounts]*;

Conditional discounts. If our bids for more than one lot are accepted, the following discounts shall apply. *[Specify precisely each discount offered (eg amount/percentage) and the conditions of the discount.]*

Methodology of application of the conditional discounts. The discounts shall be applied using the following method: *[Specify in detail the method that shall be used to apply the discounts]*;

1. Our bid shall be valid for a period of *[specify the number of calendar days]* calendar days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
2. We, including any subcontractors or providers for any part of the contract resulting from this procurement process, are eligible to participate in public procurement in accordance with ITB Clause 4.1
3. If our bid is accepted, we commit to obtain a Performance Security in accordance with the Bidding Document in the amount of *[insert amount and currency in words and figures of the performance security]* for the due performance of the Contract;
4. We, including any subcontractors or Providers for any part of the contract, have nationals from the following eligible countries *[insert the nationality of the Bidder, including that of all parties that comprise the Bidder, if the Bidder is a Joint Venture consortium or association, and the nationality of each subcontractor];*
5. We undertake to abide by the Code of Ethical Conduct for Bidders and Providers during the procurement process and the execution of any resulting contract;
6. We are not participating, as Bidders, in more than one bid in this bidding process, other than alternative bids in accordance with the Bidding Document;
7. We do not have any conflict of interest and have not participated in the preparation of the original Statement of Requirements for the Procuring and Disposing Entity;
8. We, our affiliates or subsidiaries, including any subcontractors or Providers for any part of the contract, have not been suspended by the Public Procurement and Disposal of Public Assets Authority in Uganda from participating in public procurement;
9. The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, their full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity. If none has been paid or is to be paid, indicate “none.”] ]*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Recipient** | **Address** | **Reason** | **Amount & Currency** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. We understand that this bid , together with your written acceptance thereof included in your Letter of Bid Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
2. We understand that you are not bound to accept the lowest bid or any other bid that you may receive.

Signed: *[signature of person whose name and capacity are shown below ]*

Name: *[insert complete name of person signing the bid]*

In the capacity of *[insert legal capacity of person signing the bid]*

Duly authorised to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ *[insert date of signing]*

CODE OF ETHICAL CONDUCT FOR BIDDERS AND PROVIDERS

(Under Section 93 (2) of the Public Procurement and Disposal of Public Assets Act, 2003)

This Code of Ethical Conduct for Bidders and Providers (the "Code") sets out the minimum standards expected from the bidders and providers participating in public procurement and disposal processes of Government of Uganda. Failure to comply with the provisions of this Code may lead to suspension of the bidder or provider from being eligible for participating in public procurement and disposal processes or contract award and may result in a contract being terminated.

1. Compliance with Applicable Law

Bidders and Providers must operate in full compliance with applicable laws, rules, and regulations.

2. Corruption

Bidders and Providers must adhere to the highest standards of moral and ethical conduct and not engage in any form of integrity violations, including, but not limited to, fraud, corruption, coercion, collusion, and obstructive practices.

3. Standards

Bidders and providers shall-

i. Strive to provide works, services and supplies of high quality and accept full responsibility for all works, services or supplies provided;

ii. Comply with the professional standards of their industry or any professional body of which they are members.

4. Conflict of interest

Bidders and Providers shall not accept contracts which would constitute a conflict of interest with, any prior or current contract with any procuring and disposing entity.

Bidders and Providers shall disclose to all concerned parties those conflicts of interest that cannot reasonably be avoided or escaped.

5. Confidentiality and accuracy of information

i. Information given by bidders and providers in the course of a procurement and disposal process or the performance of the contracts shall be true, fair and not designed to mislead.

ii. Providers shall respect the confidentiality of information received in the course of performance of a contract and shall not use such information for personal gain.

6. Gifts and Hospitality

Bidders and providers shall not offer gifts or extend hospitality directly or indirectly to staff of the Procuring and Disposing Entity that might be viewed by the public as having an influence on their decisions.

7. Inducements

i. Bidders and Providers shall not offer or give anything of value to influence the action of public officials in the procurement process or in the contract execution.

ii. Bidders and Providers shall not ask a public official to do anything which is inconsistent with the Act, Regulations, Guidelines or Code of Ethical Conduct in Business.

8. Fraudulent Practices

Bidders and providers shall not-

i. Collude with the other businesses and organizations with the intention of depriving a Procuring and Disposing Entity of the benefits of free and open competition;

ii. Enter into business arrangements that might prevent the effective conclusion of a procurement or disposal process in a fair manner;

iii. Engage in deceptive financial practices, such as bribery, double billing or other improper financial practices;

iv. Misrepresent or conceal facts in order to influence a procurement and disposal process or the execution of a contract to the detriment of the Procuring and Disposing Entity; or utter false documents;

v. Unlawfully obtain information relating to a procurement and disposal process in order to influence the process or execution of a contract to the detriment of the Procuring and Disposing Entity; and

vi. Withhold from giving information to the Procuring and Disposing Entity during contract execution to the detriment of the Procuring and Disposing Entity.

9. Labor, Human Rights and Social Responsibility

Labor

Bidders and Providers must not engage in forced or compulsory labor in all its forms. Bidders and Providers must not employ children below 18 years of age.

Bidders and Providers must ensure the payment of wages in legal tender, at regular intervals directly to the employees concerned. Bidders and Providers should keep an appropriate record of such payments.

Harassment

Bidders and Providers and their employees must not engage in any form of harassment, including sexual harassment, mental or physical coercion, or verbal abuse of staff of Procuring and Disposing Entities and contractors including employees.

Bidders and Providers should report allegations of harassment or sexual harassment by Procuring and Disposing Entities staff to the Employer or the Authority. The reporting can be anonymous. Bidders and Providers must not dissuade or penalize their employees from reporting harassment or sexual harassment allegations.

Non-discrimination

Bidders and Providers will not engage in unlawful discrimination based on race, color, age, gender, ethnicity or national origin, disability, pregnancy, religion, political affiliation, union membership, or marital status in hiring and employment practices such as wages, promotions, rewards, and access to training.

10. Health and Safety Conduct

Bidders and Providers will provide adequate occupational safety training for employees and will identify, assess and control potential exposure to safety hazards. Personal protective equipment and educational materials will be provided where hazards cannot be adequately controlled.

11. Environmental Policy

Environmental Conduct

In order to contribute to waste reduction and to increase the development and awareness of environmentally sound purchasing, wherever possible, Bidders and Providers will strive to use durable products, reusable products and products (including those used in provision of services) that contain the maximum level of post-consumer waste, post-industrial and/or recyclable content, without significantly affecting the intended use of the goods or services.

Pollution prevention and resource reduction

Bidders and Providers will utilize strategies to deliver the product or service that minimizes the emissions and discharges of pollutants and generation of waste. Bidders and Providers should strive to conserve [scarce] natural resources, including water, fossil fuels, minerals, and virgin forest products.

I.................................................................... (name of the authorized signatory) agree to comply with the above code of ethical conduct of providers and bidders.

------------------------------------------ ---------------------------------------------------

AUTHORISED SIGNATORY NAME OF THE BIDDER/PROVIDER

[Physical Address of Bidder]

**Bid-Securing Declaration**

Date:

Subject of procurement and Reference No.:  *Procurement Reference Number of bidding process]*

To: *[insert complete name of Procuring and Disposing Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid- Securing Declaration.

2. I/We accept that we will automatically be suspended for three years by the Authority from being eligible for bidding in any contract with the Government of Uganda*,* if we are in breach of our obligation(s) under the bid conditions, because we:

(a) have withdrawn our bid during the period of bid validity specified by us in the Bid Submission Sheet or

(b) having been notified of the acceptance of our bid by the Procuring and Disposing Entity during the period of bid validity fail or refuse to (i) sign the contract, (ii) fail or refuse to furnish the Performance Security in accordance with ITB Clause 43; or (iii) fail or refuse to accept the correction of our bid by the Procuring and Disposing Entity, pursuant to ITB Clause 31;

3. I/We understand this Bid Securing Declaration shall cease to be valid if I/we are not the successful Bidder, upon the earlier of (i) the expiry of the notice of best evaluated bidder or (ii) upon the expiration of the validity of my/our bid on the *[insert bid validity date]*,

Signed: *[insert signature of person whose name and capacity are shown]* In the capacity of *[insert legal capacity of person signing the Bid Securing Declaration]*

Name: *[insert complete name of person signing the Bid Securing Declaration]*

Duly authorized to sign the bid securing declaration for and on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ *[insert date of signing]*

Corporate Seal (where appropriate)

\*Please delete as appropriate

**VENDOR INFORMATION FORM**

**TEMPLATE FOR BENEFICIAL OWNERSHIP DECLARATION FORM**

*This beneficial ownership declaration form issued by The Public Procurement and Disposal of Public Assets Authority to collect beneficial ownership information. The template includes sections to be completed by the bidders.*

|  |  |
| --- | --- |
| Company identification | |
| **Full legal name of the bidder (Company or Joint Venture)** |  |
| **Physical / contact address** |  |
| **Names of Beneficial Owner(s) of the Company/ /Joint venture companies / Consortiums etc.** | Name (s) |
| 1. |
| 2. |
| 3. |

|  |
| --- |
| Are any of the beneficial owners a Politically Exposed Person (PEP)? □ No □If Yes  Name: …………………………………………………..  Public office position and role: …………………………  Date when office was assumed ……………………………………………………………………… |
| **Attestation**  I, undersigned, for and on behalf of the bidder confirm that all the information provided in the above beneficial ownership declaration is accurate and reliable.  **[Name]:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **[Position]:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **[Signature]:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Beneficial ownership definition |
| “Beneficial owner” means “the natural person who ultimately owns or controls a legal person or the natural person on whose behalf a transaction is conducted and includes those natural persons who exercise ultimate effective control a legal person or arrangement directly or indirectly” |

**Part 2: Section 5. Statement of Requirements**

*[This Price Schedule should be signed by a person with the proper authority to sign documents for the Bidder. It should be included by the Bidder in its bid. The Bidder may reproduce this in landscape format but is responsible for its accurate reproduction].*

**Price Schedule for Supplies or Services**

**Procurement Reference Number: MU/SPLS/2024-25/00015**

Date: *[insert date (as day, month and year) of bid submission]*

Procurement Reference No: *[insert Procurement Reference number]*

Name of Bidder: *[Insert the name of the Bidder]*

| **Item No.** | **Brief Description of Supplies and Related Services** | **Unit of Measure** | **Estimated Quantity (UGX)** | **Estimated**  **Unit Price (UGX)** |
| --- | --- | --- | --- | --- |
|  | **Supply of computers, printers, projectors, scanners, binding machines etc** |  |  |  |
| 01 | **Small Form Factor- Desktop Computers**  **ThinkCentre M80q Gen 4 Tiny (Intel) Desktop**  **PERFORMANCE**  **i5 Processor**  **Processor**  13th Generation Intel® Core™  i5-13500T Processor with vPro® (E-Core Max 3.20 GHz, P-Core Max 4.60 GHz with Turbo Boost, 14 Cores, 20 Threads, 24 MB Cache)  i7 Processor  13th Generation Intel® Core™  i7-13700T Processor with vPro® (E-Core Max 3.60 GHz, P-Core Max 4.80 GHz with Turbo Boost, 16 Cores, 24 Threads, 30 MB Cache)  **Operating System**  Windows 11 Pro  **Memory**  16 GB DDR5-4800MHz  16 GB DDR5-5600MHz  **Storage**  Up to 1TB M.2 PCIe SSD Gen 4  **CONNECTIVITY**  **Ports/Slots**  **Front:**  2 x USB-A 3.2 Gen 2 (1 always on, fast charge)  USB-C 3.2 Gen 1  Headphone / mic combo  **Rear:**  2 x USB-A 3.2 Gen 2  2 x USB-A 3.2 Gen 1  HDMI 2.1  DisplayPort 1.4  Ethernet (RJ45)  **Optional rear expansion:**  Optional rear expansion:  Optional punch-out slot 1: VGA/DP/HDMI/USB-C/serial  Optional punch-out slot 2: VGA/DP/HDMI/serial/Ethernet  **OR**  Optional: 2 x USB-A 3.2 Gen 1 or 4 x USB-A 3.2 Gen 1  **M.2 Slot**  2 x M.2 SSD PCIe Gen 4  M.2 WiFi  **Internal Bay**  2.5″ HDD  **DESIGN**  **Dimensions (H x W x D)**  179mm x 36.5mm x 182.9mm / 7.0″ x 1.4″ x 7.2″  **Weight**  Starting at 1.3kg / 2.9lbs  **Color**  Raven Black  **SUSTAINABILITY**  **Material**  30% ocean-bound plastic in the system bag packaging  65% post-consumer content (PCC) used in the rear cover  **Certifications / Registries**  ENERGY STAR® 8.0  RoHS Compliant  ERP LOT3  **OTHER INFORMATION**  **Think Shield Security**  Optional: Intel vPro® Enterprise  Discrete Trusted Platform Module (dTPM) 2.0  EC Self-healing BIOS (level 2)  BIOS-based Smart USB Protection  Kensington Security Slot™  **Power Supply Unit**  135W, 89% energy efficient  90W, 89% energy efficient  65W, 89% energy efficient  **Display**  Ideal fit with ThinkCentre Tiny-in-One monitor 24’ LCD HDR  **What is in the box**  ThinkCentre M80q Gen 4 Tiny (Intel)  65W, 90W, or 135W PSU  USB Keyboard  USB Mouse  Quick Start Gui | pc | 1 |  |
|  |  |  |  |  |
|  | **Option 2**  **Model**  Pro SFF 400 G9 Desktop PC  **Operating system:** Windows 11 Pro  **Processor family:** Intel® Core™ i5 14th generation processor  **Processor: Intel**® Core™ i5-14500 (up to 5.0 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads)  **Chipset:** Intel® Q670  **Memory:** 8 GB DDR5-4800 MT/s (1 x 8 GB)  **Standard memory note:** Transfer rates up to 4800 MT/s.  **Memory layout (slots & size)** 1 x 16 GB  **Memory Slots:** 2 DIMM  **Storage:** 512 SSD  **Monitor Display:** 24’ UHD  **Graphics (integrated):** Intel® UHD Graphics 770  **Graphic card footnote number:** [14,37]  **I/O Port location:** Front  **Ports**1 headphone/microphone combo 1 SuperSpeed USB Type-C® 10Gbps signaling rate 3 SuperSpeed USB Type-A 10Gbps signaling rate  Rear  1 audio-out 1 power connector  1 RJ-45 1 HDMI 1.4 3 SuperSpeed USB Type-A 5Gbps signaling rate 1 DisplayPort™ 1.4 2 USB Type-A 480Mbps signaling rate  **Wireless:** Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card (supporting gigabit data rate)  **Expansion slots:** 1 M.2 2230 1 M.2 2280 1 PCIe 3 x1 1 PCIe 4 x16  **Expansion slots note:**1 M.2 2230 slot for WLAN or storage and 1 M.2 2280 slot for storage.  **Network interface type:** WLAN  **Audio:** Realtek ALC3252 codec, universal audio jack with CTIA and OMTP headset support  **Keyboard:** 125 Wired Keyboard  **Pointing device:**  125 Wired Mouse  **Weight:** 4.2 kg  **Package weight:** 7.25 kg  **Dimensions (W x D x H):** 27 x 9.5 x 30.8 cm  **Package dimensions (W x D x H):** 39.4 x 20.5 x 49.9 cm  **Power:** 240 W internal power supply, up to 92% efficiency, active PFC  **Security management:** Trusted Platform Module TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified) (FIPS 140-2 Level 2 Certified) Secure Erase Sure Click Absolute Persistence module Sure Admin Tamper Lock Sure Start Gen7 Sure Sense2  **Security Software Licenses:** Wolf Pro Security Edition (1 year)  **Form factor:** Small form factor  **Manufacturer Warranty:** 1 year (1/1/1) limited warranty includes 1 year of parts | pc | 1 |  |
| 02 | All-in- One Desktops |  |  |  |
|  | **Option 1**  **ThinkCentre M90a Gen 5 (24″ Intel) All-In-One**  **Performance**  **Processor**  14th Generation Intel® Core™ i5-14500 Processor with vPro® (E-Core Max 3.70 GHz, P-Core Max 5.00 GHz with Turbo Boost, 14 Cores, 20 Threads, 24 MB Cache)  14th Generation Intel® Core™ i7-14700 Processor with vPro® (E-Core Max 4.20 GHz, P-Core Max 5.30 GHz with Turbo Boost, 20 Cores, 28 Threads, 33 MB Cache)  **Operating System**  **Windows 11 Pro - Lenovo recommends Windows 11 Pro for business**  **Graphics**  Intel® UHD Graphics 770  Intel® UHD Graphics 730  **Memory**  Up to 16GB DDR5 4800MHz  Up to 16GB DDR5 5600MHz  **Storage**  Up to 1TB PCIe SSD (1 x 1TB)  **Audio**  Dual-mic array for AI noise suppression  3W x 2 speakers with Dolby Atmos®  **Camera**  5M RGB non-tilt camera  5M RGB tilt camera  **Connectivity**  **Ports/Slots**  3 x USB-A (USB 10Gbps)  Optional: 3-in-1 card reader  Headphone / mic combo  USB-C® (USB 10Gbps, supports rapid charge 15W)  3 x USB-A (USB 5Gbps, one supports USB power on)  DisplayPort 1.4 (out)  Ethernet (RJ45)  HDMI in 1.4 / out 2.1 combo (up to HDMI 2.1 TDMS)  Optional: Serial port  **Wireless**  Optional: Intel® WiFi 6E\* AX211 802.11AX (2 x 2) & Bluetooth® 5.1  Optional: Intel® WiFi 6 AX201 802.11AX (2 x 2) & Bluetooth®5.1  **Internal Bay**  Optional: Slim Optical Disk Drive (ODD)  **Design**  **Display**  23.8″ FHD (1920 x 1080) IPS, touchscreen, near edgeless, antiglare, 72% NTSC, 60Hz refresh rate, 1000:1 contrast ratio, low blue light (software controlled), 16.7M color support. 250cd/m2 brightness, 14ms response time  **Expansion Slot**  M.2 for WiFi  2 x M.2 for PCIe Gen 4 SSD  **Dimensions (H x W x D)**  **With Camera**  Without stand: Starting from 371mm x 539.6mm x 49.6mm / 14.61″ x 21.24″ x 1.95″  With optional Full Function Monitor Stand: Starting from 393.66mm x 539.6mm x 217.31mm / 15.50″ x 21.24″ x 8.56″  With optional UltraFlex IV Stand: Starting from 227.54mm x 539.6mm x 216.31mm / 8.96″ x 21.24″ x 8.52″  With optional Tilt Stand: 453.39mm x 539.6mm x 213.4mm / 17.85″ x 21.24″ x 8.4″  **Without Camera**  Without stand: Starting from 352mm x 539.6mm x 49.6mm / 13.86″ x 21.24″ x 1.95″  With optional Full Function Monitor Stand: Starting from 374.15mm x 539.6mm x 217.31mm / 14.73″ x 21.24″ x 8.56″  With optional UltraFlex IV Stand: Starting from 219.5mm x 539.6mm x 216.31mm / 8.64″ x 21.24″ x 8.52″  With optional Tilt Stand: 453.4mm x 539.6mm x 213.38mm / 17.85″ x 21.24″ x 8.4″  **Weight**  **Without stand:** Starting from 6.06 kg / 13.35lbs  **With optional Full Function Monitor Stand:** Starting from 8.05Kg / 17.74lbs  **With optional UltraFlex IV Stand:** Starting from 8.56kg / 18.86lbs  **With optional Tilt Stand:** Starting from 7.61kg / 16.78lbs  **Color**  Black  **Sustainability**  **Material**  Low-temperature solder  90% recycled and/or sustainable packaging\*  **Certifications / Registries**  ENERGY STAR® 8.0  EPEAT® Gold, where applicable\*  TCO 9.0  TCO Certified Edge  RoHS  TÜV Rheinland certified Low Blue Light  TÜV Rheinland certified Flicker Free  TÜV Rheinland certified Eyesafe (non-touchscreen)  Ultra-Low Noise  12 MIL-SPEC  **Other Information**  **ThinkShield Security**  Intel vPro® Enterprise  Optional: Human Presence Detection Sensor 2.0  BIOS-based Smart USB Protection  Intel® Context Sensing Technology (Intel® CST)  **Display Stand**  **Full Function Monitor Stand**  Tilt: -5 to 20 degrees  Lift: 110mm  Pivot: 90 degrees  Swivel: 90 degrees, 45 degrees left and 45 degrees right  **UltraFlex IV Stand**  Tilt: -5 to 70 degrees  Lift: 70 degrees ± 2° with vertical lift range of 84.37mm  **What’s in the Box**  ThinkCentre M90a Gen 5 (24″ Intel)  Up to 230W power supply unit  USB Keyboard  USB Mouse  Stand  Quick Start Guide | pc | 1 |  |
|  | **Option 2**  **Model**  ProOne 240 G10 AIO PC  **Processor:**Intel Core i5-1335U (up to 4.6 GHz, 12MB Cache, 10 Cores, 12 Threads)  **Operating System:**Windows 11 Pro (Genuine Windows license)  **Memory:**8GB DDR4-3200 RAM (Upgrade Support)  **Storage:**512GB PCIe NVMe SSD  **Display:**23.8-inch diagonal FHD (1920 x 1080) IPS, anti-glare, 250 nits, 72% NTSC  **Graphics:**Integrated Intel Iris Xe Graphics  **Connectivity:**Realtek Wi-Fi 6 RTL8852BE (2×2) and Bluetooth 5.3, Gigabit Ethernet  **Ports:**1 USB Type-C® 5Gbps, 2 USB Type-A 5Gbps, 2 USB 2.0 Type-A, 1 HDMI 1.4, 1 RJ-45, 1 headphone/microphone combo  **Audio:**Realtek ALC3274 codec, internal speaker  **Webcam:**5 MP Swivel camera with microphones  **Dimensions:**54.06 x 18.37 x 41.9 cm  **Weight:**5.37 kg  **Color: Silver** | pc | 1 |  |
|  | **Option 3**  **Model**  ProOne 440 G9  **Processor: I**ntel Core i7-1355U (Raptor Lake-U)  **Memory**: 8GB (1x8GB) DDR4 3200 SODIMM  **Storage:** 512GB 2280 PCIe NVMe Value SSD  **Display:** 23.8-inch Full HD (1920 x 1080) Antiglare IPS Non-Touch  **Graphics:** UMA  **Operating System:** Windows 11 Pro  **Connectivity**: Wi-Fi, Bluetooth  **Ports:** Multiple USB ports, HDMI, Audio Jack  **Audio:** Built-in speakers  **Webcam:** HD Camera  **Dimensions:** Please refer to HP’s official product page  **Weight:** Please refer to HP’s official product page  **Color:** Jet Black | pc | 1 |  |
|  | **Option 4**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 7 155U (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)  **Operating system:** Windows 11 Professional  **Office:** Genuine Microsoft Office 2021 Activated  **Graphics:** Integrated: Intel® Iris® Xᶱ Graphics  **Display:** 27" diagonal, FHD (1920 x 1080), touch, IPS, three-sided micro-edge, anti-glare, 300 nits, 99% sRGB  **Memory:** 16 GB DDR5-5600 MT/s (2 x 8 GB)  **Memory slots:** 2 SODIMM  **Storage:** 512 GB PCIe® NVMe™ M.2 SSD  **Network interface:** Integrated 10/100/1000 GbE LAN  **Wireless technology:** Realtek RTL8852BE Wi-Fi 6 (2x2) and Bluetooth®️ 5.3 wireless card (supporting gigabit data rate)  **Power supply:** 90 W Smart AC power adapter  **External I/O Ports**: Rear: 1 USB Type-C® 5Gbps signalling rate; 2 USB Type-A 5Gbps signalling rate; 2 USB 2.0 Type-A; 1 headphone/microphone combo; 1 RJ-45 Expansion slots, 2 M.2 (1 for SSD, 1 for WLAN)  **Video connector:** 1 HDMI-out 1.4  **Webcam:** True Vision 1080p FHD IR tilt privacy camera with temporal noise reduction and integrated dual array digital microphones  **Audio Features:** Dual 2 W speakers  **Keyboard:** 310 Black Wired Keyboard and mouse combo  **Warranty**: 1-year limited hardware warranty and 90 days limited technical support for software and initial setup (from date of purchase) | pc | 1 |  |
|  | **Option 5**  **Indicate Model**  **Operating system:** Windows 11 Professional English  **Processor and graphics:** Intel® Core™ Ultra 5 125U (up to 4.3 GHz, 12 MB L3 cache, 12 cores, 14 threads) + Intel® Iris® Xe Graphics  **Memory:** 8 GB DDR5-5600 MHz RAM (1 x 8 GB)  Expansion slots: 2 M.2 (1 for SSD, 1 for WLAN)  **Storage:** 512 GB PCIe® NVMe™ M.2 SSD  **Display:** 23.8" diagonal, FHD (1920 x 1080), IPS, three-sided micro-edge, anti-glare, 250 nits, 99% sRGB Non-touch screen  **Audio Features:** Dual 2 W speakers  **Keyboard and mouse:** HP 310 Black Wired Keyboard and mouse combo  **External I/O Ports:** Rear : 1 USB Type-C® 5Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 2 USB 2.0 Type-A; 1 headphone/microphone combo; 1 RJ-45  **Video connector:** 1 HDMI-out 1.4  **Wireless technology:** Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 wireless card  **Network interface:** Integrated 10/100/1000 GbE LAN  **Form factor:** All-in-One  **Special features:** Height adjustable detachable stand  **Power supply:** 90 W AC power adapter  **Warranty:** 1-year limited hardware warranty support | pc | 1 |  |
| 03 | **Smart LED TV** |  |  |  |
|  | **Option 1Model**  4K Smart TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  85 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive | pc | 1 |  |
|  | **Option 2**  **Model**  Class A7 series LED4K UHD (85A7H)  **Category**  QD-MiniLED  **Product Dimensions**  74.9x42.8x3.5inch” (LxWxH)  **Package Weight**  133.2Ib  **Display**  Actual ScreenSize(measured diagonally  85: inch  **Type of TV**  Smart TV  **Yes**  **Picture Quality**  **Screen resolution**  3840x2160p  **Wide Color Gamut**  Yes  7,680x4,320  **Audio**  **Audio**  **Picture engine**  Neural Quantum Processor 8K  **Audio**  **Audio output power(watts)**  **15W x 2**  **Languages**  On-screen Display  English/French/Spanish  **Connectivity**  Wireless built-in  Yes(802.11ac 2.4Ghz/5Ghz)  **Ports**  **HDMI**  4  Wall Mount  Mount Pattern  VESA 800 x 400  **Accessories**  Remote  Yes, Voice Remote  **Battery**  2  **Screen Type**  LCD  **HDR- compatible**  Dolby Vision HDR & HDR10  **Audio technogies**  **Dolby Atmos**  **Bluetooth**  Yes | pc | 1 |  |
|  | **Option 3**  **Model**  4K Curved Smart TV Crystal UHD  **Design:** Curved Design  **Size:** 65’  **Slim Type:** Slim  **Resolution:** 3,840 x 2,160  **Motion Rate:** 120  **Wi-Fi:** Yes (802.11ac)  **Bluetooth:** Yes (4.2)  **Works with Google Assistant:** Yes  **Works with Alexa:** Yes  **Game Mode:** Yes (Game Enhancer)  **Multi Voice Assistant:** Yes (Bixby, Alexa, Google\*)  **Remote Access:** Yes  **Easy Setup:** Yes  **App Casting:** Yes  **Wireless TV On – Samsung WOW: Yes**  **Brightness/Color Detection: Brightness Detection**  **Accessibility – Voice Guide: US English**  **Auto Channel Search: Yes**  **Digital Clean View: Yes** | pc | 1 |  |
|  | **Option 4**  **Model**  4K Smart TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  50 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive | pc | 1 |  |
| 04 | Ordinary Desktop PCs  **Option 1** |  |  |  |
|  | **Processor:** Intel® Core™ Ultra 7 265 (13 TOPS NPU, 20 cores, up to 5.3GHz)  **Operating System:** Windows 11 Pro  **Office:** Microsoft Office 2021 activated  **Graphics Card:** Integrated Graphics  **Memory:** 8GB: 1 x 8GB, DDR5, up to 5600 MT/s, non-ECC  **Storage:** 512GB SSD TLC  **Wireless:** MediaTek Wi-Fi 6 MT7920, 2x2, 802.11ax, MU-MIMO, Bluetooth® wireless card  **Keyboard:** Dell Wired Keyboard - KB216 - US English – Black  **Mouse:** Dell Wired Mouse - MS116 - Black  **Ports Front:** 1 USB 2.0 (480 Mbps) with PowerShare port, 1 USB 2.0 (480 Mbps) port, 1 USB 3.2 Gen 2x2 (20 Gbps) Type-C® port, 1 USB 3.2 Gen 2 (10 Gbps) port, 1 global headset jack., Rear: 3 USB 3.2 Gen 1 (5 Gbps) ports, 3 DisplayPort™ 1.4a (HBR3) ports, 2 USB 2.0 (480 Mbps) with SmartPower On ports,1 USB 3.2 Gen 2 (10 Gbps) Type-C® port, 1 RJ45 (1 Gbps) Ethernet port.  **Optical Drive:** 8x DVD+/-RW/RAM 9.5mm Slimline Optical Disk Drive | pc | 1 |  |
|  | **Option 2**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 5-225 processor (10 Cores, 20MB Total Cache, 3.3GHz)  **Operating System:** Windows 11 Pro  **Graphics Card:** Intel® UHD Graphics  **Memory:** 8GB, 8GBx1, DDR5, 5600MT/s  **Keyboard:** Dell Wired Keyboard - KB216 - US English - Black  **Mouse:** Dell Wired Mouse - MS116 - Black  **Storage:** 512GB M.2 PCIe NVMe Solid State Drive  **Wireless:** MediaTek Wi-Fi 6 MT7920, 2x2, 802.11ax, MU-MIMO, Bluetooth® wireless card  **Ports:** Front: 2 USB 2.0 (480 Mbps) ports,1 USB 3.2 Gen 1 (5 Gbps) port, 1 USB 3.2 Gen 1 (5 Gbps) Type-C® port, 1 Global headset jack, Power button, Media Card Reader; Rear: Power Supply, Power Indicator, Kensington Lock Slot, 2 USB 2.0 (480 Mbps) ports with Smart Power On, 2 USB 3.2 Gen 1 (5 Gbps) ports, 1 HDMI 2.1 (TDMS) port,1 RJ45 (1 Gbps) Ethernet port.  **Monitor/Display:** Diagonal Size: 23.8"  **Resolution / Refresh Rate:** 1920 x 1080  **Ports:** 1x HDMI 1.4 (HDCP 1.4) (Supports up to FHD 1920 x 1080 100Hz TMDS as per specified in HDMI 1.4), 1x DP 1.2 (HDCP 1.4), 1x VGA, 1x USB 3.2 Gen1 Type-B upstream, 3x USB 3.2 Gen1 Type-A downstream, 1x USB 3.2 Gen1 Type-C downstream with up to 15W PD (data only), Cables: (1x Power cord, 1x DP-to-DP cable, 1.8m, 1x USB 3.2 Gen1 Type A-to-B (upstream) cable, 1.8m), Adjustability Height, Tilt, Swivel, Pivot | pc | 1 |  |
|  | **Option 3**  **Indicate Model**  **Operating system:** Windows 11 Pro English  Office: Genuine Microsoft Office Plus 2021 Activated  **Processor:** Intel® Core™ i5-14500 (up to 5.0 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads)  **Chipset:** Intel® Q670 (vPro®)   * Graphics: Integrated Intel® UHD Graphics 770 * Memory: 8 GB DDR5-4800 MT/s (1 x 8 GB)   **Memory slots:** 4 DIMM  **Hard drive:** 256 GB PCIe® NVMe™ M.2 SSD  **Power supply:** 260 W internal power adapter, up to 92% efficiency, active PFC  **External I/O Ports:** Front: 1 headphone/microphone combo; 4 SuperSpeed USB Type-A 10Gbps signalling rate; 1 SuperSpeed USB Type-C® 20Gbps signalling rate  **Rear:** 1 audio-in/out; 1 RJ-45; 1 HDMI 1.4; 3 SuperSpeed USB Type-A 5Gbps signalling rate; 2 DisplayPort™ 1.4; 3 USB Type-A 480 Mbps signalling rate 1 USB 3.1 Gen 2  **Expansion slots:** 1 M.2 2230; 2 PCIe 3 x1; 1 PCIe 3 x16 (wired as x4); 2 M.2 2280; 1 PCIe 4 x16, 1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage  **Audio Features:** Realtek ALC3252 codec, universal audio jack with CTIA and OMTP headset support  **Form factor:** Small form factor  **Pointing device:** 125 Wired Mouse  **Keyboard:** Wired Desktop 320K Keyboard  **Warranty:** 3 year (3/3/3) limited warranty includes 3 years of parts, labor and on-site repair. | pc | 1 |  |
|  | **Model**  ThinkCentre M90t Gen 3 (Intel) Tower  **Part Number**  11TN002SUS  **Processor**  14th Generation Intel® Core™ i5-12500 vPro® Processor (P-cores 3.00 GHz up to 4.60 GHz)  **Operating System**  Windows 11 Pro 64 Bit  **Office**  Genuine Microsoft Office Pro Plus 2019 64 Bit  **Graphic Card**  Integrated Intel® UHD Graphics 770  **Memory**  8 GB DDR5-4400MHz (UDIMM)  **Storage**  1TB SSD M.2 2280 PCIe Gen4 TLC Opal  **Optical Drive**  Slim Ultrabay DVD-RW  **Pointing Device**  USB Optical Mouse  **Keyboard**  USB, Traditional, Black with Number Pad - English (US)  **WiFi Wireless LAN Adapters**  Yes  **Monitor**  LCD Display 24’ diagonal FHD  **Model**  4K Smart LED TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  32 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive | pc | 1 |  |
| 05 | **Laptops**  **(Inclusive with Bags)** |  |  |  |
|  | **Option 1**  **Model** |  |  |  |
|  | **ThinkPad X1 Carbon Gen 11 (14” Intel)**  14th Generation Intel® Core™ i7-1365U Processor with vPro® (E-Core Max 3.90 GHz, P-Core Max 5.20 GHz with Turbo Boost, 10 Cores, 12 Threads, 12 MB Cache)  **Operating System**  Windows 11 Pro  **Graphics**  Integrated Intel® Iris® XeGraphics  **Memory**  16 GB LPDDR5 6400MHz  **Storage**  Up to 1TB PCIe NVMe SSD Gen 4 Performance  **Battery**  57Whr battery  Rapid Charge (60 minutes = 80% runtime), requires 65W or higher adapter  **Audio**  Dolby Atmos®  4 x 360-degree quad-array microphones  Dolby Voice® certified for professional conferencing solution  **Camera**  FHD RGB with webcam privacy shutter (Select Models)  FHD infrared (IR) hybrid with webcam privacy shutter  (Select Models) FHD + IR mobile industry processor interface (MIPI) webcam with Computer Vision & webcam privacy shutter  **CONNECTIVITY**  **Ports/Slots**  2 x USB-C Thunderbolt™ 4  2 x USB-A 3.2 Gen 1  Headphone / mic combo  HDMI 2.1 supporting resolutio  Optional: Nano SIM slot  **WiFi**  Optional: WWAN\* 5G sub6 CAT20 with eSIM & physical nano SIM  Optional: 4G/LTE CAT16 with eSIM & physical nano SIM  WLAN: WiFi 6E\*\* AX211 802.11AX (2 x 2) (requires Windows 11)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Docks**  Thunderbolt™ Dock  USB-C 3.2 Dock  **DESIGN**  **Display**  14″ WUXGA (1920 x 1200) touchscreen, low power, IPS, 400 nits, Eyesafe® certified low blue light, antiglare  14″ WUXGA (1920 x 1200) low power, 400 nits, Eyesafe® certified low blue light, antiglare  **Dimensions (H x W x D)**  For HD camera: 14.96mm x 315.6mm x 222.5mm x / 0.59″ x 12.43″ x 8.76″  For FHD camera: 15.36mm x 315.6mm x 222.5mm x / 0.60″ x 12.43″ x 8.76″  **Weight**  Starting at 1.12kg / 2.48lbs  **Keyboard**  pill-resistant  Glass trackpad 110mm / 4.33″  Backlit with white LED lighting  Air intake key  **Colors**  Deep Black  Optional: Carbon-Fiber Weave on top cover (Select Models)  **SUSTAINABILITY**  **Material**  90% recycled magnesium on C cover  98% post-consumer content (PCC) recycled plastic used in speaker enclosure  25-30% PCC recycled plastic used in the battery enclosure  90% PCC recycled plastic used in power adaptor  Low-temperature solder  Plastic-free packaging with 90% recycled and/or sustainable content\*  **Certifications / Registries**  ENERGY STAR® 8.0EPEAT® Gold, where applicable\*  TCO 9  **OTHER INFORMATION**  **Security**  Discrete Trusted Platform Module (dTPM) 2.0  Firmware shield  PrivacyGuard with ePrivacy certification on display option  PrivacyAlert with Glance app (requires infrared (IR) camera)  Facial recognition login (requires IR camera)  Fingerprint reader integrated with power button (match-on-chip)  Webcam privacy shutter  Kensington Nano Security Slot™  Lock on leave with presence detection (requires IR camera)  **Preloaded Software**  Commercial Vantage  Intel® Unison™  Intel® Connectivity Performance Suite  **What’s in the box**  ThinkPad X1 Carbon Gen 11 laptop  USB-C 65W power adapter (supports Rapid Charge)  Internal Battery  Quick Start Guide | pc | 1 |  |
|  | **Option 2**  **ThinkPad X1 Carbon Gen 11 (14” Intel)**  **PERFORMANCE**  **Processor**  14th Generation Intel® Core™ i5-1355U Processor (E-Core Max 3.70 GHz, P-Core Max 5.00 GHz with Turbo Boost, 10 Cores, 12 Threads, 12 MB Cache)  Windows 11 Pro  **Graphics**  Integrated Intel® Iris® XeGraphics  **Memory**  16 GB LPDDR5 6400MHz  **Storage**  Up to 1TB PCIe NVMe SSD Gen 4 Performance  **Battery**  57Whr battery  Rapid Charge (60 minutes = 80% runtime), requires 65W or higher adapter  **Audio**  Dolby Atmos®  4 x 360-degree quad-array microphones  Dolby Voice® certified for professional conferencing solution  **Camera**  FHD RGB with webcam privacy shutter (Select Models)  FHD infrared (IR) hybrid with webcam privacy shutter  (Select Models) FHD + IR mobile industry processor interface (MIPI) webcam with Computer Vision & webcam privacy shutter  **CONNECTIVITY**  **Ports/Slots**  2 x USB-C Thunderbolt™ 4  2 x USB-A 3.2 Gen 1  Headphone / mic combo  HDMI 2.1 supporting resolutio  Optional: Nano SIM slot  **WiFi**  Optional: WWAN\* 5G sub6 CAT20 with eSIM & physical nano SIM  Optional: 4G/LTE CAT16 with eSIM & physical nano SIM  WLAN: WiFi 6E\*\* AX211 802.11AX (2 x 2) (requires Windows 11)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Docks**  Thunderbolt™ Dock  USB-C 3.2 Dock  **DESIGN**  **Display**  14″ WUXGA (1920 x 1200) touchscreen, low power, IPS, 400 nits, Eyesafe® certified low blue light, antiglare  14″ WUXGA (1920 x 1200) low power, 400 nits, Eyesafe® certified low blue light, antiglare  **Dimensions (H x W x D)**  For HD camera: 14.96mm x 315.6mm x 222.5mm x / 0.59″ x 12.43″ x 8.76″  For FHD camera: 15.36mm x 315.6mm x 222.5mm x / 0.60″ x 12.43″ x 8.76″  **Weight**  Starting at 1.12kg / 2.48lbs  **Keyboard**  pill-resistant  Glass trackpad 110mm / 4.33″  Backlit with white LED lighting  Air intake key  **Colors**  Deep Black  Optional: Carbon-Fiber Weave on top cover (Select Models)  **SUSTAINABILITY**  **Material**  90% recycled magnesium on C cover  98% post-consumer content (PCC) recycled plastic used in speaker enclosure  25-30% PCC recycled plastic used in the battery enclosure  90% PCC recycled plastic used in power adaptor  Low-temperature solder  Plastic-free packaging with 90% recycled and/or sustainable content\*  **Certifications / Registries**  ENERGY STAR® 8.0EPEAT® Gold, where applicable\*  TCO 9  **OTHER INFORMATION**  **Security**  Discrete Trusted Platform Module (dTPM) 2.0  Firmware shield  PrivacyGuard with ePrivacy certification on display option  PrivacyAlert with Glance app (requires infrared (IR) camera)  Facial recognition login (requires IR camera)  Fingerprint reader integrated with power button (match-on-chip)  Webcam privacy shutter  Kensington Nano Security Slot™  Lock on leave with presence detection (requires IR camera)  **Preloaded Software**  Commercial Vantage  Intel® Unison™  Intel® Connectivity Performance Suite  **What’s in the box**  ThinkPad X1 Carbon Gen 11 laptop  USB-C 65W power adapter (supports Rapid Charge)  Internal Battery  Quick Start Guide | pc | 1 |  |
|  | **Option 3**  ThinkPad E14 Gen 5 (Part No: 21JK0084US)  **Processor:** 13th Generation Intel® Core™ i5-1335U Processor (E-cores up to 3.40 GHz P-cores up to 4.60 GHz)  **Operating System**: Genuine Windows 11 Pro 64  **Memory**: 16GB DDR4 3200MHz (soldered + dimm)  **Storage:** 512 GB SSD M.2 2242 PCIe Gen4 TLC Opal.  **Display:** 14″ WUXGA (1920 x 1200) IPS, anti-glare, 300 nits, 45% NTSC, TÜV Rheinland Low Blue Light-certified, 90.4% screen-to-body ratio  **Camera:** 1080P FHD RGB with Microphone and Privacy Shutter  Fingerprint Reader: Yes  Keyboard: English Backlit keyboard (US)  Wireless: Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 (Windows 10) or Bluetooth® 5.2 (Windows 11)  **Battery:** 3 Cell 47Whr  **Connectivity/ ports:**  Thunderbolt™ 4  USB-C 3.2 Gen 2  USB-A 3.2 Gen 1  USB-A 2.0  HDMI 2.1  Ethernet (RJ45)  Headphone / mic combo  in the box:   * ThinkPad E14 Gen 5 (14” Intel) * 65W AC adapter * Internal Battery * Quick Start Guide | pc | 1 |  |
|  | **Option 4**  ThinkPad T14 (14”, Intel)  **Processor:** 10th Generation Intel® Core™ i5-10310U Processor with vPro® (1.70 GHz, up to 4.40 GHz with Turbo Boost, 4 Cores, 8 Threads, 6 MB Cache)  **Operating System**: Genuine Windows 10 Pro 64  **Memory**: 8 GB DDR4 2667MHz  **Graphics:** Integrated Intel® UHD Graphics  **Storage:** 512 GB PCIe SSD  **Display:** 14.0" FHD (1920 x 1080) IPS, anti-glare, touchscreen with Privacy Guard, 500 nits  **Camera:** 720p HD with ThinkShutter  Keyboard: English Backlit keyboard (US)  **Audio:**  Dolby Audio™ Speaker System  Dual far-field microphones  **Connectivity:**   * Optional WWAN: Integrated Global Mobile Broadband LTE-A, CAT 9 * WLAN: Intel® Wi-Fi 6 AX201 802.11AX (2 x 2) * Bluetooth® 5.1 * vPro®: On vPro® Processors   **Battery:** 3 Cell 50Wh internal battery   * Audio: Dolby Audio™ Speaker System * Dual far-field microphones   **Ports/ slots:**   * 2 x USB 3.2\*\* Gen 1 (1 always on) * 1 x USB-C / Thunderbolt™ 3 (DisplayPort, Data Transfer, Power Delivery) * 1 x USB-C (DisplayPort, Data Transfer, Power Delivery) * MicroSD card reader * Optional: Smart card reader * Headphone / mic combo * HDMI 1.4 * RJ45   In the box:   * ThinkPad T14 * 65W AC adapter * 3 Cell 50Wh internal battery   Quick start guide | pc | 1 |  |
|  | **Option 5**  **Model**  ThinkPad E14 Gen 5 (Part Number 21JK0053US)  **Processor:** 13th Generation Intel® Core™ i7-1335U Processor (E-cores up to 3.40 GHz P-cores up to 4.60 GHz)  **Operating System**: Genuine Windows 11 Pro 64  **Memory**: 16GB DDR4 3200MHz (soldered + dimm)  **Graphics:** Integrated Intel® Iris® Xe Graphics  **Storage:** 512 GB SSD M.2 2242 PCIe Gen4 TLC Opal.  **Display:** 14″ WUXGA (1920 x 1200) IPS, touchscreen, 300 nits, 45% NTSC, TÜV Rheinland Low Blue Light-certified, 90.4% screen-to-body ratio  **Camera:** 1080P FHD RGB with Microphone and Privacy Shutter  Fingerprint Reader: Yes  Keyboard: English Backlit keyboard (US)  Connectivity: Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 (Windows 10) or  Bluetooth® 5.2 (Windows 11)  **Audio**: 2 x 2W stereo speakers  Dual mics  Dolby Atmos®  **Battery:** 3 Cell 47Whr  **Ports/ slots:**  Thunderbolt™ 4  USB-C 3.2 Gen 2  USB-A 3.2 Gen 1  USB-A 2.0  HDMI 2.1  Ethernet (RJ45)  Headphone / mic combo  Security:  Kensington Security Slot™  Camera Privacy Shutter  Optional: Smart Power On (integrated fingerprint reader on power button)  Discrete Trusted Platform Module (dTPM) 2.0  In the box:  ThinkPad E14 Gen 5 (14” Intel)  65W AC adapter  Internal Battery  Quick Start Guide | pc | 1 |  |
|  | **Option 6**  **Model**  ThinkPad X13 Gen 5 Intel (13″)  **Processor:** Intel® Core™ Ultra 5 125H Processor (E-Core Max 3.60 GHz, P-Core Max 4.50 GHz with Turbo Boost, 14 Cores, 18 Threads, 18 MB Cache)  Or  Intel® Core™ Ultra 7 155H Processor (E-Core Max 3.80 GHz, P-Core Max 4.80 GHz with Turbo Boost, 16 Cores, 22 Threads, 24 MB Cache)  Or  Intel® Core™ Ultra 5 135U Processor with vPro® (E-cores up to 3.60 GHz P-cores up to 4.40 GHz with Turbo Boost, 12 Cores, 14 Threads, 12 MB Cache)  **Display:** 13.3" WUXGA (1920 x 1200), IPS, antiglare, 100%sRGB, 400 nits, 60Hz, Low Power  Or  13.3” WUXGA (1920 x 1200) 16:10 aspect ratio, IPS, antiglare, 300 nits, 100% sRGB  **Operating system:** Genuine Windows 11 Pro  **Graphics:** Intel® integrated graphics  **Memory:** 16 GB LPDDR5X-6400MHz (Soldered)  **Storage:** 1 TB SSD M.2 2280 PCIe Gen 4 Performance  **Battery:** 3 Cell Rechargeable Li-ion 41 Whr  **Audio:**  Dolby Audio™ Dolby Voice®  2 x speakers  2 x mics  **Camera:** 5MP with webcam privacy shutter  **Fingerprint Reader**: Yes  **Ports/ slots:**  2 x USB-C® (Thunderbolt™ 4, USB 40Gpbs, power delivery 3.0 / DisplayPort 2.1)  2 x USB-A (USB 5Gbps)  HDMI® 2.1 (supports resolution up to 4K@60Hz)  Headphone / mic combo  **Wireless:**  Intel® Wi-Fi 6E AX211 802.11AX (2 x 2)  Intel® Wi-Fi 7 BE200 802.11BE (2 x 2)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Keyboard:** Backlit, Black - English (US)  Spill-resistant (up to 200ml / 6.76oz)  Dual-function TrackPoint: navigate cursor or double-tap to open TrackPoint Quick Menu  TrackPad: 110mm / 4.33″  **Certifications:**  ENERGY STAR® 8.0  EPEAT® Gold, where applicable\*  Eyesafe® (select models)  Forest Stewardship Council® for packaging  Intel® Evo™ (select models)  MIL-SPEC 810H  TCO 9  **ThinkShield Security:**  Discrete Trusted Platform Module (dTPM) 2.0  Facial recognition login (requires IR camera)  Intel vPro® security  Kensington Nano Security Slot™  Microsoft Secured-core PCs  Optional: Power-on Match-on-chip Fingerprint Reader  Ultrasonic Human Presence Detection (requires IR camera)  Webcam privacy shutter  **Preinstalled Software:**  Intel® Connectivity Performance Suite  Intel® Unison™  Lenovo Commercial Vantage  Lenovo View  TrackPoint Quick Menu  **In the box:**  ThinkPad X13 Gen 5 (13” Intel)  USB-C® 65W AC Adapter, supports Rapid Charge  Internal Battery  Quick Start Guide | pc | 1 |  |
|  | **Option 7**  ThinkPad X9 15 Aura Edition (15ʺ Intel) Laptop  **Processor:** Intel® Core™ Ultra 5 226V Processor (LPE-core Max 3.50 GHz, P-core Max 4.50 GHz with Turbo Boost, 8 Cores, 8 Threads, 8 MB Cache / 16 GB MOP)  Or  Intel® Core™ Ultra 7 258V Processor (LPE-core Max 3.70 GHz, P-core Max 4.80 GHz with Turbo Boost, 8 Cores, 8 Threads, 12 MB Cache / 32 GB MOP)  Or  Intel® Core™ Ultra 5 238V Processor with vPro® (LPE-core Max 3.50 GHz, P-core Max 4.70 GHz with Turbo Boost, 8 Cores, 8 Threads, 8 MB Cache / 32 GB MOP)  **Operating system:** Windows 11 Pro  **NPU:** Up to 48 trillion operations per second (TOPS) AI performance  **Graphics:** Intel®Arc™ Xe2 GPU with >67 TOPs  **Display:**  15.3ʺ 2.8k (2880 x 1800) OLED, antireflective / antismudge, 500nit, 120Hz refresh rate, 100% DCI-P3, 16:10 aspect ratio, TÜV Rheinland Certified Low Blue Light (hardware), ), TÜV Rheinland Certified Eye Comfort (5 star), Eyesafe® certified  Or  15.3ʺ 2.8k (2880 x 1800) OLED, antireflective / antismudge, 500nit, 120Hz refresh rate, 100% DCI-P3, 16:10 aspect ratio, TÜV Rheinland Certified Low Blue Light (hardware), TÜV Rheinland Certified Eye Comfort (5 star), Eyesafe® certified, add-on film touch (AOFT) touchscreen  **Memory:** 16GB LPDDR5x 8533MT/s dual channel, soldered  **Storage:** 1TB M.2 PCIe Gen4x4 SSD (2242)  Or 2TB M.2 PCIe Gen4x4 SSD (2242)  Or 512 GB M.2 PCIe Gen4x4 SSD (2242)  **Battery:** 80Whr  Supports Rapid Charge (60 minutes = 80% capacity), requires 65W or higher power adapter  **Audio:**  Dolby Atmos®  4 speakers  Dual-array microphones  **Camera:**  4K 8MP Mobile Industry Processor Interface (MIPI), RGB & infrared (IR) with webcam privacy e-shutter (F9)  **Ports/slots:**  2 x USB-C®(Thunderbolt™ 4, USB 40Gbps)  USB-A (USB 10Gbps)  Headphones / mic combo  HDMI 2.1 (supports resolution up to 4K@60Hz)  **Wireless:**  Intel® WiFi 7 802.11BE (2 x 2)  Bluetooth® 5.4  **Keyboard:**  English US-  Backlit with white LED lighting  Glass haptic TouchPad (130mm x 80mm / 5.12" x 3.15")  Spill-resistant (up to 500ml / 16.90oz)  1.35mm travel  **Certifications:**  ENERGY STAR®8.0  EPEAT® Gold with Climate+  Eyesafe® certified  Forest Stewardship Council®(FSC) packaging  Intel®Evo™  MIL-STD-810H  TCO 10  TÜV Rheinland Eye Comfort (5 star)  TÜV Rheinland Low Blue Light (hardware)  **ThinkShield Security:**  Discreet Trusted Platform Module (dTPM)  Facial recognition login  Intel®Threat Detection Technology  Microsoft Secured-core PCs (select models)  Smart Power On: Fingerprint reader (match-on-chip) integrated with power button  Webcam privacy e-shutter (F9)  **Preloaded software:**  Intel Connectivity Performance Suite  Intel®Unison™  Lenovo Aura Edition Smart Experiences  Lenovo Commercial Vantage  Lenovo View  Office 365 (trial)  **In the box:**  ThinkPad X9 15 Aura Edition (15ʺ Intel) laptop  USB-C®65W GaN AC adapter  Internal Battery  Quick Start Guide | pc | 1 |  |
|  | **Option 8**  ThinkPad E16 Gen 3 (16″ Intel) Laptop  **Processor:**  Intel® Core™ 5 210H Processor (E-cores up to 3.60 GHz P-cores up to 4.80 GHz with Turbo Boost, 8 Cores, 12 Threads, 12 MB Cache)  Or  Intel® Core™ 7 240H Processor (E-cores up to 4.00 GHz P-cores up to 5.20 GHz with Turbo Boost, 10 Cores, 16 Threads, 24 MB Cache)  **Operating system**: Windows 11 Pro  **Graphics**: Intel®Integrated Graphics  **Display**: 16″ WUXGA (1920 x 1200) IPS, 16:10 aspect ratio, 300nit, 60Hz, 45% NTSC, 90.7% STBR, antiglare, TÜV Low Blue Light (software controlled)  **Memory:** 16 GB DDR5 5200Mhz  Or 8 GB DDR5-5600MT/s (SODIMM)  **Storage:** 512GB M.2 PCIe Gen4 SSD (2242)  **Battery:** 48Whr  **Audio:**  2 x 2W speakers  Harman Kardon®speakers  Dolby Atmos®  Dual-array mics  **Camera:** 5M RGB with webcam privacy shutter  **Ports/slots:**  USB-C®(Thunderbolt™ 4, USB 40Gbps) with power delivery 3.1 & DisplayPort 2.1  USB-C®(USB 20Gbps) with power delivery 3.1 & DisplayPort 1.4  USB-A (USB 10Gbps)  USB-A (USB 5Gbps)  Ethernet (RJ45)  HDMI®2.1 (supports resolution up to 4K@60Hz)  Headphone / mic combo  **Wireless:**  Intel®AX211 WiFi 6E\* 802.11AX (2 x 2)  Bluetooth®5.3  **Keyboard:**  English US  Dual-function TrackPoint: navigate cursor or double-tap to open TrackPoint Quick Menu  backlit with white LED lighting  Spill-resistant  TrackPad with 3 buttons (115mm x 67mm / 4.52″ x 2.63″)  ThinkPad TrackPoint Keyboard (1.5mm / 0.05″ key travel)  **Certifications:**  ENERGY STAR®9.0  Forest Stewardship Council®(FSC)  MIL-STD-810H  RoHS  TCO 10.0  TÜV Low Blue Light (software controlled)  TÜV Eyesafe®  EPEAT®Gold with Climate+  **Security:**  Discrete Trusted Platform Module (dTPM) 2.0  Kensington Nano Security Slot™  Self-healing BIOS  Optional: Smart Power On: match-on-chip (MOC) fingerprint reader integrated with power button  Zero-touch login with Microsoft Windows Hello (requires optional IR camera)  **Preloaded software:**  Lenovo Commercial Vantage  Lenovo Smart Connect  Lenovo Smart Meeting  McAfee®LiveSafe™ (trial)  ThinkPad TrackPoint Quick Menu  **In the box:**  ThinkPad E16 Gen 3 (16″ Intel)  Internal Battery  USB-C®65W AC adapter  Quick Start Guide | pc | 1 |  |
|  | **Option 9**  ProBook 4 G1i 14 inch Notebook AI PC  **Processor family**: Intel® Core™ Ultra 5 processor  **Processor:** Intel® Core™ Ultra 5 225U (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)[[6,7]](https://www.hp.com/us-en/shop/pdp/hp-probook-4-g1i-14-inch-notebook-ai-pc-wolf-pro-security-edition-p-bp0u7ua-aba-1#disclaimerTabs)  **NPU:** Intel® AI Boost (12 NPU TOPS)  **Graphics**: Integrated: Intel® Graphics  **Operating system**: Windows 11 Pro  **Memory**: 16 GB DDR5-5600 MT/s (1 x 16 GB)  **Memory slots**: 2 SODIMM  **Storage**: 1 TB PCIe® NVMe™ SSD  **Display**: 14" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 300 nits, 62.5% sRGB  **Security software license**: HP Wolf Pro Security Edition (3 years)  **Ports/slots:**  1 HDMI 2.1.  1 stereo headphone/microphone combo jack  1 RJ-45  2 USB Type-A 5Gbps signaling rate (powered)  2 USB Type-C® 20Gbps signaling rate (USB Power Delivery 3.0, DisplayPort™ 1.4, HP Sleep and Charge)  **Audio:**  Audio by Poly Studio,  dual stereo speakers  dual array microphones  **Camera:** 5 MP IR camera  **Keyboard:** English US  Spill-resistant  backlit keyboard  **Wireless:**  Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card, non-vPro®  Network interface:  Realtek RTL8111HSH-CG GbE  Power supply:  45 W USB Type-C® adapter  **Battery:**  HP Long Life 3-cell, 56 Wh Li-ion polymer  **Sensors:**  HP Sure Platform; Thermal sensor; HP Tamper Lock; Hall effect sensor  **Fingerprint reader:** Yes  **Energy Efficiency:**  TCO Certified  ENERGY STAR® certified  **Warranty:**  1 year (1/1/0) limited warranty includes 1 year of parts and labor. No on-site repair.  **Software included:** Buy Microsoft Office (separately) - HP Connection Optimizer - HP Hotkey support - HP MAC Address Manager - HP Notifications - HP UEFI BIOS Certification level 2.7B - HP PC Hardware Diagnostics Windows - HP Privacy Settings - HP Services Scan - HP Smart Support- HP Support Assistant - myHP - HSA Fusion for Commercial - HSA Telemetry for Commercial - Poly Lens - Poly Camera Pro - Copilot in Windows with Copilot key | pc | 1 |  |
|  | **Option 10**  **Indicate Model**  General Type  **Processor:** Intel® Core™ Ultra 7 256V (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 8 cores, 8 threads)  **Operating system**: Windows 11 Professional  Microsoft office 2021 activated  **Graphics:** Integrated: Intel® Arc™ 140V GPU (8GB)  **Display:** 14" diagonal, 2K (1920 x 1200), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass 3, 400 nits, 62.5% sRGB  **Display brightness:** 400 nits  **Display color gamut:** 62.5% sRGB  **Memory:** 16 GB LPDDR5x-8533 MT/s (onboard)  **Storage:** 512 GB PCIe® Gen4 NVMe™ M.2 SSD  **Wireless technology:** Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card  **Power supply:** 65 W USB Type-C® power adapter  **Battery:** 3-cell, 59 Wh Li-ion polymer  Battery life Up to 16 hours and 30 minutes  Video Playback Battery Life, Up to 22 hours and 45 minutes  **Battery Recharge Time:** Supports battery fast charge: approximately 50% in 30 minutes  **External I/O Ports:** 2 USB Type-A 10Gbps signalling rate; 1 HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 1.4a, HP Sleep and Charge)[19]  Energy efficiency  **Webcam:** 5MP IR camera with temporal noise reduction and integrated dual array digital microphones  Audio Features: DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio  **Sensors:** Accelerometer; Gyroscope; IR thermal sensor  **Colour:** Glacier silver  Pointing device  **Keyboard:** Full-size, backlit, soft Gray keyboard | pc | 1 |  |
|  | **Option 11**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Processor:** Intel Core i7-1370P Processor, 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.9 GHz frequency with Intel Turbo Boost Technology 24 MB cache and 14 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) Smartcard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera**: 5 MP Camera  **Keyboard:**  Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 12**  **Indicate Model**  **General Type**  **Operating System:** Windows 11 Pro English  **Processor**: Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  Ports/slots: (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  Camera: 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 13**  **Indicate Model**  **Operating System:** Windows 10 Pro English  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  Graphic Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** 512 GB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 14**  **General Type**  **Processor**: Intel® Core™ Ultra 5 125H (14 cores, 18 threads, up to 4.5 GHz, 18 MB cache)  **Graphics:** Integrated Intel® Graphics (4 cores) or Intel® Arc Graphics (7 or 8 cores, up to 3.9 TFLOPS)  **Memory:** 8 GB DDR5-5600 MHz (dual DIMM, upgradable, 2 slots)  **Storage:** 512 GB M.2 PCIe SSD Gen 4 (NVMe, upgradable, 2 slots)  **Operating System:** Windows 11 Pro English  **Display:** 14 inches Resolution: WUXGA (1920 x 1200, IPS, anti-glare, 300 nits, 45% NTSC, 16:10 aspect ratio)  **Battery Capacity:** 47 Wh or 57 Wh (Li-Polymer)  Audio Speakers: 2 x 2W stereo, Dolby Atmos®, Audio by Harman®  **Ports:**1x USB-C (Thunderbolt™ 4, 40 Gbps, Power Delivery, DisplayPort 2.1), 1x USB-C (USB 3.2 Gen 2, 10 Gbps, Power Delivery, DisplayPort 1.4), 2x USB-A (1x USB 3.2 Gen 1, 1x USB 3.2 Gen 1 with Sleep and Charge), 1x HDMI 2.1 (4K@60Hz), 1x Ethernet (RJ45, 10/100/1000 Mbps), 1x 3.5 mm audio combo jack  **Wireless:** Intel® Wi-Fi 6E AX201 (2x2) and Bluetooth® 5.2 (Windows 11)  **Docking:** Supports ThinkPad Universal USB-C Dock, Thunderbolt™ 4 Essential Dock  **Camera:**720p HD with privacy shutter  3 years manufacturer warranty | pc | 1 |  |
|  | **Option 15**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 7 256V (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 8 cores, 8 threads)  **Operating system:** Windows 11 Professional  **Office:** Microsoft office 2021 activated  **Graphics:** Integrated: Intel® Arc™ 140V GPU (8GB)  **Display:** 14" diagonal, 2K (1920 x 1200), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass 3, 400 nits, 62.5% sRGB  **Display brightness:** 400 nits  **Display color gamut:** 62.5% sRGB  **Memory:** 16 GB LPDDR5x-8533 MT/s (onboard)  **Storage:** 512 GB PCIe® Gen4 NVMe™ M.2 SSD  **Wireless technology:** Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card  **Power supply:** 65 W USB Type-C® power adapter  Battery: 3-cell, 59 Wh Li-ion polymer  **Battery life:**Up to 16 hours and 30 minutes  **Video Playback Battery Life:** Up to 22 hours and 45 minutes  **Battery Recharge Time:** Supports battery fast charge: approximately 50% in 30 minutes  **External I/O Ports:** 2 USB Type-A 10Gbps signalling rate; 1 HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 1.4a, HP Sleep and Charge)[19]Energy efficiency  **Webcam:** 5MP IR camera with temporal noise reduction and integrated dual array digital microphones  **Audio Features:** DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio  **Sensors:** Accelerometer; Gyroscope; IR thermal sensor  **Colour:** Glacier silver  Pointing device  **Keyboard:** Full-size, backlit, soft Gray keyboard  **Warranty**: 1-year limited hardware warranty. | pc | 1 |  |
|  | **Option 16**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Processor:** Intel Core i7-1370P Processor, 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.9 GHz frequency with Intel Turbo Boost Technology 24 MB cache and 14 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  Storage: M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  **Wireless LAN (WLAN):** Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) Smartcard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** HP Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer  **Warranty: 1 Year** | pc | 1 |  |
|  | **Option 17**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Office:** Genuine Microsoft Office 2021 Activated  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  **Wireless LAN (WLAN):** Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 18**  **Indicate Model**  **Operating System**: Windows 11 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options 35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** HP Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 19**  **Indicate Model**  **Operating System:** Windows 10 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** 512 GB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer | pc | 1 |  |
|  | **Option 20**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 5 125H (14 cores, 18 threads, up to 4.5 GHz, 18 MB cache)  **Graphics:** Integrated Intel® Graphics (4 cores) or Intel® Arc Graphics (7 or 8 cores, up to 3.9 TFLOPS)  **Memory:** 16 GB DDR5-5600 MHz (dual DIMM, upgradable, 2 slots)  **Storage:** 512 GB M.2 PCIe SSD Gen 4 (NVMe, upgradable, 2 slots)  **Operating System:** Windows 11 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Display:** 14 inches Resolution: WUXGA (1920 x 1200, IPS, anti-glare, 300 nits, 45% NTSC, 16:10 aspect ratio)  **Battery Capacity:** 47 Wh or 57 Wh (Li-Polymer)  **Audio Speakers:** 2 x 2W stereo, Dolby Atmos®, Audio by Harman®  **Ports:**1x USB-C (Thunderbolt™ 4, 40 Gbps, Power Delivery, DisplayPort 2.1), 1x USB-C (USB 3.2 Gen 2, 10 Gbps, Power Delivery, DisplayPort 1.4), 2x USB-A (1x USB 3.2 Gen 1, 1x USB 3.2 Gen 1 with Sleep and Charge), 1x HDMI 2.1 (4K@60Hz), 1x Ethernet (RJ45, 10/100/1000 Mbps), 1x 3.5 mm audio combo jack  **Wireless:** Intel® Wi-Fi 6E AX201 (2x2) and Bluetooth® 5.2 (Windows 11)  **Docking:** Supports ThinkPad Universal USB-C Dock, Thunderbolt™ 4 Essential Dock  **Camera:**720p HD with privacy shutter  **Warranty:** 3 years manufacturer warranty | pc | 1 |  |
|  | **Option 21**  **Operating system:** Windows 11 Pro  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor family:** Intel® Core™ Ultra 5 processor  **Processor:** Intel® Core™ Ultra 5 125U (up to 4.3 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)  **Chipset:** Intel® Integrated SoC  **Memory:** 16 GB DDR5-5600 MT/s (2 x 8 GB)  **Memory slots:** 2 SODIMM; supports dual channel  **Internal drive:** 512 GB PCIe® Gen4 NVMe™ TLC M.2 SSD  **Display:** 14" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 400 nits, 100% sRGB  **Graphics:** Integrated: Intel® Graphics  **External I/O Ports:** Left side : 2 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery, DisplayPort™ 1.4); 2 USB Type-A 5Gbps signalling rate (1 charging, 1 power); 1 HDMI 2.1; 1 stereo headphone/microphone combo jack; Right side : 1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signalling rate  **Audio Features:** Audio by Poly Studio, dual stereo speakers, HP World Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio  **Webcam:** 5 MP IR camera  **Keyboard:** HP Premium Quiet Keyboard – spill-resistant, full-size, backlit keyboard with drain and DuraKeys  **Pointing device:** Click pad with multi-touch gesture support, taps enabled as default  **Wireless technology:** Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card  Input: Finger print reader  **Power supply:** 65 W USB Type-C™ adapter  **Battery:** HP Long Life 3-cell, 56 Wh Li-ion polymers Energy efficiency  **Warranty:** 3 year (3/3/0) limited warranty includes 3 years of parts and labor. | pc | 1 |  |
| **O5** | **Single-Functional Printers** |  |  |  |
|  | **Model**  **ECOSYS MA4500ix**  **General type**  Monochrome multifunctional for A4 format Engine speed  Up to 45 pages A4 per minute. Duplex print speed: 22.5 page per minute, A4. Duplex **copy speed:** 22.5 page per minute, A4.  **Warm-up time**  **Approx.** 23 seconds or less  **Power consumption**  **Printing:** 599.4 W, Copying: 591.9 W, Ready mode: 57.2 W, Low power mode: 35 W, **Sleep mode:** 0.5 W  **Paper Handling**  **Input capacity**  Multi-purpose tray: 100 sheets, 60 to 220 g/m², A4, A5, A6, B5, B6, Letter, Legal, Folio, Custom (70 x 140 to 216 x 356 mm), Banner paper up to 915 mm. Standard universal paper cassette: 500 sheet, 60–120 g/m², A4, A5, B5, Letter, Legal, Folio, Custom (140 x 210 to 216 x 356 mm).  **Max. input capacity with options**  2,600 sheets  **Duplex unit**  Standard duplex unit, 60 to 120 g/m², A4, A5, B5, Letter, Legal, Custom (140x 210 mm - 216 x 356 mm).  **Max. output capacity**  250-sheet-face-down with paper full sensor  **Document processor**  Reverse Auto Document Processor as standard, 75 sheets, 50–120 g/m², A4, A5, A6, B5, Letter, Legal, Custom (105 x 148 to 216 x 356 mm).  **Print**  **Processor**  **ARM Cortex-A53 Dual core 1.4GHz**  **Fonts**  93 outline fonts (PCL6, KPDL3), 4 fonts (Calibri), 4 fonts (Cambria), 1 Bitmap font, 45 types of one-dimensional barcodes, 1 type of two-dimensional barcode (PDF417)  **Features**  PDF Direct Print, Internet printing IPP 1.0, E-mail printing, WSD print, secure printing IPP over TLS, Local and network authentication, Network data encryption IPsec, HTTPS, LDAP over TLS, SNMPv3, SMTP over TLS, POP over TLS, Encrypted PDF Direct Print, TLS 1.3, Secure Boot, Run-time Integrity Check, Microsoft Universal Print, Printing for Chrome OS  **Applicable OS**  All current Windows operating systems, MAC OS X Version 10.9 or higher, Chrome OS, Linux, as well as other operating systems on request  **Copy**  **Max. original size**  A4 / Legal  **Continuous copy**  1 - 999  **Zoom range**  25 - 400 % in 1% steps  **Preset magnification ratios**  7 Reductions/5 Enlargements  **Image adjustments**  Text + Photo, Photo, Text, Chart/Map, Printed document  **Digital copy features**  Electronic sort (collate), ID card copy, 2in1, 4in1, auto cassette change, Skip blank page, Skip Line, DP Auto-cropping  **Scan**  **Scan functionalities**  Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN , WIA , WSD scan, Chrome OS (Scan), AirPrint, Mopria  **Scan speed**  Simplex: 60 ipm (300 dpi, A4, b/w), 40 ipm (300 dpi, A4, colour). Duplex: 26 ipm (300 dpi, A4, b/w), 17 ipm (300 dpi, A4, colour).  **Scan features**  Banner Scan, Colour scan, integrated address book, Active Directory support, encrypted data transfer, multi send (e-mail, fax, SMB/FTP folder, print) at once, Blank page skip  **Scan resolution**  600, 400, 300, 200 dpi, 256 greyscales per colour  **Max. scan size**  **A4 / Legal**  **File type**  TIFF, JPEG, XPS, Open XPS, PDF, PDF/A, PDF/A-1a/b, PDF/A-2a/b/u, Encrypted PDF, High compression PDF, MS Office file and Searchable PDF (optional Scan  **Extension Kit(A) is required)**  Original recognition  **Text, photo, text + photo, light text, optimised for OCR**  **Option 2**  **Model**  LaserJet Pro 4003dn Printer (2Z609A)  **Print technology:** Laser  **Print speed black (ISO, letter):** Up to 42 ppm  **Print speed black (ISO, A4):** Up to 40 ppm  **First page out black (letter, ready):** As fast as 6.1 sec  **Duty cycle (monthly, A4):** Up to 80,000 pages  **Recommended monthly page volume:** 750 to 4,000  **Print quality black (best):** Fine Lines (1200 x 1200 dpi)  **Processor speed:** 1200 MHz  **Memory:** 256 MB  **Paper handling input, standard:** 100-sheet multipurpose Tray 1, 250-sheet input Tray 2  **Paper handling output, standard:** 150-sheet output bin  **Duplex printing:** Automatic  **Connectivity, standard:** 1x Hi-Speed USB 2.0 | 1x host USB at rear side; Gigabit Ethernet 10/100/1000BASE-T network; 802.3az(EEE)  **Mobile printing capability:** Smart App; Apple AirPrint; Mopria Certified  **Display:** 2-line back lit LCD graphic display  **Number of print cartridges:** 1 (black)  **Dimensions (W x D x H):** 381 x 357 x 216 mm  **Weight:** 8.56 kg | pc | 1 |  |
| **06** | **Model**  [**COLOR LASERJET PRO MFP M479 SERIES PRINTER**](http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=4aa7-4862enuc) |  |  |  |
|  | **Functions**  Print, copy, scan, fax, email  **Print Speed - Black (normal)**  Up to 28 ppm  **Print speed - Color (normal)**  Up to 28 ppm  **First page out (ready) black**  As fast as 9.3 sec  **First page out (ready) color**  As fast as 10.9 sec  **Resolution (black)**  600 x 600 dpi, Up to 38,400 x 600 enhanced dpi  **Resolution (color)**  600 x 600 dpi, Up to 38,400 x 600 enhanced dpi  **Resolution technology**  ImageREt 3600, PANTONE® calibrated  **Monthly duty cycle**  Up to 50,000 pages  Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or groups.  **Recommended monthly page volume**  750 to 4000  **Print Technology**  Laser  **Display**  4.3" intuitive touchscreen Color Graphic Display (CGD)  **Number of print cartridges**  4 (1 each black, cyan, magenta, yellow)  **Replacement cartridges**  HP 415A Magenta LaserJet Toner Cartridge (~2,100 pages), W2033A; HP 415x Black LaserJet Toner Cartridge (~7,500 pages), W2030x; HP 415x Cyan LaserJet Toner Cartridge (~6,000 pages), W2031x; HP 415x Yellow LaserJet Toner Cartridge (~6,000 pages), W2032x | pc | 1 |  |
| 07 | **ID Card Printer** |  |  |  |
|  | **Option 1**  **Model**  HDP6600 Card Printer & Encoder  **Side Printing:** Single or Dual  **Print Method:** HDP® Dye-Sublimation / Resin Thermal Transfer  **Resolution:** 600 dpi  **Print Speed:** Up to 230 cards per hour (YMCK with transfer) / 16 seconds per card  **Memory:** 1 GB RAM  **Accepted Card Sizes:** CR-80  **Warranty:**4 years (printer);Lifetime (printhead)  **Printer Options:**  Dual-sided printing  Wasteless LMX card lamination module (one-material and two-material configurations available)  Card flattener  Magnetic stripe encoder  Contact Smart Card encoder  Contactless Smart Card encoding modules  Dual input card hopper module  200-card input hopper module  Physical locks for card hoppers and consumables access  Secure proprietary consumables system  Custom secure holographic overlaminate  Printer cleaning kit | pc | 1 |  |
|  | Consumables  **Model**  **084922**  HID Fargo 6600 Color Ribbon  Fargo YMCK Full Color Ribbon )  Full color with resin black- Upto YMCK 600 images | pc | 1 |  |
| **Model**  **084900** Fargo 6600 084900 Clear HDP Retransfer FilmClear HDP Film, Approximately 1500 imagesModel082700HID Fargo 6600 Thermal Transfer and PolyGuard OverlaminateClear 250 counts/images | pc | 1 |  |
| **Model**  **082137**  HID Fargo 6600 UltraCards  PVC cards/thickness/construction:  **HID Fargo UltraCards** PVC cards/CR-  79/CR-80 Hico 30ml-50ml Premiums  Composite 500 sealed cards per box  High Coercively Magnetic Stripes Premiums Composite Upto 1500 images | box | 1 |  |
| **Model**  **088933**  Cleaning Materials for HDP for HID Fargo Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards | packet | 1 |  |
| **Model**  **086094**  HID Fargo Replacement Printhead for Fargo HDP 6600  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly | pc | 1 |  |
|  | Option 2ModelHID FARGO® HDP5000 ID Card Printer & EncoderIdeal solution for printing on technology-rich smart cards **Sided Printing:**Single or Dual  **Print Method:**HDP Dye-Sublimation / Resin Thermal Transfer  **Resolution:**300 dpi  **Print Speed:** up to 24 seconds per card / 150 cards per hour (YMC with transfer)  **Accepted Card Sizes:**CR-80  **Warranty:**3 years (printer)\*; Lifetime (printhead)\*  **Printer Options:**  Dual-sided printing  Single- or dual-sided lamination  USB 2.0 interface for inline printing and encoding  Smart card encoding (contact/contactless)  Magnetic stripe encoding  Physical locks  Dual input card hopper 200-card input hopper  Printer cleaning kit | pc | 1 |  |
|  | Consumables |  |  |  |
|  | **Model**  **084051**  HID Fargo Color Ribbon  Full color with resin black- Upto YMCK 500 images | pc | 1 |  |
|  | **Model**  **082601**  HID Fargo Thermal Transfer and PolyGuard Overlaminate  Clear 250 counts/images | pc | 1 |  |
|  | **Model**  **084053**  HID Fargo HDP Film  Clear HDP Film, Approximately 1500 images | pc | 1 |  |
|  | **Model**  **082137**  HID Fargo UltraCards  PVC cards/thickness/construction:  CR-79/CR-80 Hico 30ml-50ml  High Coercively Magnetic Stripes Premiums Composite Upto 1500 images  500 sealed cards per box | box | 1 |  |
|  | **Model**  **089200**  Cleaning Materials for HDP for HID Fargo  Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards | packet | 1 |  |
|  | **Model**  **086091**  HID Fargo Replacement Printhead for Fargo HDP 5000  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly | pc | 1 |  |
|  |  |  |  |  |
|  | Option 3ModelHDP5000e ID Card Printer & EncoderGeneral TypeFARGO HDP5000E RETRANSFER IDCARD PRINTER (DUAL-SIDED)Sided Printing: Single or DualPrint Method: HDP® Dye-Sublimation / Resin Thermal TransferResolution: 300 dpiPrint Speed: Up to 27 seconds per card / 133 cards per hour (YMCK with transfer)Accepted Card Sizes: CR-80Warranty: Four years (printer); lifetime (printhead)Printer Options:Dual-sided printingSingle- or dual-sided laminationSmart card encoding (contact/contactless)Magnetic stripe encodingDual input card hopper200-card input hopperPrinter cleaning kit | pc | 1 |  |
|  | **Consumables**  **Model**  **084051**  HID Fargo 5000e Color Ribbon  Fargo 084511 YMCK Full Color Ribbon )  Full color with resin black- Upto YMCK 500 images | pc | 1 |  |
| **Model**  **084500** Fargo 5000e 084500 Clear HDP Retransfer FilmClear HDP Film, Approximately 1500 imagesModel082600 HID Fargo 5000e Thermal Transfer and PolyGuard Overlaminate Clear 250 counts/images | pc | 1 |  |
| **Model**  **082136**  HID Fargo 5000e UltraCards  PVC cards/thickness/construction:  **HID Fargo UltraCards** PVC cards/CR-  79/CR-80 Hico 30ml-50ml Premiums  Composite 500 sealed cards per box  High Coercively Magnetic Stripes | pc | 1 |  |
| Premiums Composite Upto 1500 images  **Model**  **096200**  Cleaning Materials for HDP for HID Fargo Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards **Model**  **096091**  HID Fargo Replacement Printhead for Fargo HDP 5000e  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly | pc | 1 |  |
|  | **Option Two**  **Model:** RG-AP9861-R, Wi-Fi 7 24.436 Gbps Indoor Access Point, 18 Spatial Streams, Built-in AI Radio  **Wireless protocol:** 802.11n/ac/ax/be  **Radio design: Five-radio:** 2.4 GHz (4x4), 5 GHz 1 (4x4), 5 GHz 2 (4x4), 6 GHz (4x4), up to 18 spatial streams  Max. data transmission rate: 24.436 Gbps  **Wi-Fi antenna:** Built-in omnidirectional smart antenna  Fixed service port: 1 x 100/1000/2.5G/5G/10GBASE-T port, 1 x 10GE SFP+/RJ45 combo port, 1 x 10/100/1000BASE-T  **Bluetooth:** Bluetooth 5.3  **Max. number of associated STAs:** 2,048 (512 STAs per radio)  Input power supply: 54 V DC/1.25 A power input over DC connecto;, PoE+/PoE++ input, in compliance with IEEE 802.3at/bt  **Max. power consumption:** 60 W  **Operating temperature:** –10°C to +50°C (14°F to 122°F)  Dimensions (W x D x H): 245 mm x 245 mm x 67 mm Mounting: Ceiling or wall | pc | 1 |  |
|  | **Option 3**  **Indicate Model**  Wireless protocol: 802.11n/ac/ax/be  **Radio design:** Dual-radio: 2.4 GHz (2x2), 5 GHz (2x2), up to 4 spatial streams  Max. data transmission rate: 3.570 Gbps  **Wi-Fi antenna:** Built-in omnidirectional smart antenna  **Fixed service port:** 1 x 100/1000/2.5GBASE-T port and 1 x 2.5GE SFP port  **Bluetooth:** Bluetooth 5.3  **Max. number of associated STAs:**256 (128 STAs per radio)  **Input power supply:** 48 V DC/0.54 A power input over DC connector; PoE/PoE+ input, in compliance with IEEE 802.3af/at  **Max. power consumption:** 16 W  **Operating temperature:** –10°C to +50°C (14°F to 122°F)  Dimensions (W x H x D): 200 mm x 200 mm x 40 mm  **Mounting:** Ceiling or wall |  |  |  |
|  | **Option 4**  **Indicate Model**  **Enclosure material:** Plastic  **Mount material:** SGCC Steel  **Weatherproofing:** IP54  **Management interfaces:** Ethernet  **Networking interface:** (1) GbE RJ45 port  **Button:** Factory reset  **LED\*:** White/Blue  **Power method:** PoE+, passive PoE (48V)  **Power supply:** UniFi PoE switch 48V, 0.5A PoE adapter  **Supported voltage range**: 44 to 57VDC  **Max. power consumption:** 16.5W  Max. TX power:2.4 GHz 26 dBm, 5 GHz 26 dBm  **MIMO: 2.4 GHz 4 x 4, 5 GHz:** 4 x 4  **Throughput rate:** 2.4 GHz: 600 Mbps; 5 GHz: 2400 Mbps  Antenna gain: **2.4 GHz 4 dBi; 5 GHz: 5.5 dBi**  Mounting: Wall/ceiling (included)  **Operating temperature:** -30 to 60° C (-22 to 140° F)  **Operating humidity:** 5 – 95% noncondensing  **WiFi standards:** 802.11a/b/g, WiFi 4/WiFi 5/WiFi 6  **Wireless security:** WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)  **BSSID:** 8 per radio  **VLAN:** 802.1Q  **Advanced QoS:** Per-user rate limiting  Guest traffic isolation Supported  **Concurrent clients:** 300+  **Supported Data Rates:**  802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11b: 1, 2, 5.5, 11 Mbps  802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11n (WiFi 4): 6.5 Mbps to 600 Mbps (MCS0 – MCS31, HT 20/40)  802.11ac (WiFi 5): 6.5 Mbps to 1.7 Gbps (MCS0 – MCS9 NSS1/2/3/4, VHT 20/40/80/160)  802.11ax (WiFi 6): 7.3 Mbps to 2.4 Gbps (MCS0 – MCS11 NSS1/2/3/4, HE 20/40/80/160)  1 year Warranty. | pc | 1 |  |
|  | **Option 5**  **Indicate Model**  **Enclosure material:** Plastic  Mount material: SGCC Steel  **Weatherproofing:** IP54  **Management interfaces:** Ethernet  **Networking interface**: (1) GbE RJ45 port  **Button:** Factory reset  LED\*: White/Blue  **Power method:** PoE+, passive PoE (48V)  **Power supply:** UniFi PoE switch 48V, 0.5A PoE adapter  **Supported voltage range:** 44 to 57VDC  **Max. power consumption:** 16.5W  Max. TX power:2.4 GHz 26 dBm, 5 GHz 26 dBm  **MIMO:** 2.4 GHz 4 x 4, 5 GHz: 4 x 4  **Throughput rate:** 2.4 GHz: 600 Mbps; 5 GHz: 2400 Mbps  **Antenna gain:** 2.4 GHz 4 dBi; 5 GHz: 5.5 dBi  **Mounting:** Wall/ceiling (included)  **Operating temperature:** -30 to 60° C (-22 to 140° F)  **Operating humidity**: 5 – 95% noncondensing  **WiFi standards:** 802.11a/b/g, WiFi 4/WiFi 5/WiFi 6  Wireless security: WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)  **BSSID:** 8 per radio  VLAN: 802.1Q  **Advanced QoS:** Per-user rate limiting  Guest traffic isolation Supported  **Concurrent clients:** 300+  **Supported Data Rates:**  **802.11a:** 6, 9, 12, 18, 24, 36, 48, 54 Mbps  **802.11b:** 1, 2, 5.5, 11 Mbps  802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11n (WiFi 4): 6.5 Mbps to 600 Mbps (MCS0 – MCS31, HT 20/40)  802.11ac (WiFi 5): 6.5 Mbps to 1.7 Gbps (MCS0 – MCS9 NSS1/2/3/4, VHT 20/40/80/160)  802.11ax (WiFi 6): 7.3 Mbps to 2.4 Gbps (MCS0 – MCS11 NSS1/2/3/4, HE 20/40/80/160) | pc | 1 |  |
| **08** | **Indoor Wireless Access Points** | pc | 1 |  |
|  | ModelU6- EnterpriseMechanicalDimensionØ220 x 48 mm (Ø8.7 x 1.9&quot;)WeightWithout mount: 960 g (2.1 lb)With mount: 1090 g (2.4 lb)Enclosure materialPolycarbonate, aluminumHardwareNetworkingInterface(1) 2.5 GbE RJ45 portManagement InterfaceEthernetBluetoothPower MethodPoE+Power SupplyUniFi PoE switch48V, 0.5A PoE adapter(Optional)Supported Voltage Range44—57V DCMax. Power Consumption22WMax TX Power2.4GHz 26 dBm5 GHz 26 dBm6GHz 26dBmMIMO2.4Ghz 4x45 GHz 4x46 GHz 4x4Thorough Put Rate2.4 GHz 573. Mbps5 GHz 4.8 Gps6 Ghz 4.8 GpsUbiquity(UniFi) Pc 03 800,000 2,400,000Antenna Gain2.4 Ghz 3.2 dBi5Ghz 5.3dBi6 GHz 4.8dBiLEDsWhite/BlueButtonReboot and factory resetMountingWall/Ceiling(included) Ambient Operating temperature30-60 0 C (-22-140 0 F)Operating Humidity5-95% noncondensingCertificationsCE FCC, ICSoftwareWiFi standards802.11a/b/g/n/ac/ax (WiFi 6/6E)Wireless SecurityWPA-PSK, WPA-Enterprise(WPA/WPA2/WPA3)BSSID8 per radioVLANAdvanced QoSPer-user rate limitingGuest traffic isolationSupportedConcurrent clients600+Zero-wait DFSYes\*\*Supported with upcomingfirmware versions.Supported Data Rates (Mbps)802.11a802.11b802.11g802.11n(WiFi4)802.11ac(WiFi5) 802.11ax(WiFi6 |  |  |  |
| 09 | Outdoor Wireless Points | pc | 1 |  |
|  | Option 1ModelAC MeshUAP-AC-MMechanicalDimension353 x 46 x 34.4 mm (13.9 x 1.8x 1.4&quot;)Hardware(1) GbE RJ45 portManagement InterfaceEthernetBluetoothPower methodPoEPassive PoE, 24V (Pairs 4, 5+;7, 8 return)Power supplyGigabit PoE adapter 24V, 0.5A\*\*5-packs do not come with PoE adapters.Supported Voltage44—57V DCMax. power consumption8.5WMax. TX power2.4 GHz 20 dBm5 GHz 20 dBm6 GHz -MIMO2.4 GHz 2x25 GHz 2x26 GHz -Throughput rate2.4 GHz 300 Mbps5GHz 867 Mbps6 GHZ -Antennae gain2.4 GHz 3dBi5 GHz 4dBi6 GHZ -ButtonFactory resetMountingUbiquity(UniFi) Pc 03 750,000 2,250,000Wall, pole, fast-mount(Included)Ambient operatingtemperature-30 to 70° C (-22 to 158° F)Ambient operating humidity5 to 95% noncondensingCertificationsCE, FCC, IC, UKCASoftwareWiFi standards802.11a/b/g/n/acWireless securityWEP, WPA-PSK, WPA-Enterprise (WPA/WPA2,TKIP/AES)VLAN802.1QBSSIDUp to 4 per radioAdvanced QoSPer-user rate limitingGuest traffic isolationSupportedPower saveSupportedWMMVoice, video, best effort, andbackgroundConcurrent clients250+Supported Data Rates802.11a802.11b802.11g802.11n(WiFi4)802.11ac(WiFi5)802.11ax(WiFi6)Warranty1 Year04 Router ModelDream Machine Pro MaxUDM-Pro-MaxMechanicalUbiquity(UniFi) Pc 01 2,500,000 2,500,000442.4 x 43.7 x 285.6 mm (17.4x 1.7 x 11.2&quot;)Weight4.7 kg (10.4 lb)Enclosure materialAluminium CNC, SGCC steelMount materialSGCC steelHardwareProcessorQuad-core ARM® Cortex®-A57at 2.0 GHzSystem memory8 GB DDR4On-board storage32 GB eMMCIntegrated 128 GB SSDManagement interfaceEthernetBluetoothNetworking interfaceLAN:(8) GbE RJ45 ports(1) 10G SFP+ portWAN:(1) 2.5 GbE RJ45 port(1) 10G SFP+ portIDS/IPS throughput5 Gbps\*\*Measured with iPerf3.Power method(1) Universal AC input,100—240V AC, 2A Max., 50/60Hz(1) USP-RPS DC input, 11.5VDC, 8.7APower supplyAC/DC, internal, 100WSupported voltage range100—240V ACMax. power consumption100WESD/EMP protectionAir: ± 15kV, contact: ± 8kVLCM display(1) 1.3&quot; touchscreenButtonFactory resetAmbient operatingtemperature-10° to 40° C (14° to 104° F)Ambient operating humidity5 to 95% noncondensingCertificationsCE, FCC, ICGateway FeaturesPerformanceRedundant WAN with failoverand load balancingWiFi QoS with UniFi APsApplication, domain, andcountry-based QoSApplication and device typeidentificationAdditional internet failover withLTE BackupInternet quality and outagereportingNext-generation securityApplication-aware firewall rulesSignature-based IPS/IDS threatdetectionContent, country, domain, andad filteringVLAN/subnet-based trafficsegmentationFull stateful firewallAdvanced networkingLicense-free SD-WANWireGuard, L2TP andOpenVPN serverOpenVPN clientOpenVPN and IPsec site-to-siteVPNOne-click Teleport and IdentityVPNPolicy-based WAN and VPNroutingDHCP relayCustomizable DHCP serverIGMP proxyIPv6 ISP supportLEDsEthernetGreen: link/activitySFP+Green: link/activityHDDWhite: disk activityAmber: disk errorRPSBlue: ready |  |  |  |
| **10** | **Biometric Machines**  **Option 1**  **General Type**  Face Recognition Terminal  **Model:** DS-K1T680DF-E1  **Display:** Screen size 8 inch  Operation method Capacitive touch screen  **Type:** LCD  **Video**  Lens:2  **Resolution:** 2 MP  FOV: HFOV = 88°; VFOV = 44°; DFOV = 108°  **Network:** Wired network Support  **Interface**  Network interface: 1 RJ-45, 10/100/1000 M self-adaptive  Lock control: 1  **Exit button:** 1  Door contact input: 1  **Alarm input:** 2  **Alarm output:** 1  **TAMPER:** 1  **RS-485:** 1 RS-485 (Half duplex, HIKVISION)  **Wiegand:** 1 Wiegand (Hik 26bit, Hik 34bit)  **USB:** 1  Authentication  Card type DESFire card, Felica card  **General**  Power supply: 12 to 24 VDC, 3 A, Standard PoE  Working temperature: -30 °C to 60 °C (-22 °F to 140 °F)  Working humidity: 0 to 90% (No condensing)  Protective level IP65  **Dimensions:** 127.3 mm × 232.1 mm × 23.5 mm (5.0'' × 9.1'' × 0.9'‘)  **Function:** Hik-Connect Support  **Language:** English  **QR code recognition:** Support. The dimension of the recognized QR code picture should be larger than 6 cm  × 6 cm.  **Face anti-spoofing:** Support  **Accessory for wall mounting:** DS-KAB6-W1 | pc | 1 |  |
|  | **Option 2**  **Model DS-K1T680DF-E1**  Face Recognition Terminal  Face Recognition Terminal  8-inch touch screen with bezel-less design  Presents card on the screen to authenticate  Face recognition distance: 0.3 m to 3 m, duration  ＜ 0.2 s/User, accuracy rate ≥ 99% ν100,000 face capacity, 100,000 card capacity (Felica, DESfire, M1), 10,000 fingerprint capacity, and -- 150,000 event capacity ν  Supports ISAPI, ISUP 5.0, Wiegand, RS-485, TCP/IP, and PoE ν  Two-way audio with indoor station and main station ν  Configuration via the web client and mobile client ν  Customizes attendance status name | pc | 1 |  |
| **11** | **CCTV Camera- Indoor**  **Model**  4 MP Smart Hybrid Light with ColorVu Motorized Varifocal Dome **Network Camera**  **Part Number**  DS-2CD2141G0-IU#ZAC  **Type**  Indoor  **Camera**  **Image Sensor**  1/1.8" Progressive Scan CMOS  Max. Resolution  2688 × 1520  **Min. Illumination**  Color: 0.0008 Lux @ (F1.2, AGC ON),0 Lux with light  Shutter Time  1/3 s to 1/100,000 s  Day & Night  **IR cut filter**  Angle Adjustment  Pan: 0° to 355°,tilt: 0° to 75°,rotate: 0° to 355°  Lens  Lens Type  Varifocal lens, motorized lens, 2.8 to 12 mm  Focal Length & FOV  2.8 to 12 mm, horizontal FOV 114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 141.3° to 48.1°  Lens Mount  Integrated  Iris Type  Fixed  Aperture  Max. F1.2  Depth Of Field  1 m to ∞  Dori  Dori  Wide: D: 60.0m, O: 23.8 m, R: 12.0 m, I: 6.0 m  Tele: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m  Illuminator  Supplement Light Type  IR,White Light  Supplement Light Range  Up to 40 m  Smart Supplement Light  Yes  IR Wavelength  850 nm  Video  Main stream  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  Sub-Stream  50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)  Third Stream  50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  Video Compression  Main stream: H.265/H.264/H.264+/H.265+,  Sub-stream: H.265/H.264/MJPEG,  Third stream: H.265/H.264,  \*Third stream is supported under certain settings.  Video Bit Rate  32 Kbps to 8 Mbps  H.264 Type  Baseline Profile,Main Profile,High Profile  H.265 Type  Main Profile  Bit Rate Control  CBR,VBR  Scalable Video Coding (SVC)  H.264 and H.265 encoding  Region Of Interest (ROI)  1 fixed region for main stream and sub-stream  Audio  Audio Compression  MP3/AAC-LC  Audio Bit Rate  320 Kbps (MP3)  Audio Sampling Rate  8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  Environment Noise Filtering  Yes  Network  Protocols  TCP/IP  Simultaneous Live View  Up to 6 channels  API  Open Network Video Interface  User/Host  Up to 32 users  Security  Password protection  Network Storage  NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR)  Client  iVMS-4200,Hik-Connect,Hik-Central  Web Browser  Chrome 57.0+, Firefox 52.0+, Edge 89+,  Image  Image Parameters Switch  Yes  Image Settings  Rotate mode, saturation, brightness, contrast, sharpness, gain, white  balance, adjustable by client software or web browser  Day/Night Switch  Day,Night,Auto,Schedule  Image Enhancement  BLC,HLC,3D DNR  SNR  ≥ 52 dB  Wide Dynamic Range (WDR)  130 dB  Privacy Mask  4 programmable polygon privacy masks  Interface  Ethernet Interface  1 RJ45 10 M/100 M self-adaptive Ethernet port  On-Board Storage  Built-in memory card slot microSD/microSD card, up to 512 GB  Audio  1 input (line in), two-core terminal block, max. input amplitude  Alarm  1 input, 1 output (max. 24 VDC/24 VAC, 1 A)  Reset Key  Yes  Event  Basic Event  Motion detection (support alarm triggering by specified target types (human  and vehicle)  Smart Event  Scene change detection  Linkage  Upload to FTP/NAS/memory card,notify surveillance center  Power  12 VDC ± 25%, 0.88 A, max. 10.5 W,Ø5.5 mm coaxial power plug,reverse polarity protection,PoE: IEEE 802.3af, Class 3, max. 12.5 W  Language  English, | pc | 1 |  |
| **12** | **CCTV Camera- Outdoor**  **Model**  4 MP ColorVu Motorized Varifocal Dome Network Camera  **Part No**  DS-2CD2747G2-LZS  **Camera**  **Image Senser**  1/1.8 Progressive Scan CMOS  Max. Resolution  2688 × 1520  Min Illumination  **Color**: 0.0005 Lux @ (F1.0, AGC ON), 0 Lux with white light  Shutter Time  1/3 s to 1/100,000 s  **Angle Adjustment**  Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°  **Lens**  Varifocal lens, motorized lens, 3.6 to 9 mmFocal  Length &FOV  2.8 mm, horizontal FOV 108.8°, vertical FOV 56.4°, diagonal FOV 112.2° to 55°  **Lens Mount**  Ø20  **Iris Type**  Fixed  **Aperture**  F1.0  Depth of Field  2.8mm:3.3m to 4mm:3.8m to  **Dori**  **Dori**  D: 69 m to 124 m, O: 27.4 m to 49.3 m, R: 13.8 m to 24.8 m, I: 6.9 m to 12.4 m  I**lluminator**  Supplement Light Type  **White Light**  Supplement Light Range  Up to 40 m  **Smart Supplement Light**  Yes  **Video**  **Main Stream**  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  **Sub-Stream**  50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)  **Third Stream**  50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  **Video Compression**  Main stream: H.265/H.264/H.265+/H.264+  **Audio**  **Audio Compression**  G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC  **Audio Bit Rate**  64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192  **Network**  **Protocols**  TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS  **Security**  Password protection  **Image**  Image Parameters Switch  **Yes**  **Image Settings**  Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser  **Interface**  **Ethernet Interface**  1 RJ45 10 M/100 M self-adaptive Ethernet port  **On-Board Storage**  Built-in memory card slot, support microSD/microSD card, up to **512 GB**  Power  12 VDC ± 25%, 0.9 A, max. 10.8 W, Ø5.5 mm coaxial power plug  PoE: 802.3af, Class 3, 36 V to 57 V, 0.36 A to 0.23 A, max. 12.9 W  **Language**  English  **Warranty**  1 Year | pc | 1 |  |
| **13** | **CCTV Camera-Rotational**  **Model**  TandemVu 7-inch 4 MP 32X Colorful & IR Network Speed Dome  **Part Number**  DS-2SE7C432MW-AEB(14F1)(P3)  **Camera**  **Image Sensor**  Bullet channel,1/1.8" Progressive Scan CMOS,PTZ channel 1/1.8" progressive scan CMOS  **Min. Illumination**  Bullet channel 0.0005 Lux @ F1.0, AGC ON), 0 Lux with light;[PTZ channel]  **Shutter Speed**  1 s to 1/30,000 s  **Slow Shutter**  Yes  **Focus**  semi-auto;manual;auto  **Day & Night**  ICR  **Zoom**  PTZ channel 32 × optical, 16 × digital  **Day/Night Switch**  day, night, auto, scheduled-switch  **Lens**  Focal Length  Bullet channel: 4 mm; [PTZ channel]: 5.9 to 188.8 mm, 32 × optical  **Zoom Speed**  PTZ channel approx. 5.6 s  **FOV**  Bullet channel Horizontal field of view: 88.7°, Vertical field of view: 44.7°;  **Aperture**  Bullet channel: F1.0; [PTZ channel]: F1.5  Illuminator  **Supplement Light Type**  Bullet channel] white light, PTZ channel IR  **Supplement Light Range**  Bullet channel] white light: up to 30 m, PTZ channel IR: up to 200 m  **Smart Supplement Light**  Yes  **PTZ**  **Movement Range (Pan)**  360°  **Movement Range (Tilt)**  -15° to 90° (auto flip)  **Pan Speed**  pan speed: configurable from 0.1° to 160°/s; preset speed: 240°/s  **Tilt Speed**  tilt speed: configurable from 0.1° to 120°/s, preset speed 200°/s  **Proportional Zoom**  Yes  **Presets**  300  **Patrol Scan**  8 patrols, up to 32 presets for each patrol  **Pattern Scan**  **Power-Off Memory**  Yes  **Video**  **Stream Type**  **main stream; sub-stream; third stream**  **Main Stream**  **Bullet channel:**  50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720  **Sub-Stream**  Bullet channel:50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)60 Hz  **Third Stream**  **Bullet channel**  50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480  **Smart Features**  **Smart Record**  ANR; Dual-VCA  **Warning And Alert**  white light and audible warning  **Network**  Network Storage  NAS (NFS，SMB/ CIFS), ANR  **Protocols**  IPv4/IPv6; HTTP; HTTPS;802  **Interface**  Communication Interface  RJ45, self-adaptive 10M/100M Ethernet port  **Deep Learning Function**  **Face Capture**  [Bullet channel] no,PTZ channel yes | pc | 1 |  |
| **14** | **LED Digital**  **Advertising Display Board**  **Application**  Indoor  **Usage**  Advertising public/Education  **Specification**  Digital Poster,Touchscreen  **Color**  Black  **Supply type**  Original ODM/ OEM  **Media Availability**  Datasheet, Photo  **Model No.**  ADV5531(Floor)  **Certicate**  CE,RoHs, FCC  **CPU**  **PX30 quoad core 64bit**  **Internal Memory**  16GB  **Ratio**  16:9  **USB**  Yes  **HDMI-IN**  Optional  **Language**  Multi-language  **Brightness**  350 cd/m2  **Packaging Details**  L195\*W85\*H23cm  **Screen Display size**  55’  **Connection**  Wireless enabled | pc | 1 |  |
| **15** | TabletOption 1ModelGalaxy tab s10 ultra 256gb cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 14.6 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 256gb ram: 12gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) | pc | 1 |  |
|  | Option 2ModelGalaxy tab S10 ultra 512 cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 14.6 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 512gb ram: 16gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |  |  |
|  | Option 3ModelGalaxy tab A9- 87Network 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 11 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 128gb ram: 8gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |  |  |
|  | Option 4ModelGalaxy tab A8 cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 11 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 64gb ram: 2gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |  |  |
| **16** | **Network Switches**  **Model:** C1000-24T-4X-L  **Series:** Catalyst 1000 Series  **Port Configuration:** 24 × 10/100/1000BASE-T (RJ45), 4 × SFP+ Uplinks (10GBASE-X)  **Form Factor:** Fixed-configuration, rack-mountable (1RU)  **Switching Capacity**: 128 Gbps  **Forwarding Rate:** 95.23 Mpps (64-byte L3 packets)  **MAC Address Table:** 16,000 entries  **Active VLANs:** 256  **VLAN IDs:** 4,094  **IPv4 Routing:** Direct: 542, Indirect: 256  **IPv6 Routing:** Direct: 414, Indirect: 128  **CPU:** ARM v7, 800 MHz  **DRAM:** 512 MB  **Flash Memory:** 256 MB  **Management Interfaces:** 1 × RJ-45 console port, 1 × USB-A (for storage/Bluetooth console)  **SPAN Sessions:** 4 (ingress/egress)  Security ACLs: IPv4/MAC ACEs: 600, IPv6 ACEs: 600  Supported Protocols: SNMP v1/v2c/v3, IEEE 802.1X, LLDP, CDP  **Operating Temperature:** 32°F to 104°F (0°C to 40°C)  **Operating Humidity:** 10% to 90% non-condensing  **Operating Altitude:** Up to 10,000 ft (3,000 m)  **Power Input:** 110-220V AC (auto-sensing)  Power Consumption: Idle: 14.52W, 10% Traffic: 16.44W, 100% Traffic: 16.68W, Weighted Avg: 15.88W  **Minimum IOS Version:** Cisco IOS 15.2(7)E4 or later  **Management Options:** Cisco DNA Canter, CLI, Web UI  **Certifications:** Safety: UL 60950-1, EN 60950-1; EMC: FCC Part 15 Class A, EN55032 | pc | 1 |  |
|  | **Model:** C1000-24P-4G-L  **Series:** Catalyst 1000 Series  **Form Factor**: Fixed-configuration, rack-mountable (1RU)  **Port Configuration:** 24 × 10/100/1000BASE-T PoE+ (RJ45), 4 × SFP Uplinks (1000BASE-X)  **Switching Capacity:** 56 Gbps (1G) / 128 Gbps (10G)  **Forwarding Rate:** 41.67 Mpps (64-byte L3 packets)  **MAC Address Table**: 16,000 entries  **Active VLANs:** 256  **VLAN IDs:** 4,094  **IPv4 Routes:** 542 direct, 256 indirect  **IPv6 Routes:** 414 direct, 128 indirect  **PoE Standards:** IEEE 802.3af (15.4W/port), IEEE 802.3at (30W/port)  **Max PoE Budget:** 195 W (total)  **PoE Power Supply:** Internal (auto-sensing 110-220V AC)  CPU: ARM v7, 800 MHz  **DRAM:** 512 MB  **Flash Memory:** 256 MB  **Management Interfaces:** 1 × RJ-45 console, 1 × USB-A (storage/Bluetooth)  **SPAN Sessions:** 4 (ingress/egress)  **Security ACLs:** IPv4/MAC ACEs: 600, IPv6 ACEs: 600  Supported Protocols: SNMP v1/v2c/v3, IEEE 802.1X, LLDP, CDP  **Operating Temperature:** 32°F to 104°F (0°C to 40°C)  **Operating Humidity:** 10% to 90% non-condensing  **Operating Altitude:** Up to 10,000 ft (3,000 m)  **Power Consumption:** Idle: 14.64 W (PoE), 16.56 W (10% traffic), 16.92 W (100% traffic), Weighted **average:** 16.04 W  **Minimum IOS Version**: Cisco IOS 15.2(7)E4 or later  **Management Options:** Cisco DNA Canter, CLI, Web UI  **Certifications**  UL 60950-1, EN 60950-1, FCC Part 15 Class A, EN55032  Manufacturer warranty |  |  |  |
|  | **Model:** C9300L-24T-4X-A  Mean Time Between Failures – MTBF (hours): 387,700 hours  **Supported IOS**  Network Advantage, Network Essentials  **Network modules options:** Fixed Modules  **Stack Technology:** StackWise-320  **Stacking bandwidth:** 320 Gbps  **Total number of MAC addresses:** 32,000  Total number of IPv4 routes (ARP plus learned routes): 32,000 (24,000 direct routes and 8,000 indirect routes)  **IPv6 routing entries:** 16,000  **Multicast routing scale:** 8,000  **QoS scale entries:** 5,120  **ACL scale entries:** 5,120  **Packet buffer per SKU:** 16 MB buffer for 24 and 48 port Gigabit Ethernet models  **Flexible NetFlow (FNF) entries:**64,000 flow on 24- and 48-port Gigabit Ethernet models  **DRAM:** 8 GB  **Flash:** 16 GB  **VLAN IDs:** 4,094  Total Switched Virtual Interfaces (SVIs): 1,000  **Jumbo frames:** 9,198 bytes  **Switching capacity**: 56 Gbps - 176 Gbps  **Forwarding rate:** 41.66 Mpps - 130.95 Mpps  Manufacturer warranty | pc | 1 |  |
|  | **Model:**C9300-48T-A  **Part Number:** C9300-48T-A  Total 10/100/1000 or Multigigabit copper ports: 48  **Default AC Power Supply:** 350WAC  **Cisco StackWise-480:** Yes  **Cisco StackPower:** Yes  **Default Power Supply:** PWR-C1-350WAC  **Switching Capacity:** 256 Gbps on 48-port Gigabit Ethernet model  **Stacking Bandwidth:** 480 Gbps  **Total Number of MAC Addresses:** 32,000  Total Number of IPv4 Routes (ARP plus learned routes): 32,000 (24,000 direct routes and 8,000 indirect routes)  **IPv4 Routing Entries:** 32,000  **IPv6 Routing Entries:** 16,000  **Multicast Routing Scale:** 8,000  **QoS Scale Entries:** 5,120  **ACL Scale Entries:** 5,120  **Packet Buffer per SKU:** 16 MB buffer for 24- or 48-port Gigabit Ethernet models  **FNF Entries:** 64,000 flow on 24- and 48-port Gigabit Ethernet models  **DRAM:** 8 GB  **Flash:** 16 GB  **VLAN IDs**: 4,000  Total Switched Virtual Interfaces (SVIs)  2,000  **Jumbo Frames:** 9,198 bytes  Total Routed Ports per 9300 Series Stack: 208  **Wireless Bandwidth per Switch:** Up to 96 Gbps on 48-port Gigabit Ethernet model  **Forwarding Rate:** 154.76 Mpps  **Mean Time Between Failures (hours):** 299,000  Manufacturer warranty | pc | 1 |  |
|  | **Model:** WS-C3850-24T-S  **Enclosure type:** Rack-mountable - 1U  **Ports:** 24 x 10/100/1000  **Network management Interface:** Ethernet management port: RJ-45 connectors, 4-pair Cat-5 UTP cabling and Management console port: RJ-45-to-DB9 cable for PC connections  **Available PoE Power:** None  **Switching Capacity:** 92Gbps  Maximum stacking number: up to 9 switches with same IOS feature set in same series  **Stack Bandwidth:** 480Gbps  Forwarding Performance: 68.4Mpps  **FNF entries:** 24,000 flows  **Maximum VLANs IDs:** 4,000  **MAC Address Table Size:** 32K  **CPU:** Multicore CPU  **RAM:** 4 G  **Flash Memory:** 2 G  Wireless: Number of AP per switch/stack  100  **Number of wireless clients per switch/stack:** 2000  **Total number of WLANs per switch:** 64  **Wireless bandwidth per switch:** up to 20Gbps  **Supported Aironet AP series:** 3600, 3500, 2600, 1600, 1260, 1140, 1040  Expansion / Connectivity: Console ports  USB (Type-B), Ethernet (RJ-45)  **Expansion Slot(s):** 1 network module slot and 1 power redundant slot  Network Modules Selection: C3850-NM-4-1G: 4 x 1G uplinks network module  Stacking cable: STACK-T1-50CM StackWise stacking cable with a 0.5 m length  **Stack Power Cable (recommended):** CAB-SPWR-30CM stack power cable with a 30CM length  **Power supply:** PWR-C1-350WAC  **Power Device:** Power supply - redundant - plug-in module  Power Redundancy  **Voltage range (Auto):** 100V-240V  **Power Consumption of standalone(in Watts):** 84.97 (max)  **Rack Mounting Kit:** Yes  **MTBF in hours:** 303,230  **Compliant Standards:** IEEE 802.1D Spanning Tree Protoco, IEEE 802.1p CoS Prioritization, IEEE 802.1Q VLAN, IEEE 802.1s, IEEE 802.1w, IEEE 802.1X, IEEE 802.1X-Rev, IEEE 802.11, IEEE 802.1ab (LLDP), IEEE 802.3ad, IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports, IEEE 802.3 10BASE-T, SNMP v1, v2c, and v3  **System software:** IOS IP Base (Upgradable)  **Software license:** C3850-24-S-E: IP Base to IP Services RTU paper license  With AC power supply Operating environment and altitude  Operating temperature up to 5000 ft (1500 m)  : 23ºF to 113ºF (-5ºC to +45ºC)  **Operating temperature up to 10,000 ft (3000 m):** 23ºF to 104ºF (-5ºC to +40ºC)  **Short-term exception at sea-level with single fan failure:** 23ºF to 113ºF (-5ºC to +45ºC)  **Short-term exception up to 5000 feet (1500 m):** 23ºF to 122ºF (-5ºC to 50ºC)  **Short-term exception up to 10,000 feet (3000 m):**23ºF to 113ºF (-5ºC to 45ºC)  **Operating temperature up to 6000 ft (1800 m):** 23ºF to 113ºF (-5ºC to +45ºC)  **Operating temperature up to 10,000 ft (3000 m):** 23ºF to 104ºF (-5ºC to +40ºC)  Manufacturer’s Warranty | pc | 1 |  |
| **17** | **Network Routers**  **Indicate Model**  **General Type**  **Device Type:** Router  **Enclosure Type:** Rack-mountable - modular - 1U  **Connectivity Technology:** Wired  **Data Link Protocol:** Ethernet, Fast Ethernet, Gigabit Ethernet  **Network / Transport Protocol:** IPSec, L2TPv3  **Routing Protocol:** OSPF, IS-IS, BGP, EIGRP, DVMRP, PIM-SM, static IP routing, IGMPv3, GRE, PIM-SSM, static IPv4 routing, static IPv6 routing, policy- based routing (PBR), MPLS, Bidirectional Forwarding Detection (BFD), IPv4-to-IPv6 Multicast  **Remote Management Protocol:** SNMP, RMON, TR-069  Features: Firewall protection, VPN support, MPLS support, Syslog support, IPv6 support, Class-Based Weighted Fair Queuing (CBWFQ),, Weighted Random Early Detection (WRED), Web Services Management Agent (WSMA), NetFlow  **Compliant Standards:** IEEE 802.3, IEEE 802.1Q, IEEE 802.3af, IEEE 802.3ah, IEEE 802.1ah, IEEE 802.1ag, ANSI T1.101, ITU-T G.823, ITU-T G.824  **RAM: 512 MB** (installed) / 2 GB (max)  **Flash Memory:** 256 MB (installed) / 8 GB (max)  **Status Indicators:** Link activity, power  **Expansion and Connectivity:**  **Interfaces:** 2 x 10Base-T/100Base-TX/1000Base-T - RJ-45 ¦ Management : 1 x console - RJ-45 ¦ Management : 1 x console - mini-USB Type B ¦  Serial : 1 x auxiliary - RJ-45 ¦ USB : 2 x 4 pin USB Type A  Expansion Slot(s): 4 (total) / 4 (free) x EHWIC ¦ 2 (total) / 2 (free) x PVDM ¦ 2 (total) / 1 (free) x CompactFlash Card ¦ 1 (total) / 1 (free) x ISM  **Power:** Power Device  Power supply - internal  **Voltage Required:** AC 120/230 V ( 50/60 Hz )  **Rack Mounting Kit:**Included  **Compliant Standards:** CISPR 22 Class A, CISPR 24, EN55024, EN55022 Class A, EN50082-1, AS/NZS 60950-1, ICES-003 Class A, CS-03, R&TTE, FCC CFR47 Part 15, EN300-386, UL 60950-1, IEC 60950-1, EN 60950-1, BSMI CNS 13438, AS/NZS 3548 Class A, CAN/CSA, C22.2 No. 60950-1, VCCI V-3, EN 61000, TIA/EIA/IS-968  **Software / System Requirements**  **OS Provided:** Cisco IOS IP Base  **Min Operating Temperature:** 32 °F  **Max Operating Temperature:** 104 °F  **Humidity Range Operating:** 10 - 85%  Manufacturer Warranty | pc | 1 |  |
| **18** | **Servers**  **Model**  HPE ProLiant DL380 Gen12  **Workloads**  Collaborative, CRM, data management, analytics and AI, VDI, SCM, ERM, and content mgmt., containers  **Number of Processors**  1-2  **Processors Supported**  Intel Xeon 6 processors  **Cores per processor**  Up to 144 E-cores (64/96/112/128/144)  Up to 86 P-cores (8/12/16/24/32/36/48/64/86)  **Maximum processor frequency/cache**  3.5 GHz maximum, depending on processor/48 to 336 MB L3, total, depending on processor  **I/O expansion slots**  Up to 8 PCIe Gen5 2 OCP 3.0 (front or rear)  **Maximum memory/No. of slots/speed**  8 TB DDR5/32/6400 MT/s  **Storage controller**  Intel Virtual RAID on CPU (Intel VROC) HPE MR216i-o and/or MR216i-p, HPE MR416i-o and/or HPE MR416i-p, HPE MR408e-p, HPE 408i-0 and/or HPE MR408i-p, depending on model  **Maximum storage drive bays**  8 or 12 LFF SAS/SATA/SSD 8, 16, or 24 SFF SAS/SATA/SSD, depending on configuration. 6 SFF rear drive optional or 2 SFF rear-drive optional, 20 SFF NVMe optional, NVMe support through Express Bay will limit maximum drive capacity, depending on model  **Maximum internal storage**  550.8 TB (36 x 15.3 TB EDSFF NVMe)  **Networking ports (embedded)/option**  Nonstandard. Choice of OCP or stand-up card required. | pc | 1 |  |
| **19** | UPS Invertor Backup Batteries  (Data Center Support)  **Option 1**  **Indicate Model**  **General Type**  **200AH 12V Deep Cycle Gel Battery**  **Battery Type:** Gel Sealed Deep Cycle  **Battery**  **Capacity:** 200AH @10hr-rate to 1.80V  **per cell@25℃**  **Normal Voltage:** 12 Volts  **Maintenance type:** Free  **Weight:** 29.5kg  **Float voltage:** 13.5v-13.8v  **Maximum discharge current:**  2000A(5 sec)  **Internal Resistance:** Approx.4 m  Recommended Maximum Charging  **Current Limit:** 60A  Operating Temperature  **Range: Discharge: -**  20℃~60℃ Charge:0℃~50℃ Stora  ge:-20℃~60℃  **Normal Operating Temperature**  **Range:** 25℃ ± 5 ℃  **Float charging Voltage: 13.6 to 13.8V**  **DC/unit Average at 25℃**  **Equalization and Cycle Service:**  14.4to 14.6V DC/unit Average at 25℃  **Self Discharge:** GEL batteries can be  stored for more than 6 months at 25℃.  Self-discharge ratio less than 3% per  month at 25℃. Please charge batteries  before using.  **Quantity**  60  **Mount Type**  Rack Mounted | pc | 1 |  |
|  | **Option 2**  **Indicate Model**  **General Type**  **100AH 48V 5kWh Lithium Iron**  **Phosphate (LiFePO4) Solar Battery Usable**  **Capacity:** 5KWH  **Nominal Voltage:** 51.2V  **Voltage Range**: 48-57.6V  **MAX. Charge & Discharge Current:** 100A @  30S  **Recommended Charge & Discharge Current:**  **≤50A**  **MAX. Output Power:** 5000W  **Recommended Output Power**: 2500W  DOD: ≥95%  **Modules Connection:** 1-6 in parallel  **Communication:** CAN & RS485  **Ingress Protection:** IP21  **Cycle Life:** ≥6000 cycles @ 25°C, 80%  DOD  **Working Temperature Range: Discharge: -**  20°C to +65°C, Charge: +0°C to +55°C  **Net Weight:** 63KG  **Gross Weight:** 76KG  **Product Dimension:** 575 x 430 x 258 mm  **Package Dimension**: 670 x 525 x 415 mm  Quantity  60  **Mount Type**  Rack Mounted | pc | 1 |  |
| **20** | Uninterrupted Power Supply(UPS)  **Model**  APC 500VA UPS (BV500I-MSX)  -Maximum power output 500 VA/300 W – Line interactive technology – Automatic Voltage Regulation (AVR)  -4 x universal, multi-socket battery backup outlets. Powers your home router, allowing you to maintain your internet connection for hours  -Reliable surge protection – protects your valuable electronic devices against damaging lightning, surges and spikes  -Input 230V/Output 230V, Interface Port USB | pc | 1 |  |
| **21** | Crimping Tool  **RJ45 Cable Crimping Tool 3 in 1 Modular Crimping Tool for RJ45 RJ12 RJ11 UTP Cat5E/Cat6 LAN Cutter 4P4C 4P2C**  **Type: 3-in-1 RJ45 Modular Crimping Tool**  **Compatibility:** RJ45, RJ11, RJ12 connectors  **Material:** High-quality steel and durable plastic  **Color: Blue or Green** | pc | 1 |  |
| **22** | **Wireless Router**  **Model**  WiFi AX2  **Dimension and Height**  **Height**  29mm  **Weight**  216g  WiFi  **Transmission Standard:**  802.11ax/ac/a/n 2 x 2 & 802.11b/g/n 2 x 2, MIMO  M**emory**  128 Mbytes RAM + 128 Mbytes ROM  **Network Port**  Three 10/100/1000 Mbps WAN/LAN ports, auto-adaptation  **Interface**  Power port, Network port, WPS/Reset button  **LED indicator**  one LED Indicator | pc | 1 |  |
| **23** | **Projectors**  **Option 1**  **Model**  EpiVision Flex  CO- FHO2  **Resolution** 1920 x 1080 (16:9, Full HD)  **Color Brightness (IDMS Rated)** 3,000 lumens  **White Brightness (ISO Rated)** 3,000 lumens  **Built-in Speaker** 5 W with enclosure  **Operating System** Android TV  **Keystone (Picture Skew)** Auto (Vertical)  **Dimensions (W x D x H)** 12.5" x 8.3" x 3.4"  **Weight** 5.7 lb | pc | 1 |  |
|  | **Option 2**  **Mode**l: EB-X49 Projector  **Image Technology:** 3LCD  **Native Resolution:** XGA (1024 x 768)  **Brightness:** 3600 lumens  **Contrast Ratio:** 16,000:1  **Lamp Life (Normal/Eco):** 6,000 / 12,000 hours  **Keystone Correction:** Vertical: Auto / Horizontal: Manual  **Projection Size:** 30″ – 300″  **Connectivity:** HDMI, VGA, Composite, USB-A, USB-B, Optional Wireless LAN  **Audio:** Built-in 5W speaker | pc | 1 |  |
|  | **Option 3**  **Model: EB-FH52**  **Projection System:** 3LCD Technology  **LCD Panel:** 0,61 inch with C2 Fine  **Color Light Output:** 4.000 Lumen- 2.400 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.000 Lumen - 2.400 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  **On-Screen Pixel Count:**2,073,600  **Contrast Ratio:** 16.000 : 1  **Light source:** Lamp  Lamp: UHE, 230 W, 5.500 h durability, 12.000 h durability (economy mode)  **Keystone Correction:** Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,14:1  **Zoom:** Manual, Factor:1,6  **Lens:** Optical  **Screen Size:** 30 inches - 300 inches  **Projection Distance Wide/Tele:** 1,76 m - 2,86 m ( 60 inch screen ),  **Projection Lens F Number:** 1,51 - 1,99  **Projection Lens Focal Length:** 18,2 mm - 29,2 mm  **Projection Lens Focus:** Manual  **Offset:** 10 : 1  **USB Display Function:** 2 in 1: Image/ Sound  **Interfaces:** USB 2.0-A, USB 2.0, VGA in, HDMI in (2x), Composite in, Miracast, Wireless LAN IEEE 802.11a/b/g/n/ac  **Noise:** Operation:37 dB (A)- Standby:28 dB (A)  **Loudspeaker:** 16 Watt  **Warranty:** 36 months Carry in, Lamp: 36 months or 1.000 h (whichever comes first) | pc | 1 |  |
|  | **Option 4**  **Model:** CO-W01  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,59 inch with MLA (D10)  **Color Light Output:** 3.000 Lumen- 2.000 Lumen (economy) In accordance with ISO 21118:2020  **White Light Output:** 3.000 Lumen - 2.000 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** WXGA  **Resolution Enhancement:** HD ready  **Aspect Ratio:** 16:10  **Light source:** Lamp  Lamp: UHE, 188 W, 6.000 h durability, 12.000 h durability (economy mode)  **Keystone Correction: Manual vertical:** ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 8 Bits: 2D Vertical  **Refresh Rate:** 100 Hz - 120 Hz  **Colour Reproduction:** 16.77 million colours  **Throw Ratio:** 1,27 - 1,71:1  **Zoom:** Digital, Factor:1 - 1,35  Lens: Optical  **Screen Size:** 25 inches - 378 inches  **Projection Distance Wide:** 0,9 m - 10,4 m  Projection Distance Tele: 0,9 m - 10,4 m  **Projection Distance Wide/Tele:** 1,64 m (60 inch screen),  **Projection Lens F Number:** 1,44  Projection Lens Focus: Manual  **Offset:** 7 : 1  **Interfaces:** HDMI 1.4, USB 2.0-A, USB 2.0 Type B (Service Only)  **Power consumption:** 270 Watt (Normal Peak-mode), 214 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  **Supply Voltage:** AC 100 V - 240 V, 50 Hz - 60 Hz  **Loudspeaker:** 5 Watt | pc | 1 |  |
|  | **Option 5**  **Model:** EB-L260F  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,62 inch with C2 Fine  **Color Light Output:** 4.600 Lumen- 3.200 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.600 Lumen - 3.200 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  On-Screen Pixel Count: 2,073,600  **Contrast Ratio:** 5.000.000 : 1  Light source: Laser  **Laser Light source**: 20.000 hours Durability High, 30.000 hours Durability Eco  Keystone Correction: Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **2D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,12:1  **Zoom:** Manual, Factor:1 - 1,62  **Projection Lens Zoom Ratio:** 1,32 - 2,12 : 1  **Lens:** Optical  **Screen Size:** 31 inches - 310 inches  **Interfaces:** USB 2.0-A, USB 2.0, RS-232C, Ethernet interface (100 Base-TX / 10 Base-T), Wi-Fi Direct, VGA in (2x), VGA out, Composite in, Miracast, Jack plug out, Jack plug in (2x), Cinch audio out, Microphone input, HDMI (HDCP 2.2) (2x), Wireless LAN IEEE 802.11a/b/g/n/ac  **Power consumption:** 199 Watt (Normal On-Mode), 144 Watt (Eco On-Mode), 260 Watt (Normal Peak-mode), 191 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  Heat Dissipation: 884 BTU/hour (max)  **Supply Voltage:** AC 220 V - 240 V, 50 Hz - 60 Hz  Warranty: 60 months Carry in or 12.000 h | pc | 1 |  |
|  | **Option 6**  **Model:** Epson Epiq Vision@ Flex CO. FHO2  **Resolution:** 1920X1080 (16:9, Full HD)  **Color Brightness (IDMS rated):** 3,000 lumens  **White Brightness (ISO Rate):** 3,000 lumens  **Contrast Ratio:** 15,000:1  **Lamp Life:** 6,000 hours (Normal Mode), 12,000 hours (Eco Mode).  **Image Size:** Projections can range from 34 to39l.  Ports: HDMI, USB-A(power), USB-B (service).  One Year Warranty | pc | 1 |  |
|  | **Option 7**  **Model:** EB-X49 Projector  **Image Technology:** 3LCD  **Native Resolution:** XGA (1024 x 768)  **Brightness:** 3600 lumens  **Contrast Ratio:** 16,000:1  **Lamp Life (Normal/Eco):** 6,000 / 12,000 hours  **Keystone Correction:** Vertical: Auto / Horizontal: Manual  **Projection Size:** 30″ – 300″  **Connectivity:** HDMI, VGA, Composite, USB-A, USB-B, Optional Wireless LAN  **Audio:** Built-in 5W speaker  Manufacturers Warranty | pc | 1 |  |
|  | **Option 8**  **Model:** EB-FH52  **Projection System:** 3LCD Technology  **LCD Panel:** 0,61 inch with C2 Fine  **Color Light Output:** 4.000 Lumen- 2.400 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.000 Lumen - 2.400 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  On-Screen Pixel Count:2,073,600  **Contrast Ratio:** 16.000 : 1  **Light source:** Lamp  **Lamp:** UHE, 230 W, 5.500 h durability, 12.000 h durability (economy mode)  **Keystone Correction:** Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,14:1  Zoom: Manual, Factor:1,6  **Lens:** Optical  **Screen Size:** 30 inches - 300 inches  **Projection Distance Wide/Tele:** 1,76 m - 2,86 m ( 60 inch screen ),  **Projection Lens F Number:** 1,51 - 1,99  **Projection Lens Focal Length:** 18,2 mm - 29,2 mm  **Projection Lens Focus:** Manual  **Offset:** 10 : 1  **USB Display Function:** 2 in 1: Image/ Sound  **Interfaces:** USB 2.0-A, USB 2.0, VGA in, HDMI in (2x), Composite in, Miracast, Wireless LAN IEEE 802.11a/b/g/n/ac  **Noise: Operation:**37 dB (A)- Standby:28 dB (A)  **Loudspeaker:** 16 Watt  **Warranty:** 36 months Carry in, Lamp: 36 months or 1.000 h (whichever comes first) | pc | 1 |  |
|  | **Option 9**  **Model:** EB-L260F  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,62 inch with C2 Fine  **Color Light Output:** 4.600 Lumen- 3.200 Lumen (economy) In accordance with IDMS15.4  White Light Output: 4.600 Lumen - 3.200 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  **On-Screen Pixel Count:** 2,073,600  **Contrast Ratio:** 5.000.000 : 1  Light source: Laser  **Laser Light source:** 20.000 hours Durability High, 30.000 hours Durability Eco  Keystone Correction: Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **2D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction: Upto** 1.07 billion colours  **Throw Ratio:** 1,32 - 2,12:1  Zoom: Manual, Factor:1 - 1,62  **Projection Lens Zoom Ratio:** 1,32 - 2,12 : 1  Lens: Optical  **Screen Size:** 31 inches - 310 inches  **Interfaces:** USB 2.0-A, USB 2.0, RS-232C, Ethernet interface (100 Base-TX / 10 Base-T), Wi-Fi Direct, VGA in (2x), VGA out, Composite in, Miracast, Jack plug out, Jack plug in (2x), Cinch audio out, Microphone input, HDMI (HDCP 2.2) (2x), Wireless LAN IEEE 802.11a/b/g/n/ac  **Power consumption:** 199 Watt (Normal On-Mode), 144 Watt (Eco On-Mode), 260 Watt (Normal Peak-mode), 191 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  **Heat Dissipation:** 884 BTU/hour (max)  **Supply Voltage:** AC 220 V - 240 V, 50 Hz - 60 Hz  Warranty: 60 months Carry in or 12.000 h | pc | 1 |  |
|  | **Option 10**  **Model:** EB-1780W  **Technology:** Projection System  3LCD Technology, RGB liquid crystal shutter  **LCD Panel**  0,59 inch with C2 Fine  **Image**  **Color Light Output**  3.000 Lumen- 1.900 Lumen (economy) In accordance with IDMS15.4  **White Light Output**  3.000 Lumen - 1.900 Lumen (economy) In accordance with ISO 21118:2020  **Resolution**  WXGA 2  R**esolution Enhancement**  HD ready  Aspect Ratio  **16:10**  **On-Screen Pixel Count**  1,024,000  **Contrast Ratio**  10.000 : 1  **Light source**  **Lamp**  Lamp  206 W, 4.000 h durability, 7.000 h durability (economy mode)  **Keystone Correction**  Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing**  10 Bits  **2D Vertical Refresh Rate**  100 Hz - 120 Hz  **Colour Reproduction**  Upto 1.07 billion colours  **Optical**  **Throw Ratio**  1,04 - 1,26:1  Zoom  **Manual, Factor:1 - 1,2**  Screen Size  **30 inches - 300 inches**  Projection Distance Wide  0,7 m - 6,8 m  **Projection Distance Tele**  0,8 m - 8,2 m  **Projection Distance Wide/Tele**  1,35 m - 1,62 m ( 60 inch screen ),  **Projection Lens F Number**  1,58 - 1,7  **Projection Lens Focal Length**  13,52 mm - 16,22 mm  **Projection Lens Focus**  Manual  Offset  10 : 1  **Connectivity**  **USB Display Function**  3 in 1: Image / Mouse / Sound  **Interfaces**  USB 2.0-A, USB 2.0, VGA in, HDMI in, Composite in, Jack plug in, MHL, Wireless LAN IEEE 802.11b/g/n, Wireless LAN b/g/g 25GHz  **Epson iProjection App**  Ad-Hoc / Infrastructure  **Advanced Features**  Security  Kensington lock, Wireless LAN security, Password protection  **Other features**  AV Mute Slide, Built-in speaker, Document Camera Compatible, Home Screen, Instant on/off, JPEG Viewer, Long lamp life, MHL audio/video interface, PC Free, Projection App for Chromebook, Quick Corner, Split-Screen-Function, Wireless LAN capable, iProjection App  Video Color Modes  Blackboard, Cinema, Dynamic, Presentation, sRGB, DICOM SIM  **General**  Power consumption  252 Watt (Normal On-Mode), 178 Watt (Eco On-Mode), 277 Watt (Normal Peak-mode), 200 Watt (Eco Peak-Mode), 0,34 Watt (Energy saving standby)  **Supply Voltage**  AC 100 V - 240 V, 50 Hz - 60 Hz  **Product dimensions**  292‎ x 213 x 44 mm (Width x Depth x Height)  **Product weight**  1,8 kg  Noise Level  Normal:39 dB (A) - Economy:30 dB (A)  **Supported Temperature**  Operation 5° C - 40° C, Storage -10° C - 60° C  **Supported Humidity**  Operation 20% - 80%, Storage 10% - 90% If the projector is suspended from a ceiling or wall mount and installed in an environment with heavy oil smoke or places where oils or chemicals are volatilized, places where a lot of smoke or bubbles are used for event staging, or where aroma oils are frequently burned, it can make certain parts of our products susceptible to a material degradation which over time could break and cause the projector to drop from the ceiling.  If you are concerned about the environment in which your projector is installed, or if you have any other questions, please contact our support department and they can provide additional assistance.  **Included Software**  EasyMP Multi PC Projection  **Options**  Air filter, Ceiling mount, Document camera, Setting plate, Spare lamp, WP System - ELPWP20, Wireless transmitter - ELPWT01  **Loudspeaker**  1 Watt  Room Type / Application  Boardroom, Huddle space / Portable, Large Meeting Room / Auditorium  **Positioning**  Ceiling Mounted, Desktop  **Colour**  White / Black  **Other**  Warranty  60 months Carry in, Lamp: 60 months or 1.000 h (whichever comes first) | pc | 1 |  |
| **24** | **Projector Screens**  **Suitable for business, study and leisure uses**  **For all conventional kinds of front projection**  **Easy to set up**  **Size 180cm x 180cm, 200cm x 200cm and 244cm x 244cm**  **Black backing to eliminate light penetration. Four side black borders enhance picture contrast, perfect for watching sporting events, movies, television and presentations. Complete your home entertainment setup ready for Superbowl LII**  **This projector screen is easy to mount and maintain, featuring a lightweight case and an anti-fabric, anti-static screen**  **Easily installs to wall or ceiling** | pc | 1 |  |
| **25** | **Interactive Smart Boards**  **Model:**  RX series with iQ  **Display**  Screen sizes (diagonal) 65" | 75" | 86"  Backlight LED  **Aspect ratio**  16:9  Maximum display resolution  **4K UHD (3840 × 2160)**  **Refresh rate 60 Hz**  Lifespan ≥ 50,000 hours  **Brightness1 490 cd/m²**  Display response time ≤ 8 ms  **Viewing angle 178°**  **Glass**  Optically bonded | Anti-glare | Antifingerprint | Heat-tempered  **Frame**  Color White  **Convenience buttons**  Power | Home | Volume | Microphone mute | Freeze frame  Sensors Proximity | Ambient light | Infrared | Room temperature | Humidity | Equivalent carbon dioxide (eCO2) | Volatile organic compound (VOC) | Particulate Matter  (PM2.5)2  **Audio**  Integrated soundbar featuring two 20 W speakers and a 15 W subwoofer Integrated linear eight-microphone array with visual mute status indicator and support for onboard acoustic echo cancellation 1Brightness of individual displays can vary. 2The display’s environmental sensors are not life safety rated sensors: they provide general information only. NFC Integrated RFID **NFC**  Reader/writer CCID (chip card interface device) when used with a native operating system driver for Windows®, Linux®, or Mac Supported protocols: ISO 14443A/B, ISO 15693, NFC Tag 1-4 **Interactive experience**  Touch technology  HyPr Touch™ with Advanced IR  **Touch features**  Tool Explorer™ v2 Simultaneous tool differentiation Object Awareness™ Pen ID™ Silktouch™ Palm rejection  **Typical touch response time**  ≤ 4 ms  Accuracy 1 mm  **Frame rate ≥ 300 Hz**  **Minimum object size**  2 mm  **Multitouch capabilities**  Up to 50 touch points (OS dependent)  **Tools included**  Stylus with multi-color select and fine eraser (×2) Erasers with angle of orientation (×2)  **Tool holders**  Intelligent | Magnetic | Frame-mounted  **Optional tools**  Stamps (available in 2024) | pc | 1 |  |
| **26** | **Projector HDMI Cables**  **Color**  Black  **Length**  3 Meters/ 30m/ 300m 4K  **Type**  Tough Cable | pc | 1 |  |
| **27** | **Modem Backup**  **Type**  Cellular Modems  **Speed**  Upto 2.4 Ghz  **Color**  Black/White  **Resett Pin**  Yes  **SIM card support**  Yes  **Network**  Wireless | pc | 1 |  |
| **28** | CCTV Camera Accessories  **CCTV Camera Accessories**  Western Digital WD22PURZ SATA 6Gb/s SC HA520 Designed for NVR ( 24 X 7 Systems)  Storage 2TB Surveillance Hard Drive | pc | 1 |  |
|  | DVR CCTV Surveillance  H.265+/H.265 dual -stream video compression  Supports HDCVI/AHD/TVI/CVBS/IP Video inputs  Max:12 channels IP camera inputs  Supports 1 SATA HDD  Smart search and intelligent video system  Channels- 8 | pc | 1 |  |
|  | NVR CCTV Surveillance  H.265+/H.265 dual -stream video compression  Supports HDCVI/AHD/TVI/CVBS/IP Video inputs  Max:12 channels IP camera inputs  Supports 1 SATA HDD  Smart search and intelligent video system  Channels- 16 | pc | 1 |  |
|  | Taf 30 Metres  HDMI A Male to A Male cable: Supports Ethernet 3D ,4K video and audio return channel (ARC)  Connects HDMI -enabled devices to TVs, displays A/V receivers  Color - Black | pc | 1 |  |
|  | Desktop PC Power Supplies  12V  Range: 10-20 Amps 280 Watts | pc | 1 |  |
|  | 12 Channel 12 Volt DC Output 5A CCTV Distributed Power Supply Box for Security Camera with AC Plug and Lock for Security Cameras, DVRs, NVRs CCTV Power Supply (5A 12-Channel) | pc | 1 |  |
| **29**  **30** | **Assorted Laptop Batteries**  **Assorted Brands**  14.6v-2600mAh/38Wh  Store between O0C To 600C  320F To 1400F  Rechargeable Li-ion Battery | pc | 1 |  |
|  | **Cleaning Agents**  Computer Foam Hand Boss High Adhesive Cleaning Material  Generic Universal | pc | 1 |  |
|  | Computer Foam WD-40 Stain or Rust Remover 330ML | pc | 1 |  |
| **31** | **External Hard Disks**  **Model**  Canvio Flex Portable External Hard Drive  **Number**  HDTX110XSCAA  Capacity1Up to 1TB  InterfaceUSB 3.0 USB 2.0  Interface Transfer Rate2Up to 5 Gb/s (USB 3.0) Up to 480 Mb/s (USB 2.0)  Drive FormatexFAT  Size (mm)1TB/2TB: 80(W) x 111(L) x 13.5(H) 4TB: 80(W) x 111(L) x 19.5(H)  ColorSilver  Weight (g)1TB/2TB: | pc | 1 |  |
| **32** | **Flash Disks**  **Capacit**y: 32GB, 16GB, 8GB · **Color**: White. · **Weight**: 0.2Kg · Hard **drive** interface: **USB**. · Write / delect protection switch · Durable data storage · **USB** . | pc | 1 |  |
| **33** | **Desktop PC Wireless Adapters**  **Model**  N300 Wi-Fi USB Adapter  300 Mbps PCI Express wireless High-Speed Performance – ideal Wi-Fi dongle for smooth HD video, voice streaming and online gaming | pc | 1 |  |
|  | **Model**  AXE3000 USB 3.0 WiFi Adapter (A8000)  Nighthawk® AXE3000 WiFi 6E USB 3.0 Adapter | pc | 1 |  |
| **34** | **Computer Mice**  **Option 1**  **Model**  **Logitech M100 Corded Mouse**  **FULL-SIZE COMFORT** – A comfortable, ambidextrous shape feels good in either hand, so you feel more comfortable as you work – even at the end of the day  **CONVENIENT CONTROLS –** Side-to-side scrolling plus zoom lets you instantly zoom in or out and scroll horizontally and vertically. Perfect for working with spreadsheets and presentations.  **ZERO SETUP REQUIRED** – Flexible wired connectivity means you just plug the cable into your USB or PS/2 port – it works right out of the box.  PRECISE CURSOR CONTROL – With 800 dpi sensitivity, you’ll get precise cursor control so you can edit documents and navigate the Web more efficiently. |  |  |  |
|  | **Option 2**  **Model**  MX Master 3S  **Sensor technology**  Sensor technology: Darkfield high precision  **Nominal value: 1000 DPI**  DPI (Minimal and maximal value): 200-8000 DPI (can be set in increments of 50 DPI)  **Buttons**  7 buttons (Left/Right-click, Back/Forward, App-Switch, Wheel mode-shift, Middle click)  **Scroll Wheel: Yes, with smart-shift**  Thumb wheel: Yes  Gesture button: Yes  **Customization app**  Supported by Logi Options+ on Windows and macOS  Wireless operating distance10 m  **Wireless technology**  **Required: Bluetooth Low Energy Technology**  **Battery**  Rechargeable Li-Po (500 mAh) battery  Get three hours of use from a one-minute quick charge | pc | 1 |  |
| **35** | **Digital HD Camera**  **Grade**  A  **Accessories**  Original Accessories  **Model Number**  a7 rll A7SII  **Type**  DSLR  **Sensor Element Type**  CMOS  **MegaPixel**  4600MP  **Image Resolution**  4K HD  **Optical Zoom**  x2- x7  **Focal Length**  28-77mm  **Memory Card Type**  SD Memory card  **Appearance**  No scratch  **Selling units**  Single item  **Single package size**  30X25X20 cm  **Single Gross Weight**  1.000kg  **Lense**  Yes  **Feature**  E-mount  **Warranty**  1 Year | pc | 1 |  |
| **36** | **Universal Softbox Lighting Kit Photography Photo Studio Softbox**  **Private Mold**  Yes  Mold Number  65cm/90cm Deep port parabolic softbox  **Color**  Black  **Product name**  Deep port parabolic softbox  **Depth**  43cm/62cm  **Weight**  1.5kg/2kg  **Application**  Studio Photography Lighting  **Function**  Photograph  **Package**  Carton Box  **Feature**  Portable Foldable | pc | 1 |  |
|  | **Option 2**  **Model**  **EOS Rebel T7 DSLR Camera**  24.1MP APS-C CMOS Sensor  DIGIC 4+ Image Processor  3.0" 920k-Dot LCD Monitor  Full HD 1080/30p Video Recording  9-Point AF with Center Cross-Type Point  ISO 100-6400, Up to 3 fps Shooting  Built-In Wi-Fi with NFC  Scene Intelligent Auto Mode  Creative Filters and Creative Auto Modes  EF-S 18-55mm f/3.5-5.6 IS II Lens | pc | 1 |  |
| **37** | **Camera Kits**  **Model**  NEEWER 150W Bi Color LED Panel Video  Light  **Item Type:** Bi Color LED Panel Light  **LEDs Qty:** 1440PCS  **Maximum Power:** 150W  **Maximum Illumination:** 49500Lux@0.5m,  17200Lux@1m  Color Temperature: 2500K-8500K (in 100K  increments)  **Brightness:** 0-100% (increments of 0.1%)  **CRI/TLCL:** CRI 96+, TLCI 97+  **Special Scene Effects:** 13 types  **Light Source Matching:** 14 types Power Supply: AC adapter 20V / V mount  battery 14.8-26V (battery & D tap cable sold  separately)  Beam Angle: 45°  **Control Methods:** APP, 2.4G, panel, DMX  control |  |  |  |
| **38** | **Video Conferencing Kits**  **Group Video Conferencing System.**  **Camera**  Smooth motorized pan, tilt and zoom  controlled from remote or console  Pan +/- 90° Tilt +35° / -45  10x lossless HD zoom  Field of View Diagonal: 90°  Horizontal: 82.1°  Vertical: 52.2°  Full HD 1080p 30fps  H.264 UVC 1.5 with Scalable Video Coding  (SVC)  Autofocus  5 camera presets  Far-end control (PTZ) of ConferenceCam  product (with supported services)  Kensington security slot  Video mute/unmute LED indicator  Standard tripod thread  **Remote Control**  Camera, speakerphone, and call control  5 camera presets  Docks on speakerphone  IR 8.5 m range  CR2032 battery (included)  **Speaker Phone**  Full-duplex performance  Acoustic echo cancellation  Noise reduction technology  Ultra-wideband audio  Pairs with mobile devices via Bluetooth and  NFC  LCD for caller ID, call duration and other  functional response  LEDs for speakerphone streaming, mute,  hold, and Bluetooth  Tactile buttons for call answer/end, volume  and mute, Bluetooth, and camera controls  5 camera presets for pan, tilt, and zoom  settings  Kensington security slot  **Microphones**  Pickup Range: 6 m  Pickup range with expansion mics: 8.5 m  Four omnidirectional, beamforming  Microphones  Frequency Response: 100Hz – 11KHz  Sensitivity: -28 dB +/-3dB  Distortion: <5% from 200Hz  Hubs/Cable/Power  Central Hub connects and powers all  components  Under-table mounting adhesive included  One cable to camera: 5 m  One cable to speakerphone: 5 m  Extended cables available: 10 and 15 m  One USB cable for connection to PC/Mac:  2 m  AC Power adapter with regional plugs  Power cable: 3 m  **Mount**  Dual-purpose bracket works for both wall  mounting and tabletop elevation  **Compatibility and Certifications**  Plug-and-play USB connectivity  Certified for Skype for Business and ready  for Teams  Fuze® Certified  Microsoft Cortana  Cisco Jabber®  Compatible with BlueJeans, BroadSoft,  GoToMeeting, Vidyo, and other video  conferencing, recording, and broadcasting  applications that support USB cameras | pc | 1 |  |
| **39** | **Ethernet Cable**  **Model**  **SKU: CTL0001**  **Type**  Cat6a Ethernet UTP Network /LAN/Ethernet Cable  Designed with Reverse sequential numbering  Round jacket  Bare copper for superior conductivity.  Packing; 305 Meters (1000ft ) for full box  The jacket material is lead-free  Has Minimal center isolation reducing diameter of the cable  **Standards Compliance**  ISO/IEC 11801:Ed.2.2 (CAT. 6)  UL verified for Data transmission performance  ANSI/TIA-568-C.2 – (CAT. 6)  CSA FT6 and UL CMP.  RoHS compliant.  **Ethernet Applications Support**  1000BASE-T Gigabit and 100BASE-T/10BASE-T- Fast Ethernet Speeds | pc | 1 |  |
| **40** | **RJ 45 Connectors**  **1000 Pcs in 1 Pack**  **Metalic** | pc | 1 |  |
| **41** | **Cable Clips**  100 pcs Per Plastic Packaging Box | pc | 1 |  |
| **42** | **Cables Ties**  100 Pcs Per Roll  Preferably in White and Black  Ranges 150x2.5mm  Ranges 200x4.8mm | pc | 1 |  |
| **43** | **Desktop PC CMOS Battery**  **Model**  CR2032 lithium coin cell battery  **Type:**CR2032 (3V lithium coin cell)  **Voltage:**3 Volts  **Typical Battery Life:**2-10 years, depending on usage and environmental conditions  **Location:**Usually found on the motherboard, often near the RAM or chipset  **Functions:**Stores BIOS settings, date and time, even when the PC is off.  **Ladders** | pc | 1 |  |
| **44** | **Model**  Telescope  20.3FT Telescoping Ladder, Portable Extension Folding Ladder, Multi-Purpose Comp |  |  |  |
|  | **Model**  Telescope  22 FT Portable Foldable Ladder Multifunctional Aluminum Alloy Telescopic Ladder | pc | 1 |  |
| **45** | **Model**  **DMS-1250 Series**  8-Port Multi-Gigabit Smart Managed Switch  DMS-1250-10SPL  PoE compatility | pc | 1 |  |
| **46** | **Indicate Model and Pack Distributions**  General Type  Microsoft Office 2016-2021 License Pack Annual  Windows 11 Pro License Pack Annual  Kaspersky Anti-Virus  MyQ Software License for Print Services Under Leasing Annual  Smadav Anti-Virus Software (Education) Multi User Annual  Autodesk AutoCAD: Design and drafting software (Multi-User Annual)  Auto Desk Revit (Multi User- Annual)  Ease US Data Recovery Software License Pack Annual  MATLAB(Education) Multi User License Annual Pack  Adobe Software Distribution (Photoshop, Illustrator, InDesign) Annual Licence Multi-User  Shutter Encorder Annual License Pack Multi-User | pc | 1 |  |
| **47** | **UPS Inverters**  **Indicate Model**  Pure sine wave, lithium support  5kVA PRO | pc | 1 |  |
| **48** | **Power Stabilizers**  **Phase** Single Phase  **Model Name/Number( Indicate)** Stabiliser  **Voltage** 2KV  **Dispatch Time** Immediate  **Display Type** LCD  **LCD Display** 7 LED  **Microprocessor** Controller | pc | 1 |  |
| **49** | **Associated Computer Software**  **Indicate Model and Pack Distributions**  General Type  Microsoft Office 2016-2021 License Pack Annual  Windows 11 Pro License Pack Annual  Kaspersky Anti-Virus  MyQ Software License for Print Services Under Leasing Annual  Smadav Anti-Virus Software (Education) Multi User Annual  Autodesk AutoCAD: Design and drafting software (Multi-User Annual)  Auto Desk Revit (Multi User- Annual)  Ease US Data Recovery Software License Pack Annual  MATLAB(Education) Multi User License Annual Pack  Adobe Software Distribution (Photoshop, Illustrator, InDesign) Annual Licence Multi-User  Shutter Encorder Annual License Pack Multi-User | pc | 1 |  |
| 50 | **LED Display monitors**  **Model** Designation of the modelX34Model alias2V7W6AADisplaySize Class34 inchesDiagonal863.6mmWidth799.8mmHeight334.8mmPanel ManufactureBOEPanel ModelMV34OVWM-NGOPanel TypeIPSPanel bit depth8bitsFRCNoColors16777216 Colors 24bitsAspect Ratio2.389.1Resolution3440 x 1440 pixelsPixel Depth0.233mmPixel density109pppiDisplay area89.09%BacklightW-LEDsRGB99%Peak brightness400cd/m2Static contrast1000:1Dynamic contrast1000034HDRDisplay HFR 400Horizontal Angle1780CoatingAnt-glare (Math (3) **Small form factor pluggable (SFP)**  **Product Code**  SFP-10G-SR-S=  **10GBASE-SR SFP Module, Enterprise-Class**  **Estimated Lead Time(days)**  14 | pc | 1 |  |
|  | Rack ServerModelHPE ProLiant DL3845 Gen11Management SoftwareInfrastructure managementHPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, and HPE OneView Advanced (require licenses) Compute Ops Management SoftwareServer ControllersNetwork controllerChoice of optional OCP plus standup, depending on modelStorage controllerHPE Tri-Mode Controllers, refer to the QuickSpecs for more detailServer CoolingSystem fan features6 fans includedServer DrivesDrive supportedUp to 12 LFF SAS/SATA with 4 LFF mid drive optional, 4 LFF rear drive Up to 24 SFF SAS/SATA/NVMe with 8 SFF mid drive optional and 2 SFF rear drive optional Up to 36 EDSFFServer ExpansionsExpansion slots8 maximum, for detailed descriptions refer to the QuickSpecsServer Form FactorForm factor2U RackServer Memory **Memory type**  HPE DDR5 Smart Memory  **Maximum memory**  6.0 TB with 256 GB DDR5  **Memory slots**  24  **Memory protection features**  ECC Server Power **Power supply type**  2 Flexible Slot power supplies maximum, depending on model Processor **Processor type**  AMD  **Processor family**  4th Generation AMD EPYC™ Processors  **Processor number**Up to 2  **Processor core available**Up to 128, depending on the processor  **Processor speed**4.4 GHz maximum, depending on the processor  **Processor cache**  64 MB, 128 MB, 256 MB, 384 MB or 1152 MB L3 cache, depending on processor model HPE ProLiant DL385 Gen11Management Software **Infrastructure management**  HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, and HPE OneView Advanced (require licenses) Compute Ops Management Software  Server Controllers  **Network controller**  Choice of optional OCP plus standup, depending on model  **Storage controller**  HPE Tri-Mode Controllers, refer to the QuickSpecs for more detail Server Cooling **System fan features**  6 fans included Server Drives **Drive supported**  Up to 12 LFF SAS/SATA with 4 LFF mid drive optional, 4 LFF rear drive Up to 24 SFF SAS/SATA/NVMe with 8 SFF mid drive optional and 2 SFF rear drive optional Up to 36 EDSFF Server ExpansionsExpansion slots8 maximum, for detailed descriptions refer to the QuickSpecsServer Form FactorForm factor2U RackServer MemoryMemory typeHPE DDR5 Smart MemoryMaximum memory6.0 TB with 256 GB DDR5Memory slots24Memory protection featuresECCServer PowerPower supply type2 Flexible Slot power supplies maximum, depending on modelProcessorProcessor typeAMDProcessor family4th Generation AMD EPYC™ ProcessorsProcessor numberUp to 2Processor core availableUp to 128, depending on the processorProcessor speed4.4 GHz maximum, depending on the processorProcessor cache64 MB, 128 MB, 256 MB, 384 MB or 1152 MB L3 cache, depending on processor model |  |  |  |
| 51 | **Server racks**  **Model**  45U  Standard 24" width for optimal use of floor space  48" depth for extra space need for mounting deep equipment  Ships fully assembled or flat packed options  Locking, removable, reversible front and rear doors  Locking, removable side panels keyed alike with doors  3000 lbs (1360.8 kgs) stationary / 2250 lbs (1020.6 kgs) rolling load capacity  Color Black | pc | 1 |  |
| 52 | **Network rack**  **Model**  18U  600 x 450 x 901mm (Width x Dept. x Height )  2 x 4-inch Fan (Low Noise) on Vented Top Flush Panel  2 x Side Door with Cam Lock  Front Door –Glass with Cam Lock  Panel Mount with Unit Indication  1 x Integrated Wall Mounting Panel  1 Packet of M6 Cage Nuts Assembly  Finish with Epoxy Powder Coating  Color : Black | pc | 1 |  |
|  | **Model**  9U  Product line: F-Line  Basic dimensions 19"/[9U](https://netrack.store/en/prestablog?id=4)  Height [mm] *507*  Width [mm] *600*  Depth [mm]600  Back: closed, can be opened  Side opening: *yes, lock o from the inside, lock - option*  Number of rack rails: *4*  Rack rails adjustment: yes, fully adjustable  Possibility of mounting fans: yes, 2x120x120mm (105x105mm)  Libra [kg]: 27.2  Carrying capacity [kg]: 60  Color: black RAL 9005  Manufacturing standards:  Compliance with ANSI/EIA RS-310-D, DIN41491 PART1, IEC297-2, DIN41494 PART7, GB/T3047.2-92  Compatibility with standards: ETSI metric and international 19”. Adaptation to general parameters 10” - no standar  Wall mount |  |  |  |
| 53 | **Offline server backup Disk**  **SKU #** C8S07B  **Detailed product description**  HPE RDX external docking station  **Capacity**  500 GB Without compression 1 TB Without compression 2 TB Without compression  **Transfer rate**  200 MB/sec  **Load/unload cycles**  5000, minimum cartridge usage life  **Media compatibility**  Forward and backward compatibility with all current and future RDX cartridges and USB 2.0 docks  **Host interface**  USB 3.0 Ports  **Cartridge robustness**  1 m, 39.4-inch (3 feet) drop to tile over concrete floor  **Warranty**  3/0/0  **Weight**  0.97 Kg (2.13 lb)  **Dimensions**  249 x 92 x 168 cm (9.8 x 3.62 x 6.61 in) | pc | 1 |  |
| 54 | **LED Display Monitor**  **Brand Series M**odel  X34  **Other Alais Model**  2V7W6AA  **Display**  Size Class  34’  **Diagonal**  863.6mm  **Width**  799.8mm  **Height**  334.8mm  **Panel Manufacturer**  BOE  **Panel Model**  MV340V | pc | 1 |  |
| 55 | Network Rack   * 6U Height * 600x600mm Depth * Wall Mountable   Includes Fan, Shelf & PDU | pc | 1 |  |
| 56 | Uninterrupted Power Supply (UPS):   * Model: APC BV1000I-MSX EASY UPS (1000VA, AVR, Universal Outlet, 230V) * Output * Max Configurable Power (Watts): 600 Watts / 1.0kVA * Output Frequency (sync to mains): 50/60 Hz +/- 1 Hz Unsynchronized: Topology * Line interactive * Waveform type: Stepped approximation to a sinewave * Transfer Time: 6 ms typical : 10 ms maximum * Input * Input frequency: 50/60 Hz +/- 5 Hz Auto-sensing * Input voltage range for main operations: 170 – 280V * Number of Power Cords: 1 * Batteries & Runtime * Battery type: Lead-acid battery * Expected Battery Life (years): 3 – 5 * Efficiency * Communications & Management: Control panel * LED Status display with on line : on battery * Audible Alarm * Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm * Surge Protection and Filtering * Surge energy rating: 156Joules * Physical * Maximum Height: 93MM, 9.25CM * Maximum Width: 161MM, 16.05CM * Maximum Depth: 305MM, 30.5CM * 143MM, 14.3CM * Color: Black * Operating Temperature: 0 – 40 °C * Operating Relative Humidity: 0 – 90 % * Operating Elevation: 0 – 2032.1meters * Storage Temperature: -20 – 50 °C * Storage Elevation: 0 – 15240meters * Audible noise at 1 meter from surface of unit: 40.0dBA   Protection Class: IP20 | pc | 1 |  |
| 57 | Indoor Ethernet Network Cable:   * Model: Siemon Cat 6 UTP Ethernet Cable 305M * jacket: Nominal O.D: 5.84mm * Conductor: 23AWG solid copper * Cross Pair Separator   Conductor Insulation: 0.99mm | roll | 1 |  |
| 58 | Indoor access points  Ubiquiti UMA-D UniFi mesh dual- band directional WiFi antena   * Model: Ubiquiti Unifi Access Point AC LR * Dimensions: 175.7 x 175.7 x 43.2 mm (6.92 x 6.92 x 1.70") * Networking Interface: (1) 10/100/1000 Ethernet Port * Buttons: Reset * Power Method: 802.3af/A PoE * 24V Passive PoE (Pairs 4, 5+; 7, 8 Return) * Power Supply: 24V, 0.5A Gigabit PoE Adapter * Power Save: Supported * Maximum Power Consumption: 6.5W * Maximum TX Power: 2.4 GHz: 24 dBm * 5 GHz: 22 dBm * Antennas: (1) Dual-Band Antenna, Tri-Polarity, 2.4 GHz: 3 dBi, 5 GHz: 3 dBi * Wi-Fi Standards: 802.11 a/b/g/n/r/k/v/ac * Wireless Security: WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) * BSSID: Up to 8 per Radio * Mounting: Wall/Ceiling (Kits Included) * Operating Temperature: -10 to 70° C (14 to 158° F) * Operating Humidity: 5 to 95% Noncondensing * Certifications: CE, FCC, IC * Advanced Traffic Management * VLAN: 802.1Q * Advanced QoS: Per-User Rate Limiting * Guest Traffic Isolation: Supported * WMM Voice, Video, Best Effort, and Background * Concurrent Clients: 250+ * Supported Data Rates (Mbps) * 802.11ac: 6.5 Mbps to 867 Mbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80) * 802.11n: 6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40) * 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps   802.11b: 1, 2, 5.5, 11 Mbps | Pc | 1 |  |
| 59 | Out door access points   * Model: Ubiquiti UniFi AP AC Mesh Access Point (UAP-AC-M) * Networking interface: (1) GbE RJ45 port * Management interface: Ethernet * Bluetooth * Power method: PoE * Passive PoE: 24V (Pairs 4, 5+; 7, 8 return) * Power supply: Gigabit PoE adapter 24V, 0.5A\* * Supported voltage range: 44—57V DC * Max. power consumption: 8.5W * Max. TX power * 2.4 GHz: 20 dBm * 5 GHz: 20 dBm * 6 GHz: - * MIMO * 2.4 GHz: 2 x 2 (DL MU-MIMO) * 5 GHz: 2 x 2 (DL MU-MIMO) * Max. data rate * 2.4 GHz: 300 Mbps (BW40) * 5 GHz: 867 Mbps (BW80) * Antenna gain * 2.4 GHz: 3 dBi * 5 GHz: 4 dBi * Button: Factory reset * Mounting: Wall, pole, fast-mount (Included) * Ambient operating temperature: -30 to 70° C (-22 to 158° F) * Ambient operating humidity: 5 to 95% noncondensing * Certifications: CE, FCC, IC, UKCA * Software * WiFi standards: 802.11a/b/g/n/ac * Wireless security: WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) * VLAN: 802.1Q * BSSID:Up to 4 per radio * Advanced QoS: Per-user rate limiting * Guest traffic isolation Supported * Power save: Supported * WMM: Voice, video, best effort, and background * Concurrent clients: 250+ * Supported Data Rates (Mbps) * 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11b: 1, 2, 5.5, 11 Mbps * 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11n: 6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40) * 802.11ac: 6.5 Mbps to 867 Mbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80)   One year warranty | Pc | 1 |  |
| 60 | Ubiquiti UMA-D UniFi Mesh Dual-Band Directional WiFi   * Dimensions: 201.3 x 128.0 x 32.5 mm * Outdoor UV Stabilized Plastic * RF Connections: 2 x RP-SMA Female * Supported Frequency Range: 2.4 – 2.5 GHz, 5.1 – 5.9 GHz * HPOL Beamwidth: * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * VPOL Beamwidth * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * Elevation Beamwidth * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * Maximum VSWR: 2:1 * Polarization: Dual-Linear Cross-Pol Isolation * 2.4 GHz: 25 dB * 5 GHz: 30 dB * Antenna Gain * 2.4 GHz: 10 dBi * 5 GHz: 15 dBi   Mounting Wall/Pole: (Kits Included) | pc | 1 |  |
| 61 | Adhesive Trunking PVC 16mmx16mm   * Colour: White * Item Dimension: 16mmx16mmx2900mm   Material: PVC | pc | 1 |  |
| 62 | Conduit pipes: 25mm PVC conduit pipe  Colour: white  Item dimension:25mm diameter by 2.9m on length  Material:PVC  Application : cable management | pc | 1 |  |
| 63 | Concrete nails  One –inch concrete nails | box | 1 |  |
| 64 | PVC plastic u shape cable wall clip 1 2.5MM   * Type: Round Cable Clips, Circle Nail Clip * Color: White/Grey * Material: PVC * Feature: Fixable, Good Elasticity   Application: Cable And Wire | Pc | 1 |  |
| 65 | PVC Flex Conduit 25mm X 25 meters   * Colour: White * Item Dimension: 25mm X 25 meters * Material: PVC   Application: Cable Management | roll | 1 |  |
| 66 | **Network switches**   * Device Type:   Switch - 24 ports - Managed - stackable   * Device Model: WS-C2960X-48FPS-L * Enclosure Type: Rack-mountable 1U * Subtype: Gigabit Ethernet * Ports: 24 x 10/100/1000 (PoE+) + 4 x Gigabit SFP * Power Over Ethernet (PoE): PoE+ * PoE Budget: 740 W * Performance * Switching capacity: 216 Gbps * Forwarding performance (64-byte packet size): 107.1 Mpps * Capacity * Virtual interfaces (VLANs): 1023 * Jumbo Frame Support: 9216 bytes * Remote Management Protocol: SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, HTTP, TFTP, SSH, CLI * Power: AC 120/230 V (50/60 Hz) * Power Redundancy: Optional   Manufacturer Warranty: One Year | pc | 1 |  |
| 67 | **Scanners**  **Model** LIDE 400 Flatbed Scanner****Technical Specifications:****– 4800 x 4800 dpi, USB Type-C – Scanner Type: Flatbed – Scanning Element: Contact Image Sensor (CIS) – Light Source: Three Color (RGB) LED – Features: 5 ‘EZ’ Buttons, Advanced Z-lid Expansion Top, Auto Dust & Scratch Reduction, Auto Document Fix, Auto Scan Mode, Digital Filing, Fading Correction, Grain Correction, Gutter Shadow Correction, High-Speed Scanning, Image Correction, Low Power Consumption, Multi-Page PDF, OCR, One Cable For Data & Power, Send to Cloud, Upright Scanning – Scanner Buttons: 5 ‘EZ’ Buttons; Auto Scan, Copy, PDF x2 (Scan Start, Scan Finish), Send – Max. Resolutions: Optical: 4800 x 4800 dpi, Interpolated: 19,200 x 19,200 dpi – Scanning Speed: Document: Approx. 8 Seconds (300 dpi/Letter Size/Color), Photo: Approx. 4 Seconds (300 dpi/Color) – Scanning Mode: Color: 48-bit Internal / 48-bit or 24-bit External, Grayscale: 16-bit Internal / 8-bit External – Max. Document Size: 8.5″ x 11.7″ (Letter/A4) – Dimensions (W x D x H): 14.5″ (W) x 9.9″ (D) x 1.7″ (H) – Weight: 3.6 lbs. – OS Compatibility: Windows 11, Windows 10, Windows 8.1, Windows 7 SP1, Mac OS X v10.11 – macOS v10.13 (High Sierra), Linux – Power Requirements: USB Type-C (One Cable For Data & Power) – Software: CanoScan LIDE 400 Color Image Scanner Driver, IJ Scan Utility (Windows) / IJ Scan Utility Lite (Mac), ScanGear MP Driver (Linux), Quick Menu – Power Source: USB Type-C (One Cable For Data & Power) – Max. Power Consumption: 4.5 W (0.3 W Standby) – Operating Temperature: 41 – 95°F (Without Condensation) – Operating Humidity: 10 – 90% (Relative Humidity) – Warranty: 1-Year Limited Warranty with InstantExchange Program – Certification: ENERGY STAR Certified – Scanner Method: LiDE (LED Indirect Exposure) | pc | 1 |  |
| 68 | Supply of binding machine: Atlas perfect solution (AS-BM CMBSTARTER) or any other preferred make, A4 size, heavy duty. | pc | 1 |  |
| 69 | Laminator, heavy duty 300mm, A3 and A4 SIZE | pc | 1 |  |
| 70 | Supply of digital standing fan heavy duty | pc | 1 |  |
| 71 | VGA- HDM converters | pc |  |  |
| 72 | **Modems**  **Type**  Cellular Modems  **Speed**  Upto 2.4 Ghz  **Color**  Black/White  **Resett Pin**  Yes  **SIM card support**  Yes  **Network**  Wireless | pc | 1 |  |
| 73 | CCTV Power Supply  **Power supply unit 12v 10amps**  Input : AC 110V /220 - + 15% 50/60Hz  Output: 10A | pc | 1 |  |
| 74 | Assorted Laptop Batteries  **Assorted Brands in [DELL, HP, Lenovo]**  14.6v-2600mAh/38Wh  Store between O0C To 600C  320F To 1400F  Rechargeable Li-ion Battery | pc | 1 |  |
| 75 | **External Hard Drives**  **Model**  Canvio Flex Portable External Hard Drive  **Number**  HDTX110XSCAA  Capacity1Up to 1TB  InterfaceUSB 3.0 USB 2.0  Interface Transfer Rate2Up to 5 Gb/s (USB 3.0) Up to 480 Mb/s (USB 2.0)  Drive FormatexFAT  Size (mm)1TB/2TB: 80(W) x 111(L) x 13.5(H) 4TB: 80(W) x 111(L) x 19.5(H)  ColorSilver  Weight (g)1TB/2TB: | pc | 1 |  |
| 76 | **Universal Serial Bus(USB) Removable Flash Disks**  **Capacit**y: 32GB, 16GB, 8GB · **Color**: White. · **Weight**: 0.2Kg · Hard **drive** interface: **USB**. · Write / delect protection switch · Durable data storage · **USB** . | pc | 1 |  |
| 77 | Speaker/sounding bar 4 speaker 1,000pro 7.1.4 sound bar with 10inch wireless subwoofer detachable rear speaker and 2m 8k ultra high speed HDM cable | pc | 1 |  |

Signed: *[signature of person whose name and capacity are shown below ]*

Name: *[insert complete name of person signing the bid]*

In the capacity of *[insert legal capacity of person signing the bid]*

Duly authorised to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ *[insert date of signing]*

**2. Delivery and Completion Schedule**

**Procurement Reference Number: MU/SPLS/2024-25/00015**

The response time shall commence from the date of each call-off order. The Provider shall meet the response times for any call-off order, subject to the limitations in the contract.

Call-off orders may be issued at any time during a period of: **18 Months**.

| **Item No.** | **Brief Description of Supplies or Related Services** | **Response Time**  *(days/wks/mths)* | **Delivery Point/ Site** |
| --- | --- | --- | --- |
| 1 | Supply ofcomputers, printers, projectors, scanners, binding machines etc | Weekly | Muni University Main Stores |
|  |  |  |  |

**3. Specification and Compliance Sheet**

**Procurement Reference Number: MU/SPLS/2024-25/00015**

*Column b states the minimum technical specification of the item(s) required by the Procuring and Disposing Entity.*

*The Bidder is to complete column c with the technical specification of the item(s) offered and to state “comply” or “not comply” and give details of the areas of non-compliance.*

| **Item No.** | **Technical Specification required including applicable standards** | **Compliance of specification  offered** |
| --- | --- | --- |
| ***A*** | ***B*** | ***C*** |
|  | **Supply of computers, printers, projectors, scanners, binding machines etc** |  |
| 01 | **Small Form Factor- Desktop Computers**  **ThinkCentre M80q Gen 4 Tiny (Intel) Desktop**  **PERFORMANCE**  **i5 Processor**  **Processor**  13th Generation Intel® Core™  i5-13500T Processor with vPro® (E-Core Max 3.20 GHz, P-Core Max 4.60 GHz with Turbo Boost, 14 Cores, 20 Threads, 24 MB Cache)  i7 Processor  13th Generation Intel® Core™  i7-13700T Processor with vPro® (E-Core Max 3.60 GHz, P-Core Max 4.80 GHz with Turbo Boost, 16 Cores, 24 Threads, 30 MB Cache)  **Operating System**  Windows 11 Pro  **Memory**  16 GB DDR5-4800MHz  16 GB DDR5-5600MHz  **Storage**  Up to 1TB M.2 PCIe SSD Gen 4  **CONNECTIVITY**  **Ports/Slots**  **Front:**  2 x USB-A 3.2 Gen 2 (1 always on, fast charge)  USB-C 3.2 Gen 1  Headphone / mic combo  **Rear:**  2 x USB-A 3.2 Gen 2  2 x USB-A 3.2 Gen 1  HDMI 2.1  DisplayPort 1.4  Ethernet (RJ45)  **Optional rear expansion:**  Optional rear expansion:  Optional punch-out slot 1: VGA/DP/HDMI/USB-C/serial  Optional punch-out slot 2: VGA/DP/HDMI/serial/Ethernet  **OR**  Optional: 2 x USB-A 3.2 Gen 1 or 4 x USB-A 3.2 Gen 1  **M.2 Slot**  2 x M.2 SSD PCIe Gen 4  M.2 WiFi  **Internal Bay**  2.5″ HDD  **DESIGN**  **Dimensions (H x W x D)**  179mm x 36.5mm x 182.9mm / 7.0″ x 1.4″ x 7.2″  **Weight**  Starting at 1.3kg / 2.9lbs  **Color**  Raven Black  **SUSTAINABILITY**  **Material**  30% ocean-bound plastic in the system bag packaging  65% post-consumer content (PCC) used in the rear cover  **Certifications / Registries**  ENERGY STAR® 8.0  RoHS Compliant  ERP LOT3  **OTHER INFORMATION**  **Think Shield Security**  Optional: Intel vPro® Enterprise  Discrete Trusted Platform Module (dTPM) 2.0  EC Self-healing BIOS (level 2)  BIOS-based Smart USB Protection  Kensington Security Slot™  **Power Supply Unit**  135W, 89% energy efficient  90W, 89% energy efficient  65W, 89% energy efficient  **Display**  Ideal fit with ThinkCentre Tiny-in-One monitor 24’ LCD HDR  **What is in the box**  ThinkCentre M80q Gen 4 Tiny (Intel)  65W, 90W, or 135W PSU  USB Keyboard  USB Mouse  Quick Start Gui |  |
|  |  |  |
|  | **Option 2**  **Model**  Pro SFF 400 G9 Desktop PC  **Operating system:** Windows 11 Pro  **Processor family:** Intel® Core™ i5 14th generation processor  **Processor: Intel**® Core™ i5-14500 (up to 5.0 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads)  **Chipset:** Intel® Q670  **Memory:** 8 GB DDR5-4800 MT/s (1 x 8 GB)  **Standard memory note:** Transfer rates up to 4800 MT/s.  **Memory layout (slots & size)** 1 x 16 GB  **Memory Slots:** 2 DIMM  **Storage:** 512 SSD  **Monitor Display:** 24’ UHD  **Graphics (integrated):** Intel® UHD Graphics 770  **Graphic card footnote number:** [14,37]  **I/O Port location:** Front  **Ports**1 headphone/microphone combo 1 SuperSpeed USB Type-C® 10Gbps signaling rate 3 SuperSpeed USB Type-A 10Gbps signaling rate  Rear  1 audio-out 1 power connector  1 RJ-45 1 HDMI 1.4 3 SuperSpeed USB Type-A 5Gbps signaling rate 1 DisplayPort™ 1.4 2 USB Type-A 480Mbps signaling rate  **Wireless:** Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card (supporting gigabit data rate)  **Expansion slots:** 1 M.2 2230 1 M.2 2280 1 PCIe 3 x1 1 PCIe 4 x16  **Expansion slots note:**1 M.2 2230 slot for WLAN or storage and 1 M.2 2280 slot for storage.  **Network interface type:** WLAN  **Audio:** Realtek ALC3252 codec, universal audio jack with CTIA and OMTP headset support  **Keyboard:** 125 Wired Keyboard  **Pointing device:**  125 Wired Mouse  **Weight:** 4.2 kg  **Package weight:** 7.25 kg  **Dimensions (W x D x H):** 27 x 9.5 x 30.8 cm  **Package dimensions (W x D x H):** 39.4 x 20.5 x 49.9 cm  **Power:** 240 W internal power supply, up to 92% efficiency, active PFC  **Security management:** Trusted Platform Module TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified) (FIPS 140-2 Level 2 Certified) Secure Erase Sure Click Absolute Persistence module Sure Admin Tamper Lock Sure Start Gen7 Sure Sense2  **Security Software Licenses:** Wolf Pro Security Edition (1 year)  **Form factor:** Small form factor  **Manufacturer Warranty:** 1 year (1/1/1) limited warranty includes 1 year of parts |  |
| 02 | All-in- One Desktops |  |
|  | **Option 1**  **ThinkCentre M90a Gen 5 (24″ Intel) All-In-One**  **Performance**  **Processor**  14th Generation Intel® Core™ i5-14500 Processor with vPro® (E-Core Max 3.70 GHz, P-Core Max 5.00 GHz with Turbo Boost, 14 Cores, 20 Threads, 24 MB Cache)  14th Generation Intel® Core™ i7-14700 Processor with vPro® (E-Core Max 4.20 GHz, P-Core Max 5.30 GHz with Turbo Boost, 20 Cores, 28 Threads, 33 MB Cache)  **Operating System**  **Windows 11 Pro - Lenovo recommends Windows 11 Pro for business**  **Graphics**  Intel® UHD Graphics 770  Intel® UHD Graphics 730  **Memory**  Up to 16GB DDR5 4800MHz  Up to 16GB DDR5 5600MHz  **Storage**  Up to 1TB PCIe SSD (1 x 1TB)  **Audio**  Dual-mic array for AI noise suppression  3W x 2 speakers with Dolby Atmos®  **Camera**  5M RGB non-tilt camera  5M RGB tilt camera  **Connectivity**  **Ports/Slots**  3 x USB-A (USB 10Gbps)  Optional: 3-in-1 card reader  Headphone / mic combo  USB-C® (USB 10Gbps, supports rapid charge 15W)  3 x USB-A (USB 5Gbps, one supports USB power on)  DisplayPort 1.4 (out)  Ethernet (RJ45)  HDMI in 1.4 / out 2.1 combo (up to HDMI 2.1 TDMS)  Optional: Serial port  **Wireless**  Optional: Intel® WiFi 6E\* AX211 802.11AX (2 x 2) & Bluetooth® 5.1  Optional: Intel® WiFi 6 AX201 802.11AX (2 x 2) & Bluetooth®5.1  **Internal Bay**  Optional: Slim Optical Disk Drive (ODD)  **Design**  **Display**  23.8″ FHD (1920 x 1080) IPS, touchscreen, near edgeless, antiglare, 72% NTSC, 60Hz refresh rate, 1000:1 contrast ratio, low blue light (software controlled), 16.7M color support. 250cd/m2 brightness, 14ms response time  **Expansion Slot**  M.2 for WiFi  2 x M.2 for PCIe Gen 4 SSD  **Dimensions (H x W x D)**  **With Camera**  Without stand: Starting from 371mm x 539.6mm x 49.6mm / 14.61″ x 21.24″ x 1.95″  With optional Full Function Monitor Stand: Starting from 393.66mm x 539.6mm x 217.31mm / 15.50″ x 21.24″ x 8.56″  With optional UltraFlex IV Stand: Starting from 227.54mm x 539.6mm x 216.31mm / 8.96″ x 21.24″ x 8.52″  With optional Tilt Stand: 453.39mm x 539.6mm x 213.4mm / 17.85″ x 21.24″ x 8.4″  **Without Camera**  Without stand: Starting from 352mm x 539.6mm x 49.6mm / 13.86″ x 21.24″ x 1.95″  With optional Full Function Monitor Stand: Starting from 374.15mm x 539.6mm x 217.31mm / 14.73″ x 21.24″ x 8.56″  With optional UltraFlex IV Stand: Starting from 219.5mm x 539.6mm x 216.31mm / 8.64″ x 21.24″ x 8.52″  With optional Tilt Stand: 453.4mm x 539.6mm x 213.38mm / 17.85″ x 21.24″ x 8.4″  **Weight**  **Without stand:** Starting from 6.06 kg / 13.35lbs  **With optional Full Function Monitor Stand:** Starting from 8.05Kg / 17.74lbs  **With optional UltraFlex IV Stand:** Starting from 8.56kg / 18.86lbs  **With optional Tilt Stand:** Starting from 7.61kg / 16.78lbs  **Color**  Black  **Sustainability**  **Material**  Low-temperature solder  90% recycled and/or sustainable packaging\*  **Certifications / Registries**  ENERGY STAR® 8.0  EPEAT® Gold, where applicable\*  TCO 9.0  TCO Certified Edge  RoHS  TÜV Rheinland certified Low Blue Light  TÜV Rheinland certified Flicker Free  TÜV Rheinland certified Eyesafe (non-touchscreen)  Ultra-Low Noise  12 MIL-SPEC  **Other Information**  **ThinkShield Security**  Intel vPro® Enterprise  Optional: Human Presence Detection Sensor 2.0  BIOS-based Smart USB Protection  Intel® Context Sensing Technology (Intel® CST)  **Display Stand**  **Full Function Monitor Stand**  Tilt: -5 to 20 degrees  Lift: 110mm  Pivot: 90 degrees  Swivel: 90 degrees, 45 degrees left and 45 degrees right  **UltraFlex IV Stand**  Tilt: -5 to 70 degrees  Lift: 70 degrees ± 2° with vertical lift range of 84.37mm  **What’s in the Box**  ThinkCentre M90a Gen 5 (24″ Intel)  Up to 230W power supply unit  USB Keyboard  USB Mouse  Stand  Quick Start Guide |  |
|  | **Option 2**  **Model**  ProOne 240 G10 AIO PC  **Processor:**Intel Core i5-1335U (up to 4.6 GHz, 12MB Cache, 10 Cores, 12 Threads)  **Operating System:**Windows 11 Pro (Genuine Windows license)  **Memory:**8GB DDR4-3200 RAM (Upgrade Support)  **Storage:**512GB PCIe NVMe SSD  **Display:**23.8-inch diagonal FHD (1920 x 1080) IPS, anti-glare, 250 nits, 72% NTSC  **Graphics:**Integrated Intel Iris Xe Graphics  **Connectivity:**Realtek Wi-Fi 6 RTL8852BE (2×2) and Bluetooth 5.3, Gigabit Ethernet  **Ports:**1 USB Type-C® 5Gbps, 2 USB Type-A 5Gbps, 2 USB 2.0 Type-A, 1 HDMI 1.4, 1 RJ-45, 1 headphone/microphone combo  **Audio:**Realtek ALC3274 codec, internal speaker  **Webcam:**5 MP Swivel camera with microphones  **Dimensions:**54.06 x 18.37 x 41.9 cm  **Weight:**5.37 kg  **Color: Silver** |  |
|  | **Option 3**  **Model**  ProOne 440 G9  **Processor: I**ntel Core i7-1355U (Raptor Lake-U)  **Memory**: 8GB (1x8GB) DDR4 3200 SODIMM  **Storage:** 512GB 2280 PCIe NVMe Value SSD  **Display:** 23.8-inch Full HD (1920 x 1080) Antiglare IPS Non-Touch  **Graphics:** UMA  **Operating System:** Windows 11 Pro  **Connectivity**: Wi-Fi, Bluetooth  **Ports:** Multiple USB ports, HDMI, Audio Jack  **Audio:** Built-in speakers  **Webcam:** HD Camera  **Dimensions:** Please refer to HP’s official product page  **Weight:** Please refer to HP’s official product page  **Color:** Jet Black |  |
|  | **Option 4**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 7 155U (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)  **Operating system:** Windows 11 Professional  **Office:** Genuine Microsoft Office 2021 Activated  **Graphics:** Integrated: Intel® Iris® Xᶱ Graphics  **Display:** 27" diagonal, FHD (1920 x 1080), touch, IPS, three-sided micro-edge, anti-glare, 300 nits, 99% sRGB  **Memory:** 16 GB DDR5-5600 MT/s (2 x 8 GB)  **Memory slots:** 2 SODIMM  **Storage:** 512 GB PCIe® NVMe™ M.2 SSD  **Network interface:** Integrated 10/100/1000 GbE LAN  **Wireless technology:** Realtek RTL8852BE Wi-Fi 6 (2x2) and Bluetooth®️ 5.3 wireless card (supporting gigabit data rate)  **Power supply:** 90 W Smart AC power adapter  **External I/O Ports**: Rear: 1 USB Type-C® 5Gbps signalling rate; 2 USB Type-A 5Gbps signalling rate; 2 USB 2.0 Type-A; 1 headphone/microphone combo; 1 RJ-45 Expansion slots, 2 M.2 (1 for SSD, 1 for WLAN)  **Video connector:** 1 HDMI-out 1.4  **Webcam:** True Vision 1080p FHD IR tilt privacy camera with temporal noise reduction and integrated dual array digital microphones  **Audio Features:** Dual 2 W speakers  **Keyboard:** 310 Black Wired Keyboard and mouse combo  **Warranty**: 1-year limited hardware warranty and 90 days limited technical support for software and initial setup (from date of purchase) |  |
|  | **Option 5**  **Indicate Model**  **Operating system:** Windows 11 Professional English  **Processor and graphics:** Intel® Core™ Ultra 5 125U (up to 4.3 GHz, 12 MB L3 cache, 12 cores, 14 threads) + Intel® Iris® Xe Graphics  **Memory:** 8 GB DDR5-5600 MHz RAM (1 x 8 GB)  Expansion slots: 2 M.2 (1 for SSD, 1 for WLAN)  **Storage:** 512 GB PCIe® NVMe™ M.2 SSD  **Display:** 23.8" diagonal, FHD (1920 x 1080), IPS, three-sided micro-edge, anti-glare, 250 nits, 99% sRGB Non-touch screen  **Audio Features:** Dual 2 W speakers  **Keyboard and mouse:** HP 310 Black Wired Keyboard and mouse combo  **External I/O Ports:** Rear : 1 USB Type-C® 5Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 2 USB 2.0 Type-A; 1 headphone/microphone combo; 1 RJ-45  **Video connector:** 1 HDMI-out 1.4  **Wireless technology:** Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 wireless card  **Network interface:** Integrated 10/100/1000 GbE LAN  **Form factor:** All-in-One  **Special features:** Height adjustable detachable stand  **Power supply:** 90 W AC power adapter  **Warranty:** 1-year limited hardware warranty support |  |
| 03 | **Smart LED TV** |  |
|  | **Option 1Model**  4K Smart TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  85 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive |  |
|  | **Option 2**  **Model**  Class A7 series LED4K UHD (85A7H)  **Category**  QD-MiniLED  **Product Dimensions**  74.9x42.8x3.5inch” (LxWxH)  **Package Weight**  133.2Ib  **Display**  Actual ScreenSize(measured diagonally  85: inch  **Type of TV**  Smart TV  **Yes**  **Picture Quality**  **Screen resolution**  3840x2160p  **Wide Color Gamut**  Yes  7,680x4,320  **Audio**  **Audio**  **Picture engine**  Neural Quantum Processor 8K  **Audio**  **Audio output power(watts)**  **15W x 2**  **Languages**  On-screen Display  English/French/Spanish  **Connectivity**  Wireless built-in  Yes(802.11ac 2.4Ghz/5Ghz)  **Ports**  **HDMI**  4  Wall Mount  Mount Pattern  VESA 800 x 400  **Accessories**  Remote  Yes, Voice Remote  **Battery**  2  **Screen Type**  LCD  **HDR- compatible**  Dolby Vision HDR & HDR10  **Audio technogies**  **Dolby Atmos**  **Bluetooth**  Yes |  |
|  | **Option 3**  **Model**  4K Curved Smart TV Crystal UHD  **Design:** Curved Design  **Size:** 65’  **Slim Type:** Slim  **Resolution:** 3,840 x 2,160  **Motion Rate:** 120  **Wi-Fi:** Yes (802.11ac)  **Bluetooth:** Yes (4.2)  **Works with Google Assistant:** Yes  **Works with Alexa:** Yes  **Game Mode:** Yes (Game Enhancer)  **Multi Voice Assistant:** Yes (Bixby, Alexa, Google\*)  **Remote Access:** Yes  **Easy Setup:** Yes  **App Casting:** Yes  **Wireless TV On – Samsung WOW: Yes**  **Brightness/Color Detection: Brightness Detection**  **Accessibility – Voice Guide: US English**  **Auto Channel Search: Yes**  **Digital Clean View: Yes** |  |
|  | **Option 4**  **Model**  4K Smart TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  50 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive |  |
| 04 | Ordinary Desktop PCs  **Option 1** |  |
|  | **Processor:** Intel® Core™ Ultra 7 265 (13 TOPS NPU, 20 cores, up to 5.3GHz)  **Operating System:** Windows 11 Pro  **Office:** Microsoft Office 2021 activated  **Graphics Card:** Integrated Graphics  **Memory:** 8GB: 1 x 8GB, DDR5, up to 5600 MT/s, non-ECC  **Storage:** 512GB SSD TLC  **Wireless:** MediaTek Wi-Fi 6 MT7920, 2x2, 802.11ax, MU-MIMO, Bluetooth® wireless card  **Keyboard:** Dell Wired Keyboard - KB216 - US English – Black  **Mouse:** Dell Wired Mouse - MS116 - Black  **Ports Front:** 1 USB 2.0 (480 Mbps) with PowerShare port, 1 USB 2.0 (480 Mbps) port, 1 USB 3.2 Gen 2x2 (20 Gbps) Type-C® port, 1 USB 3.2 Gen 2 (10 Gbps) port, 1 global headset jack., Rear: 3 USB 3.2 Gen 1 (5 Gbps) ports, 3 DisplayPort™ 1.4a (HBR3) ports, 2 USB 2.0 (480 Mbps) with SmartPower On ports,1 USB 3.2 Gen 2 (10 Gbps) Type-C® port, 1 RJ45 (1 Gbps) Ethernet port.  **Optical Drive:** 8x DVD+/-RW/RAM 9.5mm Slimline Optical Disk Drive |  |
|  | **Option 2**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 5-225 processor (10 Cores, 20MB Total Cache, 3.3GHz)  **Operating System:** Windows 11 Pro  **Graphics Card:** Intel® UHD Graphics  **Memory:** 8GB, 8GBx1, DDR5, 5600MT/s  **Keyboard:** Dell Wired Keyboard - KB216 - US English - Black  **Mouse:** Dell Wired Mouse - MS116 - Black  **Storage:** 512GB M.2 PCIe NVMe Solid State Drive  **Wireless:** MediaTek Wi-Fi 6 MT7920, 2x2, 802.11ax, MU-MIMO, Bluetooth® wireless card  **Ports:** Front: 2 USB 2.0 (480 Mbps) ports,1 USB 3.2 Gen 1 (5 Gbps) port, 1 USB 3.2 Gen 1 (5 Gbps) Type-C® port, 1 Global headset jack, Power button, Media Card Reader; Rear: Power Supply, Power Indicator, Kensington Lock Slot, 2 USB 2.0 (480 Mbps) ports with Smart Power On, 2 USB 3.2 Gen 1 (5 Gbps) ports, 1 HDMI 2.1 (TDMS) port,1 RJ45 (1 Gbps) Ethernet port.  **Monitor/Display:** Diagonal Size: 23.8"  **Resolution / Refresh Rate:** 1920 x 1080  **Ports:** 1x HDMI 1.4 (HDCP 1.4) (Supports up to FHD 1920 x 1080 100Hz TMDS as per specified in HDMI 1.4), 1x DP 1.2 (HDCP 1.4), 1x VGA, 1x USB 3.2 Gen1 Type-B upstream, 3x USB 3.2 Gen1 Type-A downstream, 1x USB 3.2 Gen1 Type-C downstream with up to 15W PD (data only), Cables: (1x Power cord, 1x DP-to-DP cable, 1.8m, 1x USB 3.2 Gen1 Type A-to-B (upstream) cable, 1.8m), Adjustability Height, Tilt, Swivel, Pivot |  |
|  | **Option 3**  **Indicate Model**  **Operating system:** Windows 11 Pro English  Office: Genuine Microsoft Office Plus 2021 Activated  **Processor:** Intel® Core™ i5-14500 (up to 5.0 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads)  **Chipset:** Intel® Q670 (vPro®)   * Graphics: Integrated Intel® UHD Graphics 770 * Memory: 8 GB DDR5-4800 MT/s (1 x 8 GB)   **Memory slots:** 4 DIMM  **Hard drive:** 256 GB PCIe® NVMe™ M.2 SSD  **Power supply:** 260 W internal power adapter, up to 92% efficiency, active PFC  **External I/O Ports:** Front: 1 headphone/microphone combo; 4 SuperSpeed USB Type-A 10Gbps signalling rate; 1 SuperSpeed USB Type-C® 20Gbps signalling rate  **Rear:** 1 audio-in/out; 1 RJ-45; 1 HDMI 1.4; 3 SuperSpeed USB Type-A 5Gbps signalling rate; 2 DisplayPort™ 1.4; 3 USB Type-A 480 Mbps signalling rate 1 USB 3.1 Gen 2  **Expansion slots:** 1 M.2 2230; 2 PCIe 3 x1; 1 PCIe 3 x16 (wired as x4); 2 M.2 2280; 1 PCIe 4 x16, 1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage  **Audio Features:** Realtek ALC3252 codec, universal audio jack with CTIA and OMTP headset support  **Form factor:** Small form factor  **Pointing device:** 125 Wired Mouse  **Keyboard:** Wired Desktop 320K Keyboard  **Warranty:** 3 year (3/3/3) limited warranty includes 3 years of parts, labor and on-site repair. |  |
|  | **Model**  ThinkCentre M90t Gen 3 (Intel) Tower  **Part Number**  11TN002SUS  **Processor**  14th Generation Intel® Core™ i5-12500 vPro® Processor (P-cores 3.00 GHz up to 4.60 GHz)  **Operating System**  Windows 11 Pro 64 Bit  **Office**  Genuine Microsoft Office Pro Plus 2019 64 Bit  **Graphic Card**  Integrated Intel® UHD Graphics 770  **Memory**  8 GB DDR5-4400MHz (UDIMM)  **Storage**  1TB SSD M.2 2280 PCIe Gen4 TLC Opal  **Optical Drive**  Slim Ultrabay DVD-RW  **Pointing Device**  USB Optical Mouse  **Keyboard**  USB, Traditional, Black with Number Pad - English (US)  **WiFi Wireless LAN Adapters**  Yes  **Monitor**  LCD Display 24’ diagonal FHD  **Model**  4K Smart LED TV Crystal UHD  **Resolution:**  4K 3840\*2160  **Size:**  32 inch  **Category:**  QD-MiniLED  **Zone:**  5000+ Local Dimming Zones  **Frequency:**  120Hz Ultra Motion  **Certification:**  Freesync Premium Pro  **Peaking Brightness:**  2500nits  **HDR Processing:**  Dolby Vision HDR10+ Adaptive |  |
| 05 | **Laptops**  **(Inclusive with Bags)** |  |
|  | **Option 1**  **Model** |  |
|  | **ThinkPad X1 Carbon Gen 11 (14” Intel)**  14th Generation Intel® Core™ i7-1365U Processor with vPro® (E-Core Max 3.90 GHz, P-Core Max 5.20 GHz with Turbo Boost, 10 Cores, 12 Threads, 12 MB Cache)  **Operating System**  Windows 11 Pro  **Graphics**  Integrated Intel® Iris® XeGraphics  **Memory**  16 GB LPDDR5 6400MHz  **Storage**  Up to 1TB PCIe NVMe SSD Gen 4 Performance  **Battery**  57Whr battery  Rapid Charge (60 minutes = 80% runtime), requires 65W or higher adapter  **Audio**  Dolby Atmos®  4 x 360-degree quad-array microphones  Dolby Voice® certified for professional conferencing solution  **Camera**  FHD RGB with webcam privacy shutter (Select Models)  FHD infrared (IR) hybrid with webcam privacy shutter  (Select Models) FHD + IR mobile industry processor interface (MIPI) webcam with Computer Vision & webcam privacy shutter  **CONNECTIVITY**  **Ports/Slots**  2 x USB-C Thunderbolt™ 4  2 x USB-A 3.2 Gen 1  Headphone / mic combo  HDMI 2.1 supporting resolutio  Optional: Nano SIM slot  **WiFi**  Optional: WWAN\* 5G sub6 CAT20 with eSIM & physical nano SIM  Optional: 4G/LTE CAT16 with eSIM & physical nano SIM  WLAN: WiFi 6E\*\* AX211 802.11AX (2 x 2) (requires Windows 11)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Docks**  Thunderbolt™ Dock  USB-C 3.2 Dock  **DESIGN**  **Display**  14″ WUXGA (1920 x 1200) touchscreen, low power, IPS, 400 nits, Eyesafe® certified low blue light, antiglare  14″ WUXGA (1920 x 1200) low power, 400 nits, Eyesafe® certified low blue light, antiglare  **Dimensions (H x W x D)**  For HD camera: 14.96mm x 315.6mm x 222.5mm x / 0.59″ x 12.43″ x 8.76″  For FHD camera: 15.36mm x 315.6mm x 222.5mm x / 0.60″ x 12.43″ x 8.76″  **Weight**  Starting at 1.12kg / 2.48lbs  **Keyboard**  pill-resistant  Glass trackpad 110mm / 4.33″  Backlit with white LED lighting  Air intake key  **Colors**  Deep Black  Optional: Carbon-Fiber Weave on top cover (Select Models)  **SUSTAINABILITY**  **Material**  90% recycled magnesium on C cover  98% post-consumer content (PCC) recycled plastic used in speaker enclosure  25-30% PCC recycled plastic used in the battery enclosure  90% PCC recycled plastic used in power adaptor  Low-temperature solder  Plastic-free packaging with 90% recycled and/or sustainable content\*  **Certifications / Registries**  ENERGY STAR® 8.0EPEAT® Gold, where applicable\*  TCO 9  **OTHER INFORMATION**  **Security**  Discrete Trusted Platform Module (dTPM) 2.0  Firmware shield  PrivacyGuard with ePrivacy certification on display option  PrivacyAlert with Glance app (requires infrared (IR) camera)  Facial recognition login (requires IR camera)  Fingerprint reader integrated with power button (match-on-chip)  Webcam privacy shutter  Kensington Nano Security Slot™  Lock on leave with presence detection (requires IR camera)  **Preloaded Software**  Commercial Vantage  Intel® Unison™  Intel® Connectivity Performance Suite  **What’s in the box**  ThinkPad X1 Carbon Gen 11 laptop  USB-C 65W power adapter (supports Rapid Charge)  Internal Battery  Quick Start Guide |  |
|  | **Option 2**  **ThinkPad X1 Carbon Gen 11 (14” Intel)**  **PERFORMANCE**  **Processor**  14th Generation Intel® Core™ i5-1355U Processor (E-Core Max 3.70 GHz, P-Core Max 5.00 GHz with Turbo Boost, 10 Cores, 12 Threads, 12 MB Cache)  Windows 11 Pro  **Graphics**  Integrated Intel® Iris® XeGraphics  **Memory**  16 GB LPDDR5 6400MHz  **Storage**  Up to 1TB PCIe NVMe SSD Gen 4 Performance  **Battery**  57Whr battery  Rapid Charge (60 minutes = 80% runtime), requires 65W or higher adapter  **Audio**  Dolby Atmos®  4 x 360-degree quad-array microphones  Dolby Voice® certified for professional conferencing solution  **Camera**  FHD RGB with webcam privacy shutter (Select Models)  FHD infrared (IR) hybrid with webcam privacy shutter  (Select Models) FHD + IR mobile industry processor interface (MIPI) webcam with Computer Vision & webcam privacy shutter  **CONNECTIVITY**  **Ports/Slots**  2 x USB-C Thunderbolt™ 4  2 x USB-A 3.2 Gen 1  Headphone / mic combo  HDMI 2.1 supporting resolutio  Optional: Nano SIM slot  **WiFi**  Optional: WWAN\* 5G sub6 CAT20 with eSIM & physical nano SIM  Optional: 4G/LTE CAT16 with eSIM & physical nano SIM  WLAN: WiFi 6E\*\* AX211 802.11AX (2 x 2) (requires Windows 11)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Docks**  Thunderbolt™ Dock  USB-C 3.2 Dock  **DESIGN**  **Display**  14″ WUXGA (1920 x 1200) touchscreen, low power, IPS, 400 nits, Eyesafe® certified low blue light, antiglare  14″ WUXGA (1920 x 1200) low power, 400 nits, Eyesafe® certified low blue light, antiglare  **Dimensions (H x W x D)**  For HD camera: 14.96mm x 315.6mm x 222.5mm x / 0.59″ x 12.43″ x 8.76″  For FHD camera: 15.36mm x 315.6mm x 222.5mm x / 0.60″ x 12.43″ x 8.76″  **Weight**  Starting at 1.12kg / 2.48lbs  **Keyboard**  pill-resistant  Glass trackpad 110mm / 4.33″  Backlit with white LED lighting  Air intake key  **Colors**  Deep Black  Optional: Carbon-Fiber Weave on top cover (Select Models)  **SUSTAINABILITY**  **Material**  90% recycled magnesium on C cover  98% post-consumer content (PCC) recycled plastic used in speaker enclosure  25-30% PCC recycled plastic used in the battery enclosure  90% PCC recycled plastic used in power adaptor  Low-temperature solder  Plastic-free packaging with 90% recycled and/or sustainable content\*  **Certifications / Registries**  ENERGY STAR® 8.0EPEAT® Gold, where applicable\*  TCO 9  **OTHER INFORMATION**  **Security**  Discrete Trusted Platform Module (dTPM) 2.0  Firmware shield  PrivacyGuard with ePrivacy certification on display option  PrivacyAlert with Glance app (requires infrared (IR) camera)  Facial recognition login (requires IR camera)  Fingerprint reader integrated with power button (match-on-chip)  Webcam privacy shutter  Kensington Nano Security Slot™  Lock on leave with presence detection (requires IR camera)  **Preloaded Software**  Commercial Vantage  Intel® Unison™  Intel® Connectivity Performance Suite  **What’s in the box**  ThinkPad X1 Carbon Gen 11 laptop  USB-C 65W power adapter (supports Rapid Charge)  Internal Battery  Quick Start Guide |  |
|  | **Option 3**  ThinkPad E14 Gen 5 (Part No: 21JK0084US)  **Processor:** 13th Generation Intel® Core™ i5-1335U Processor (E-cores up to 3.40 GHz P-cores up to 4.60 GHz)  **Operating System**: Genuine Windows 11 Pro 64  **Memory**: 16GB DDR4 3200MHz (soldered + dimm)  **Storage:** 512 GB SSD M.2 2242 PCIe Gen4 TLC Opal.  **Display:** 14″ WUXGA (1920 x 1200) IPS, anti-glare, 300 nits, 45% NTSC, TÜV Rheinland Low Blue Light-certified, 90.4% screen-to-body ratio  **Camera:** 1080P FHD RGB with Microphone and Privacy Shutter  Fingerprint Reader: Yes  Keyboard: English Backlit keyboard (US)  Wireless: Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 (Windows 10) or Bluetooth® 5.2 (Windows 11)  **Battery:** 3 Cell 47Whr  **Connectivity/ ports:**  Thunderbolt™ 4  USB-C 3.2 Gen 2  USB-A 3.2 Gen 1  USB-A 2.0  HDMI 2.1  Ethernet (RJ45)  Headphone / mic combo  in the box:   * ThinkPad E14 Gen 5 (14” Intel) * 65W AC adapter * Internal Battery * Quick Start Guide |  |
|  | **Option 4**  ThinkPad T14 (14”, Intel)  **Processor:** 10th Generation Intel® Core™ i5-10310U Processor with vPro® (1.70 GHz, up to 4.40 GHz with Turbo Boost, 4 Cores, 8 Threads, 6 MB Cache)  **Operating System**: Genuine Windows 10 Pro 64  **Memory**: 8 GB DDR4 2667MHz  **Graphics:** Integrated Intel® UHD Graphics  **Storage:** 512 GB PCIe SSD  **Display:** 14.0" FHD (1920 x 1080) IPS, anti-glare, touchscreen with Privacy Guard, 500 nits  **Camera:** 720p HD with ThinkShutter  Keyboard: English Backlit keyboard (US)  **Audio:**  Dolby Audio™ Speaker System  Dual far-field microphones  **Connectivity:**   * Optional WWAN: Integrated Global Mobile Broadband LTE-A, CAT 9 * WLAN: Intel® Wi-Fi 6 AX201 802.11AX (2 x 2) * Bluetooth® 5.1 * vPro®: On vPro® Processors   **Battery:** 3 Cell 50Wh internal battery   * Audio: Dolby Audio™ Speaker System * Dual far-field microphones   **Ports/ slots:**   * 2 x USB 3.2\*\* Gen 1 (1 always on) * 1 x USB-C / Thunderbolt™ 3 (DisplayPort, Data Transfer, Power Delivery) * 1 x USB-C (DisplayPort, Data Transfer, Power Delivery) * MicroSD card reader * Optional: Smart card reader * Headphone / mic combo * HDMI 1.4 * RJ45   In the box:   * ThinkPad T14 * 65W AC adapter * 3 Cell 50Wh internal battery   Quick start guide |  |
|  | **Option 5**  **Model**  ThinkPad E14 Gen 5 (Part Number 21JK0053US)  **Processor:** 13th Generation Intel® Core™ i7-1335U Processor (E-cores up to 3.40 GHz P-cores up to 4.60 GHz)  **Operating System**: Genuine Windows 11 Pro 64  **Memory**: 16GB DDR4 3200MHz (soldered + dimm)  **Graphics:** Integrated Intel® Iris® Xe Graphics  **Storage:** 512 GB SSD M.2 2242 PCIe Gen4 TLC Opal.  **Display:** 14″ WUXGA (1920 x 1200) IPS, touchscreen, 300 nits, 45% NTSC, TÜV Rheinland Low Blue Light-certified, 90.4% screen-to-body ratio  **Camera:** 1080P FHD RGB with Microphone and Privacy Shutter  Fingerprint Reader: Yes  Keyboard: English Backlit keyboard (US)  Connectivity: Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.1 (Windows 10) or  Bluetooth® 5.2 (Windows 11)  **Audio**: 2 x 2W stereo speakers  Dual mics  Dolby Atmos®  **Battery:** 3 Cell 47Whr  **Ports/ slots:**  Thunderbolt™ 4  USB-C 3.2 Gen 2  USB-A 3.2 Gen 1  USB-A 2.0  HDMI 2.1  Ethernet (RJ45)  Headphone / mic combo  Security:  Kensington Security Slot™  Camera Privacy Shutter  Optional: Smart Power On (integrated fingerprint reader on power button)  Discrete Trusted Platform Module (dTPM) 2.0  In the box:  ThinkPad E14 Gen 5 (14” Intel)  65W AC adapter  Internal Battery  Quick Start Guide |  |
|  | **Option 6**  **Model**  ThinkPad X13 Gen 5 Intel (13″)  **Processor:** Intel® Core™ Ultra 5 125H Processor (E-Core Max 3.60 GHz, P-Core Max 4.50 GHz with Turbo Boost, 14 Cores, 18 Threads, 18 MB Cache)  Or  Intel® Core™ Ultra 7 155H Processor (E-Core Max 3.80 GHz, P-Core Max 4.80 GHz with Turbo Boost, 16 Cores, 22 Threads, 24 MB Cache)  Or  Intel® Core™ Ultra 5 135U Processor with vPro® (E-cores up to 3.60 GHz P-cores up to 4.40 GHz with Turbo Boost, 12 Cores, 14 Threads, 12 MB Cache)  **Display:** 13.3" WUXGA (1920 x 1200), IPS, antiglare, 100%sRGB, 400 nits, 60Hz, Low Power  Or  13.3” WUXGA (1920 x 1200) 16:10 aspect ratio, IPS, antiglare, 300 nits, 100% sRGB  **Operating system:** Genuine Windows 11 Pro  **Graphics:** Intel® integrated graphics  **Memory:** 16 GB LPDDR5X-6400MHz (Soldered)  **Storage:** 1 TB SSD M.2 2280 PCIe Gen 4 Performance  **Battery:** 3 Cell Rechargeable Li-ion 41 Whr  **Audio:**  Dolby Audio™ Dolby Voice®  2 x speakers  2 x mics  **Camera:** 5MP with webcam privacy shutter  **Fingerprint Reader**: Yes  **Ports/ slots:**  2 x USB-C® (Thunderbolt™ 4, USB 40Gpbs, power delivery 3.0 / DisplayPort 2.1)  2 x USB-A (USB 5Gbps)  HDMI® 2.1 (supports resolution up to 4K@60Hz)  Headphone / mic combo  **Wireless:**  Intel® Wi-Fi 6E AX211 802.11AX (2 x 2)  Intel® Wi-Fi 7 BE200 802.11BE (2 x 2)  Bluetooth® 5.3  vPro®: On vPro® Processors  **Keyboard:** Backlit, Black - English (US)  Spill-resistant (up to 200ml / 6.76oz)  Dual-function TrackPoint: navigate cursor or double-tap to open TrackPoint Quick Menu  TrackPad: 110mm / 4.33″  **Certifications:**  ENERGY STAR® 8.0  EPEAT® Gold, where applicable\*  Eyesafe® (select models)  Forest Stewardship Council® for packaging  Intel® Evo™ (select models)  MIL-SPEC 810H  TCO 9  **ThinkShield Security:**  Discrete Trusted Platform Module (dTPM) 2.0  Facial recognition login (requires IR camera)  Intel vPro® security  Kensington Nano Security Slot™  Microsoft Secured-core PCs  Optional: Power-on Match-on-chip Fingerprint Reader  Ultrasonic Human Presence Detection (requires IR camera)  Webcam privacy shutter  **Preinstalled Software:**  Intel® Connectivity Performance Suite  Intel® Unison™  Lenovo Commercial Vantage  Lenovo View  TrackPoint Quick Menu  **In the box:**  ThinkPad X13 Gen 5 (13” Intel)  USB-C® 65W AC Adapter, supports Rapid Charge  Internal Battery  Quick Start Guide |  |
|  | **Option 7**  ThinkPad X9 15 Aura Edition (15ʺ Intel) Laptop  **Processor:** Intel® Core™ Ultra 5 226V Processor (LPE-core Max 3.50 GHz, P-core Max 4.50 GHz with Turbo Boost, 8 Cores, 8 Threads, 8 MB Cache / 16 GB MOP)  Or  Intel® Core™ Ultra 7 258V Processor (LPE-core Max 3.70 GHz, P-core Max 4.80 GHz with Turbo Boost, 8 Cores, 8 Threads, 12 MB Cache / 32 GB MOP)  Or  Intel® Core™ Ultra 5 238V Processor with vPro® (LPE-core Max 3.50 GHz, P-core Max 4.70 GHz with Turbo Boost, 8 Cores, 8 Threads, 8 MB Cache / 32 GB MOP)  **Operating system:** Windows 11 Pro  **NPU:** Up to 48 trillion operations per second (TOPS) AI performance  **Graphics:** Intel®Arc™ Xe2 GPU with >67 TOPs  **Display:**  15.3ʺ 2.8k (2880 x 1800) OLED, antireflective / antismudge, 500nit, 120Hz refresh rate, 100% DCI-P3, 16:10 aspect ratio, TÜV Rheinland Certified Low Blue Light (hardware), ), TÜV Rheinland Certified Eye Comfort (5 star), Eyesafe® certified  Or  15.3ʺ 2.8k (2880 x 1800) OLED, antireflective / antismudge, 500nit, 120Hz refresh rate, 100% DCI-P3, 16:10 aspect ratio, TÜV Rheinland Certified Low Blue Light (hardware), TÜV Rheinland Certified Eye Comfort (5 star), Eyesafe® certified, add-on film touch (AOFT) touchscreen  **Memory:** 16GB LPDDR5x 8533MT/s dual channel, soldered  **Storage:** 1TB M.2 PCIe Gen4x4 SSD (2242)  Or 2TB M.2 PCIe Gen4x4 SSD (2242)  Or 512 GB M.2 PCIe Gen4x4 SSD (2242)  **Battery:** 80Whr  Supports Rapid Charge (60 minutes = 80% capacity), requires 65W or higher power adapter  **Audio:**  Dolby Atmos®  4 speakers  Dual-array microphones  **Camera:**  4K 8MP Mobile Industry Processor Interface (MIPI), RGB & infrared (IR) with webcam privacy e-shutter (F9)  **Ports/slots:**  2 x USB-C®(Thunderbolt™ 4, USB 40Gbps)  USB-A (USB 10Gbps)  Headphones / mic combo  HDMI 2.1 (supports resolution up to 4K@60Hz)  **Wireless:**  Intel® WiFi 7 802.11BE (2 x 2)  Bluetooth® 5.4  **Keyboard:**  English US-  Backlit with white LED lighting  Glass haptic TouchPad (130mm x 80mm / 5.12" x 3.15")  Spill-resistant (up to 500ml / 16.90oz)  1.35mm travel  **Certifications:**  ENERGY STAR®8.0  EPEAT® Gold with Climate+  Eyesafe® certified  Forest Stewardship Council®(FSC) packaging  Intel®Evo™  MIL-STD-810H  TCO 10  TÜV Rheinland Eye Comfort (5 star)  TÜV Rheinland Low Blue Light (hardware)  **ThinkShield Security:**  Discreet Trusted Platform Module (dTPM)  Facial recognition login  Intel®Threat Detection Technology  Microsoft Secured-core PCs (select models)  Smart Power On: Fingerprint reader (match-on-chip) integrated with power button  Webcam privacy e-shutter (F9)  **Preloaded software:**  Intel Connectivity Performance Suite  Intel®Unison™  Lenovo Aura Edition Smart Experiences  Lenovo Commercial Vantage  Lenovo View  Office 365 (trial)  **In the box:**  ThinkPad X9 15 Aura Edition (15ʺ Intel) laptop  USB-C®65W GaN AC adapter  Internal Battery  Quick Start Guide |  |
|  | **Option 8**  ThinkPad E16 Gen 3 (16″ Intel) Laptop  **Processor:**  Intel® Core™ 5 210H Processor (E-cores up to 3.60 GHz P-cores up to 4.80 GHz with Turbo Boost, 8 Cores, 12 Threads, 12 MB Cache)  Or  Intel® Core™ 7 240H Processor (E-cores up to 4.00 GHz P-cores up to 5.20 GHz with Turbo Boost, 10 Cores, 16 Threads, 24 MB Cache)  **Operating system**: Windows 11 Pro  **Graphics**: Intel®Integrated Graphics  **Display**: 16″ WUXGA (1920 x 1200) IPS, 16:10 aspect ratio, 300nit, 60Hz, 45% NTSC, 90.7% STBR, antiglare, TÜV Low Blue Light (software controlled)  **Memory:** 16 GB DDR5 5200Mhz  Or 8 GB DDR5-5600MT/s (SODIMM)  **Storage:** 512GB M.2 PCIe Gen4 SSD (2242)  **Battery:** 48Whr  **Audio:**  2 x 2W speakers  Harman Kardon®speakers  Dolby Atmos®  Dual-array mics  **Camera:** 5M RGB with webcam privacy shutter  **Ports/slots:**  USB-C®(Thunderbolt™ 4, USB 40Gbps) with power delivery 3.1 & DisplayPort 2.1  USB-C®(USB 20Gbps) with power delivery 3.1 & DisplayPort 1.4  USB-A (USB 10Gbps)  USB-A (USB 5Gbps)  Ethernet (RJ45)  HDMI®2.1 (supports resolution up to 4K@60Hz)  Headphone / mic combo  **Wireless:**  Intel®AX211 WiFi 6E\* 802.11AX (2 x 2)  Bluetooth®5.3  **Keyboard:**  English US  Dual-function TrackPoint: navigate cursor or double-tap to open TrackPoint Quick Menu  backlit with white LED lighting  Spill-resistant  TrackPad with 3 buttons (115mm x 67mm / 4.52″ x 2.63″)  ThinkPad TrackPoint Keyboard (1.5mm / 0.05″ key travel)  **Certifications:**  ENERGY STAR®9.0  Forest Stewardship Council®(FSC)  MIL-STD-810H  RoHS  TCO 10.0  TÜV Low Blue Light (software controlled)  TÜV Eyesafe®  EPEAT®Gold with Climate+  **Security:**  Discrete Trusted Platform Module (dTPM) 2.0  Kensington Nano Security Slot™  Self-healing BIOS  Optional: Smart Power On: match-on-chip (MOC) fingerprint reader integrated with power button  Zero-touch login with Microsoft Windows Hello (requires optional IR camera)  **Preloaded software:**  Lenovo Commercial Vantage  Lenovo Smart Connect  Lenovo Smart Meeting  McAfee®LiveSafe™ (trial)  ThinkPad TrackPoint Quick Menu  **In the box:**  ThinkPad E16 Gen 3 (16″ Intel)  Internal Battery  USB-C®65W AC adapter  Quick Start Guide |  |
|  | **Option 9**  ProBook 4 G1i 14 inch Notebook AI PC  **Processor family**: Intel® Core™ Ultra 5 processor  **Processor:** Intel® Core™ Ultra 5 225U (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)[[6,7]](https://www.hp.com/us-en/shop/pdp/hp-probook-4-g1i-14-inch-notebook-ai-pc-wolf-pro-security-edition-p-bp0u7ua-aba-1#disclaimerTabs)  **NPU:** Intel® AI Boost (12 NPU TOPS)  **Graphics**: Integrated: Intel® Graphics  **Operating system**: Windows 11 Pro  **Memory**: 16 GB DDR5-5600 MT/s (1 x 16 GB)  **Memory slots**: 2 SODIMM  **Storage**: 1 TB PCIe® NVMe™ SSD  **Display**: 14" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 300 nits, 62.5% sRGB  **Security software license**: HP Wolf Pro Security Edition (3 years)  **Ports/slots:**  1 HDMI 2.1.  1 stereo headphone/microphone combo jack  1 RJ-45  2 USB Type-A 5Gbps signaling rate (powered)  2 USB Type-C® 20Gbps signaling rate (USB Power Delivery 3.0, DisplayPort™ 1.4, HP Sleep and Charge)  **Audio:**  Audio by Poly Studio,  dual stereo speakers  dual array microphones  **Camera:** 5 MP IR camera  **Keyboard:** English US  Spill-resistant  backlit keyboard  **Wireless:**  Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card, non-vPro®  Network interface:  Realtek RTL8111HSH-CG GbE  Power supply:  45 W USB Type-C® adapter  **Battery:**  HP Long Life 3-cell, 56 Wh Li-ion polymer  **Sensors:**  HP Sure Platform; Thermal sensor; HP Tamper Lock; Hall effect sensor  **Fingerprint reader:** Yes  **Energy Efficiency:**  TCO Certified  ENERGY STAR® certified  **Warranty:**  1 year (1/1/0) limited warranty includes 1 year of parts and labor. No on-site repair.  **Software included:** Buy Microsoft Office (separately) - HP Connection Optimizer - HP Hotkey support - HP MAC Address Manager - HP Notifications - HP UEFI BIOS Certification level 2.7B - HP PC Hardware Diagnostics Windows - HP Privacy Settings - HP Services Scan - HP Smart Support- HP Support Assistant - myHP - HSA Fusion for Commercial - HSA Telemetry for Commercial - Poly Lens - Poly Camera Pro - Copilot in Windows with Copilot key |  |
|  | **Option 10**  **Indicate Model**  General Type  **Processor:** Intel® Core™ Ultra 7 256V (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 8 cores, 8 threads)  **Operating system**: Windows 11 Professional  Microsoft office 2021 activated  **Graphics:** Integrated: Intel® Arc™ 140V GPU (8GB)  **Display:** 14" diagonal, 2K (1920 x 1200), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass 3, 400 nits, 62.5% sRGB  **Display brightness:** 400 nits  **Display color gamut:** 62.5% sRGB  **Memory:** 16 GB LPDDR5x-8533 MT/s (onboard)  **Storage:** 512 GB PCIe® Gen4 NVMe™ M.2 SSD  **Wireless technology:** Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card  **Power supply:** 65 W USB Type-C® power adapter  **Battery:** 3-cell, 59 Wh Li-ion polymer  Battery life Up to 16 hours and 30 minutes  Video Playback Battery Life, Up to 22 hours and 45 minutes  **Battery Recharge Time:** Supports battery fast charge: approximately 50% in 30 minutes  **External I/O Ports:** 2 USB Type-A 10Gbps signalling rate; 1 HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 1.4a, HP Sleep and Charge)[19]  Energy efficiency  **Webcam:** 5MP IR camera with temporal noise reduction and integrated dual array digital microphones  Audio Features: DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio  **Sensors:** Accelerometer; Gyroscope; IR thermal sensor  **Colour:** Glacier silver  Pointing device  **Keyboard:** Full-size, backlit, soft Gray keyboard |  |
|  | **Option 11**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Processor:** Intel Core i7-1370P Processor, 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.9 GHz frequency with Intel Turbo Boost Technology 24 MB cache and 14 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) Smartcard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera**: 5 MP Camera  **Keyboard:**  Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 12**  **Indicate Model**  **General Type**  **Operating System:** Windows 11 Pro English  **Processor**: Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  Ports/slots: (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  Camera: 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 13**  **Indicate Model**  **Operating System:** Windows 10 Pro English  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  Graphic Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** 512 GB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 14**  **General Type**  **Processor**: Intel® Core™ Ultra 5 125H (14 cores, 18 threads, up to 4.5 GHz, 18 MB cache)  **Graphics:** Integrated Intel® Graphics (4 cores) or Intel® Arc Graphics (7 or 8 cores, up to 3.9 TFLOPS)  **Memory:** 8 GB DDR5-5600 MHz (dual DIMM, upgradable, 2 slots)  **Storage:** 512 GB M.2 PCIe SSD Gen 4 (NVMe, upgradable, 2 slots)  **Operating System:** Windows 11 Pro English  **Display:** 14 inches Resolution: WUXGA (1920 x 1200, IPS, anti-glare, 300 nits, 45% NTSC, 16:10 aspect ratio)  **Battery Capacity:** 47 Wh or 57 Wh (Li-Polymer)  Audio Speakers: 2 x 2W stereo, Dolby Atmos®, Audio by Harman®  **Ports:**1x USB-C (Thunderbolt™ 4, 40 Gbps, Power Delivery, DisplayPort 2.1), 1x USB-C (USB 3.2 Gen 2, 10 Gbps, Power Delivery, DisplayPort 1.4), 2x USB-A (1x USB 3.2 Gen 1, 1x USB 3.2 Gen 1 with Sleep and Charge), 1x HDMI 2.1 (4K@60Hz), 1x Ethernet (RJ45, 10/100/1000 Mbps), 1x 3.5 mm audio combo jack  **Wireless:** Intel® Wi-Fi 6E AX201 (2x2) and Bluetooth® 5.2 (Windows 11)  **Docking:** Supports ThinkPad Universal USB-C Dock, Thunderbolt™ 4 Essential Dock  **Camera:**720p HD with privacy shutter  3 years manufacturer warranty |  |
|  | **Option 15**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 7 256V (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 8 cores, 8 threads)  **Operating system:** Windows 11 Professional  **Office:** Microsoft office 2021 activated  **Graphics:** Integrated: Intel® Arc™ 140V GPU (8GB)  **Display:** 14" diagonal, 2K (1920 x 1200), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass 3, 400 nits, 62.5% sRGB  **Display brightness:** 400 nits  **Display color gamut:** 62.5% sRGB  **Memory:** 16 GB LPDDR5x-8533 MT/s (onboard)  **Storage:** 512 GB PCIe® Gen4 NVMe™ M.2 SSD  **Wireless technology:** Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card  **Power supply:** 65 W USB Type-C® power adapter  Battery: 3-cell, 59 Wh Li-ion polymer  **Battery life:**Up to 16 hours and 30 minutes  **Video Playback Battery Life:** Up to 22 hours and 45 minutes  **Battery Recharge Time:** Supports battery fast charge: approximately 50% in 30 minutes  **External I/O Ports:** 2 USB Type-A 10Gbps signalling rate; 1 HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signalling rate (USB Power Delivery 3.1, DisplayPort™ 1.4a, HP Sleep and Charge)[19]Energy efficiency  **Webcam:** 5MP IR camera with temporal noise reduction and integrated dual array digital microphones  **Audio Features:** DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio  **Sensors:** Accelerometer; Gyroscope; IR thermal sensor  **Colour:** Glacier silver  Pointing device  **Keyboard:** Full-size, backlit, soft Gray keyboard  **Warranty**: 1-year limited hardware warranty. |  |
|  | **Option 16**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Processor:** Intel Core i7-1370P Processor, 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.9 GHz frequency with Intel Turbo Boost Technology 24 MB cache and 14 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  Supported resolutions: HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  Storage: M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  **Wireless LAN (WLAN):** Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4)  , (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) Smartcard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** HP Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer  **Warranty: 1 Year** |  |
|  | **Option 17**  **Indicate Model**  **Operating System:** Windows 11 Pro English  **Office:** Genuine Microsoft Office 2021 Activated  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 16 GB DDR5-5200 MHz RAM (1 x 16 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  **Wireless LAN (WLAN):** Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 18**  **Indicate Model**  **Operating System**: Windows 11 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options 35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** M.2 Solid-State Drive storage (SSD), 1 TB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signalling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signalling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** HP Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 19**  **Indicate Model**  **Operating System:** Windows 10 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor:** Intel Core i5-1350P Processor 1.4 GHz Efficient-core base frequency, up to Efficient-core 3.5 GHz frequency with Intel Turbo Boost Technology 12 MB cache and 12 cores  **Memory:** 8 GB DDR5-5200 MHz RAM (1 x 8 GB)  **Graphics:** Intel Iris Xe Graphics  **Display:** Touchscreen display panel options  35.56 cm (14.0 in) diagonal, WUXGA, antiglare, UWVA, bent, Touch on Panel, 250 nits, 45% NTSC (1920 x 1200) for 5MP and IR Camera  **Supported resolutions:** HDMI 2.1 supports resolution up to 4K at 60 Hz  **External display support:** Dual display through the dock  **Storage:** 512 GB PCIe Gen 4.0 x4 NVMe M.2 TLC SSD  Wireless LAN (WLAN): Intel AX211 Wi-Fi 6E and Bluetooth 5.3 M.2 160 MHz CNVi worldwide WLAN vPro wireless card  **Ports/slots:** (2) Thunderbolt 4 with USB4 Type-C ports; 40 Gbps signaling rate (USB Power Delivery and DisplayPort 1.4), (2) SuperSpeed USB 3.2 Gen 1.0 Type-A ports; 5 Gbps signaling rate (one charging port), (1) HDMI 2.1 port (cable sold separately), (1) Headphone/microphone combo jack, (1) SmartCard Reader (optional)  **Audio:** Audio by Bang & Olufsen, (2) Integrated stereo speakers, Discrete amplifiers, Integrated dual array microphone  **Camera:** 5 MP Camera  **Keyboard:** Premium Keyboard, Spill resistance with backlight  **Battery:** Long Life 3-cell, 38 Wh Polymer |  |
|  | **Option 20**  **Indicate Model**  **Processor:** Intel® Core™ Ultra 5 125H (14 cores, 18 threads, up to 4.5 GHz, 18 MB cache)  **Graphics:** Integrated Intel® Graphics (4 cores) or Intel® Arc Graphics (7 or 8 cores, up to 3.9 TFLOPS)  **Memory:** 16 GB DDR5-5600 MHz (dual DIMM, upgradable, 2 slots)  **Storage:** 512 GB M.2 PCIe SSD Gen 4 (NVMe, upgradable, 2 slots)  **Operating System:** Windows 11 Pro English  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Display:** 14 inches Resolution: WUXGA (1920 x 1200, IPS, anti-glare, 300 nits, 45% NTSC, 16:10 aspect ratio)  **Battery Capacity:** 47 Wh or 57 Wh (Li-Polymer)  **Audio Speakers:** 2 x 2W stereo, Dolby Atmos®, Audio by Harman®  **Ports:**1x USB-C (Thunderbolt™ 4, 40 Gbps, Power Delivery, DisplayPort 2.1), 1x USB-C (USB 3.2 Gen 2, 10 Gbps, Power Delivery, DisplayPort 1.4), 2x USB-A (1x USB 3.2 Gen 1, 1x USB 3.2 Gen 1 with Sleep and Charge), 1x HDMI 2.1 (4K@60Hz), 1x Ethernet (RJ45, 10/100/1000 Mbps), 1x 3.5 mm audio combo jack  **Wireless:** Intel® Wi-Fi 6E AX201 (2x2) and Bluetooth® 5.2 (Windows 11)  **Docking:** Supports ThinkPad Universal USB-C Dock, Thunderbolt™ 4 Essential Dock  **Camera:**720p HD with privacy shutter  **Warranty:** 3 years manufacturer warranty |  |
|  | **Option 21**  **Operating system:** Windows 11 Pro  **Office:** Genuine Microsoft Office Plus 2021 Activate  **Processor family:** Intel® Core™ Ultra 5 processor  **Processor:** Intel® Core™ Ultra 5 125U (up to 4.3 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 14 threads)  **Chipset:** Intel® Integrated SoC  **Memory:** 16 GB DDR5-5600 MT/s (2 x 8 GB)  **Memory slots:** 2 SODIMM; supports dual channel  **Internal drive:** 512 GB PCIe® Gen4 NVMe™ TLC M.2 SSD  **Display:** 14" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 400 nits, 100% sRGB  **Graphics:** Integrated: Intel® Graphics  **External I/O Ports:** Left side : 2 Thunderbolt™ 4 with USB Type-C® 40Gbps signalling rate (USB Power Delivery, DisplayPort™ 1.4); 2 USB Type-A 5Gbps signalling rate (1 charging, 1 power); 1 HDMI 2.1; 1 stereo headphone/microphone combo jack; Right side : 1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signalling rate  **Audio Features:** Audio by Poly Studio, dual stereo speakers, HP World Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio  **Webcam:** 5 MP IR camera  **Keyboard:** HP Premium Quiet Keyboard – spill-resistant, full-size, backlit keyboard with drain and DuraKeys  **Pointing device:** Click pad with multi-touch gesture support, taps enabled as default  **Wireless technology:** Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card  Input: Finger print reader  **Power supply:** 65 W USB Type-C™ adapter  **Battery:** HP Long Life 3-cell, 56 Wh Li-ion polymers Energy efficiency  **Warranty:** 3 year (3/3/0) limited warranty includes 3 years of parts and labor. |  |
| **O5** | **Single-Functional Printers** |  |
|  | **Model**  **ECOSYS MA4500ix**  **General type**  Monochrome multifunctional for A4 format Engine speed  Up to 45 pages A4 per minute. Duplex print speed: 22.5 page per minute, A4. Duplex **copy speed:** 22.5 page per minute, A4.  **Warm-up time**  **Approx.** 23 seconds or less  **Power consumption**  **Printing:** 599.4 W, Copying: 591.9 W, Ready mode: 57.2 W, Low power mode: 35 W, **Sleep mode:** 0.5 W  **Paper Handling**  **Input capacity**  Multi-purpose tray: 100 sheets, 60 to 220 g/m², A4, A5, A6, B5, B6, Letter, Legal, Folio, Custom (70 x 140 to 216 x 356 mm), Banner paper up to 915 mm. Standard universal paper cassette: 500 sheet, 60–120 g/m², A4, A5, B5, Letter, Legal, Folio, Custom (140 x 210 to 216 x 356 mm).  **Max. input capacity with options**  2,600 sheets  **Duplex unit**  Standard duplex unit, 60 to 120 g/m², A4, A5, B5, Letter, Legal, Custom (140x 210 mm - 216 x 356 mm).  **Max. output capacity**  250-sheet-face-down with paper full sensor  **Document processor**  Reverse Auto Document Processor as standard, 75 sheets, 50–120 g/m², A4, A5, A6, B5, Letter, Legal, Custom (105 x 148 to 216 x 356 mm).  **Print**  **Processor**  **ARM Cortex-A53 Dual core 1.4GHz**  **Fonts**  93 outline fonts (PCL6, KPDL3), 4 fonts (Calibri), 4 fonts (Cambria), 1 Bitmap font, 45 types of one-dimensional barcodes, 1 type of two-dimensional barcode (PDF417)  **Features**  PDF Direct Print, Internet printing IPP 1.0, E-mail printing, WSD print, secure printing IPP over TLS, Local and network authentication, Network data encryption IPsec, HTTPS, LDAP over TLS, SNMPv3, SMTP over TLS, POP over TLS, Encrypted PDF Direct Print, TLS 1.3, Secure Boot, Run-time Integrity Check, Microsoft Universal Print, Printing for Chrome OS  **Applicable OS**  All current Windows operating systems, MAC OS X Version 10.9 or higher, Chrome OS, Linux, as well as other operating systems on request  **Copy**  **Max. original size**  A4 / Legal  **Continuous copy**  1 - 999  **Zoom range**  25 - 400 % in 1% steps  **Preset magnification ratios**  7 Reductions/5 Enlargements  **Image adjustments**  Text + Photo, Photo, Text, Chart/Map, Printed document  **Digital copy features**  Electronic sort (collate), ID card copy, 2in1, 4in1, auto cassette change, Skip blank page, Skip Line, DP Auto-cropping  **Scan**  **Scan functionalities**  Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN , WIA , WSD scan, Chrome OS (Scan), AirPrint, Mopria  **Scan speed**  Simplex: 60 ipm (300 dpi, A4, b/w), 40 ipm (300 dpi, A4, colour). Duplex: 26 ipm (300 dpi, A4, b/w), 17 ipm (300 dpi, A4, colour).  **Scan features**  Banner Scan, Colour scan, integrated address book, Active Directory support, encrypted data transfer, multi send (e-mail, fax, SMB/FTP folder, print) at once, Blank page skip  **Scan resolution**  600, 400, 300, 200 dpi, 256 greyscales per colour  **Max. scan size**  **A4 / Legal**  **File type**  TIFF, JPEG, XPS, Open XPS, PDF, PDF/A, PDF/A-1a/b, PDF/A-2a/b/u, Encrypted PDF, High compression PDF, MS Office file and Searchable PDF (optional Scan  **Extension Kit(A) is required)**  Original recognition  **Text, photo, text + photo, light text, optimised for OCR**  **Option 2**  **Model**  LaserJet Pro 4003dn Printer (2Z609A)  **Print technology:** Laser  **Print speed black (ISO, letter):** Up to 42 ppm  **Print speed black (ISO, A4):** Up to 40 ppm  **First page out black (letter, ready):** As fast as 6.1 sec  **Duty cycle (monthly, A4):** Up to 80,000 pages  **Recommended monthly page volume:** 750 to 4,000  **Print quality black (best):** Fine Lines (1200 x 1200 dpi)  **Processor speed:** 1200 MHz  **Memory:** 256 MB  **Paper handling input, standard:** 100-sheet multipurpose Tray 1, 250-sheet input Tray 2  **Paper handling output, standard:** 150-sheet output bin  **Duplex printing:** Automatic  **Connectivity, standard:** 1x Hi-Speed USB 2.0 | 1x host USB at rear side; Gigabit Ethernet 10/100/1000BASE-T network; 802.3az(EEE)  **Mobile printing capability:** Smart App; Apple AirPrint; Mopria Certified  **Display:** 2-line back lit LCD graphic display  **Number of print cartridges:** 1 (black)  **Dimensions (W x D x H):** 381 x 357 x 216 mm  **Weight:** 8.56 kg |  |
| **06** | **Model**  [**COLOR LASERJET PRO MFP M479 SERIES PRINTER**](http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=4aa7-4862enuc) |  |
|  | **Functions**  Print, copy, scan, fax, email  **Print Speed - Black (normal)**  Up to 28 ppm  **Print speed - Color (normal)**  Up to 28 ppm  **First page out (ready) black**  As fast as 9.3 sec  **First page out (ready) color**  As fast as 10.9 sec  **Resolution (black)**  600 x 600 dpi, Up to 38,400 x 600 enhanced dpi  **Resolution (color)**  600 x 600 dpi, Up to 38,400 x 600 enhanced dpi  **Resolution technology**  ImageREt 3600, PANTONE® calibrated  **Monthly duty cycle**  Up to 50,000 pages  Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or groups.  **Recommended monthly page volume**  750 to 4000  **Print Technology**  Laser  **Display**  4.3" intuitive touchscreen Color Graphic Display (CGD)  **Number of print cartridges**  4 (1 each black, cyan, magenta, yellow)  **Replacement cartridges**  HP 415A Magenta LaserJet Toner Cartridge (~2,100 pages), W2033A; HP 415x Black LaserJet Toner Cartridge (~7,500 pages), W2030x; HP 415x Cyan LaserJet Toner Cartridge (~6,000 pages), W2031x; HP 415x Yellow LaserJet Toner Cartridge (~6,000 pages), W2032x |  |
| 07 | **ID Card Printer** |  |
|  | **Option 1**  **Model**  HDP6600 Card Printer & Encoder  **Side Printing:** Single or Dual  **Print Method:** HDP® Dye-Sublimation / Resin Thermal Transfer  **Resolution:** 600 dpi  **Print Speed:** Up to 230 cards per hour (YMCK with transfer) / 16 seconds per card  **Memory:** 1 GB RAM  **Accepted Card Sizes:** CR-80  **Warranty:**4 years (printer);Lifetime (printhead)  **Printer Options:**  Dual-sided printing  Wasteless LMX card lamination module (one-material and two-material configurations available)  Card flattener  Magnetic stripe encoder  Contact Smart Card encoder  Contactless Smart Card encoding modules  Dual input card hopper module  200-card input hopper module  Physical locks for card hoppers and consumables access  Secure proprietary consumables system  Custom secure holographic overlaminate  Printer cleaning kit |  |
|  | Consumables  **Model**  **084922**  HID Fargo 6600 Color Ribbon  Fargo YMCK Full Color Ribbon )  Full color with resin black- Upto YMCK 600 images |  |
|  | **Model**  **084900** Fargo 6600 084900 Clear HDP Retransfer FilmClear HDP Film, Approximately 1500 imagesModel082700HID Fargo 6600 Thermal Transfer and PolyGuard OverlaminateClear 250 counts/images |  |
|  | **Model**  **082137**  HID Fargo 6600 UltraCards  PVC cards/thickness/construction:  **HID Fargo UltraCards** PVC cards/CR-  79/CR-80 Hico 30ml-50ml Premiums  Composite 500 sealed cards per box  High Coercively Magnetic Stripes Premiums Composite Upto 1500 images |  |
|  | **Model**  **088933**  Cleaning Materials for HDP for HID Fargo Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards |  |
|  | **Model**  **086094**  HID Fargo Replacement Printhead for Fargo HDP 6600  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly |  |
|  | Option 2ModelHID FARGO® HDP5000 ID Card Printer & EncoderIdeal solution for printing on technology-rich smart cards **Sided Printing:**Single or Dual  **Print Method:**HDP Dye-Sublimation / Resin Thermal Transfer  **Resolution:**300 dpi  **Print Speed:** up to 24 seconds per card / 150 cards per hour (YMC with transfer)  **Accepted Card Sizes:**CR-80  **Warranty:**3 years (printer)\*; Lifetime (printhead)\*  **Printer Options:**  Dual-sided printing  Single- or dual-sided lamination  USB 2.0 interface for inline printing and encoding  Smart card encoding (contact/contactless)  Magnetic stripe encoding  Physical locks  Dual input card hopper 200-card input hopper  Printer cleaning kit |  |
|  | Consumables |  |
|  | **Model**  **084051**  HID Fargo Color Ribbon  Full color with resin black- Upto YMCK 500 images |  |
|  | **Model**  **082601**  HID Fargo Thermal Transfer and PolyGuard Overlaminate  Clear 250 counts/images |  |
|  | **Model**  **084053**  HID Fargo HDP Film  Clear HDP Film, Approximately 1500 images |  |
|  | **Model**  **082137**  HID Fargo UltraCards  PVC cards/thickness/construction:  CR-79/CR-80 Hico 30ml-50ml  High Coercively Magnetic Stripes Premiums Composite Upto 1500 images  500 sealed cards per box |  |
|  | **Model**  **089200**  Cleaning Materials for HDP for HID Fargo  Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards |  |
|  | **Model**  **086091**  HID Fargo Replacement Printhead for Fargo HDP 5000  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly |  |
|  |  |  |
|  | Option 3ModelHDP5000e ID Card Printer & EncoderGeneral TypeFARGO HDP5000E RETRANSFER IDCARD PRINTER (DUAL-SIDED)Sided Printing: Single or DualPrint Method: HDP® Dye-Sublimation / Resin Thermal TransferResolution: 300 dpiPrint Speed: Up to 27 seconds per card / 133 cards per hour (YMCK with transfer)Accepted Card Sizes: CR-80Warranty: Four years (printer); lifetime (printhead)Printer Options:Dual-sided printingSingle- or dual-sided laminationSmart card encoding (contact/contactless)Magnetic stripe encodingDual input card hopper200-card input hopperPrinter cleaning kit |  |
|  | **Consumables**  **Model**  **084051**  HID Fargo 5000e Color Ribbon  Fargo 084511 YMCK Full Color Ribbon )  Full color with resin black- Upto YMCK 500 images |  |
|  | **Model**  **084500** Fargo 5000e 084500 Clear HDP Retransfer FilmClear HDP Film, Approximately 1500 imagesModel082600 HID Fargo 5000e Thermal Transfer and PolyGuard Overlaminate Clear 250 counts/images |  |
|  | **Model**  **082136**  HID Fargo 5000e UltraCards  PVC cards/thickness/construction:  **HID Fargo UltraCards** PVC cards/CR-  79/CR-80 Hico 30ml-50ml Premiums  Composite 500 sealed cards per box  High Coercively Magnetic Stripes |  |
|  | Premiums Composite Upto 1500 images  **Model**  **096200**  Cleaning Materials for HDP for HID Fargo Cleaning Kit-Includes 4 Printhead Cleaning Swabs, 10 Cleaning cards,10 cleaning Pads and 3 Alcohol Cleaning Cards **Model**  **096091**  HID Fargo Replacement Printhead for Fargo HDP 5000e  300 dpi Thermal Printhead Replacement Kit- Includes Replacement Printhead and complete Printhead Assembly |  |
|  | **Option Two**  **Model:** RG-AP9861-R, Wi-Fi 7 24.436 Gbps Indoor Access Point, 18 Spatial Streams, Built-in AI Radio  **Wireless protocol:** 802.11n/ac/ax/be  **Radio design: Five-radio:** 2.4 GHz (4x4), 5 GHz 1 (4x4), 5 GHz 2 (4x4), 6 GHz (4x4), up to 18 spatial streams  Max. data transmission rate: 24.436 Gbps  **Wi-Fi antenna:** Built-in omnidirectional smart antenna  Fixed service port: 1 x 100/1000/2.5G/5G/10GBASE-T port, 1 x 10GE SFP+/RJ45 combo port, 1 x 10/100/1000BASE-T  **Bluetooth:** Bluetooth 5.3  **Max. number of associated STAs:** 2,048 (512 STAs per radio)  Input power supply: 54 V DC/1.25 A power input over DC connecto;, PoE+/PoE++ input, in compliance with IEEE 802.3at/bt  **Max. power consumption:** 60 W  **Operating temperature:** –10°C to +50°C (14°F to 122°F)  Dimensions (W x D x H): 245 mm x 245 mm x 67 mm Mounting: Ceiling or wall |  |
|  | **Option 3**  **Indicate Model**  Wireless protocol: 802.11n/ac/ax/be  **Radio design:** Dual-radio: 2.4 GHz (2x2), 5 GHz (2x2), up to 4 spatial streams  Max. data transmission rate: 3.570 Gbps  **Wi-Fi antenna:** Built-in omnidirectional smart antenna  **Fixed service port:** 1 x 100/1000/2.5GBASE-T port and 1 x 2.5GE SFP port  **Bluetooth:** Bluetooth 5.3  **Max. number of associated STAs:**256 (128 STAs per radio)  **Input power supply:** 48 V DC/0.54 A power input over DC connector; PoE/PoE+ input, in compliance with IEEE 802.3af/at  **Max. power consumption:** 16 W  **Operating temperature:** –10°C to +50°C (14°F to 122°F)  Dimensions (W x H x D): 200 mm x 200 mm x 40 mm  **Mounting:** Ceiling or wall |  |
|  | **Option 4**  **Indicate Model**  **Enclosure material:** Plastic  **Mount material:** SGCC Steel  **Weatherproofing:** IP54  **Management interfaces:** Ethernet  **Networking interface:** (1) GbE RJ45 port  **Button:** Factory reset  **LED\*:** White/Blue  **Power method:** PoE+, passive PoE (48V)  **Power supply:** UniFi PoE switch 48V, 0.5A PoE adapter  **Supported voltage range**: 44 to 57VDC  **Max. power consumption:** 16.5W  Max. TX power:2.4 GHz 26 dBm, 5 GHz 26 dBm  **MIMO: 2.4 GHz 4 x 4, 5 GHz:** 4 x 4  **Throughput rate:** 2.4 GHz: 600 Mbps; 5 GHz: 2400 Mbps  Antenna gain: **2.4 GHz 4 dBi; 5 GHz: 5.5 dBi**  Mounting: Wall/ceiling (included)  **Operating temperature:** -30 to 60° C (-22 to 140° F)  **Operating humidity:** 5 – 95% noncondensing  **WiFi standards:** 802.11a/b/g, WiFi 4/WiFi 5/WiFi 6  **Wireless security:** WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)  **BSSID:** 8 per radio  **VLAN:** 802.1Q  **Advanced QoS:** Per-user rate limiting  Guest traffic isolation Supported  **Concurrent clients:** 300+  **Supported Data Rates:**  802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11b: 1, 2, 5.5, 11 Mbps  802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11n (WiFi 4): 6.5 Mbps to 600 Mbps (MCS0 – MCS31, HT 20/40)  802.11ac (WiFi 5): 6.5 Mbps to 1.7 Gbps (MCS0 – MCS9 NSS1/2/3/4, VHT 20/40/80/160)  802.11ax (WiFi 6): 7.3 Mbps to 2.4 Gbps (MCS0 – MCS11 NSS1/2/3/4, HE 20/40/80/160)  1 year Warranty. |  |
|  | **Option 5**  **Indicate Model**  **Enclosure material:** Plastic  Mount material: SGCC Steel  **Weatherproofing:** IP54  **Management interfaces:** Ethernet  **Networking interface**: (1) GbE RJ45 port  **Button:** Factory reset  LED\*: White/Blue  **Power method:** PoE+, passive PoE (48V)  **Power supply:** UniFi PoE switch 48V, 0.5A PoE adapter  **Supported voltage range:** 44 to 57VDC  **Max. power consumption:** 16.5W  Max. TX power:2.4 GHz 26 dBm, 5 GHz 26 dBm  **MIMO:** 2.4 GHz 4 x 4, 5 GHz: 4 x 4  **Throughput rate:** 2.4 GHz: 600 Mbps; 5 GHz: 2400 Mbps  **Antenna gain:** 2.4 GHz 4 dBi; 5 GHz: 5.5 dBi  **Mounting:** Wall/ceiling (included)  **Operating temperature:** -30 to 60° C (-22 to 140° F)  **Operating humidity**: 5 – 95% noncondensing  **WiFi standards:** 802.11a/b/g, WiFi 4/WiFi 5/WiFi 6  Wireless security: WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)  **BSSID:** 8 per radio  VLAN: 802.1Q  **Advanced QoS:** Per-user rate limiting  Guest traffic isolation Supported  **Concurrent clients:** 300+  **Supported Data Rates:**  **802.11a:** 6, 9, 12, 18, 24, 36, 48, 54 Mbps  **802.11b:** 1, 2, 5.5, 11 Mbps  802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps  802.11n (WiFi 4): 6.5 Mbps to 600 Mbps (MCS0 – MCS31, HT 20/40)  802.11ac (WiFi 5): 6.5 Mbps to 1.7 Gbps (MCS0 – MCS9 NSS1/2/3/4, VHT 20/40/80/160)  802.11ax (WiFi 6): 7.3 Mbps to 2.4 Gbps (MCS0 – MCS11 NSS1/2/3/4, HE 20/40/80/160) |  |
| **08** | **Indoor Wireless Access Points** |  |
|  | ModelU6- EnterpriseMechanicalDimensionØ220 x 48 mm (Ø8.7 x 1.9&quot;)WeightWithout mount: 960 g (2.1 lb)With mount: 1090 g (2.4 lb)Enclosure materialPolycarbonate, aluminumHardwareNetworkingInterface(1) 2.5 GbE RJ45 portManagement InterfaceEthernetBluetoothPower MethodPoE+Power SupplyUniFi PoE switch48V, 0.5A PoE adapter(Optional)Supported Voltage Range44—57V DCMax. Power Consumption22WMax TX Power2.4GHz 26 dBm5 GHz 26 dBm6GHz 26dBmMIMO2.4Ghz 4x45 GHz 4x46 GHz 4x4Thorough Put Rate2.4 GHz 573. Mbps5 GHz 4.8 Gps6 Ghz 4.8 GpsUbiquity(UniFi) Pc 03 800,000 2,400,000Antenna Gain2.4 Ghz 3.2 dBi5Ghz 5.3dBi6 GHz 4.8dBiLEDsWhite/BlueButtonReboot and factory resetMountingWall/Ceiling(included) Ambient Operating temperature30-60 0 C (-22-140 0 F)Operating Humidity5-95% noncondensingCertificationsCE FCC, ICSoftwareWiFi standards802.11a/b/g/n/ac/ax (WiFi 6/6E)Wireless SecurityWPA-PSK, WPA-Enterprise(WPA/WPA2/WPA3)BSSID8 per radioVLANAdvanced QoSPer-user rate limitingGuest traffic isolationSupportedConcurrent clients600+Zero-wait DFSYes\*\*Supported with upcomingfirmware versions.Supported Data Rates (Mbps)802.11a802.11b802.11g802.11n(WiFi4)802.11ac(WiFi5) 802.11ax(WiFi6 |  |
| 09 | Outdoor Wireless Points |  |
|  | Option 1ModelAC MeshUAP-AC-MMechanicalDimension353 x 46 x 34.4 mm (13.9 x 1.8x 1.4&quot;)Hardware(1) GbE RJ45 portManagement InterfaceEthernetBluetoothPower methodPoEPassive PoE, 24V (Pairs 4, 5+;7, 8 return)Power supplyGigabit PoE adapter 24V, 0.5A\*\*5-packs do not come with PoE adapters.Supported Voltage44—57V DCMax. power consumption8.5WMax. TX power2.4 GHz 20 dBm5 GHz 20 dBm6 GHz -MIMO2.4 GHz 2x25 GHz 2x26 GHz -Throughput rate2.4 GHz 300 Mbps5GHz 867 Mbps6 GHZ -Antennae gain2.4 GHz 3dBi5 GHz 4dBi6 GHZ -ButtonFactory resetMountingUbiquity(UniFi) Pc 03 750,000 2,250,000Wall, pole, fast-mount(Included)Ambient operatingtemperature-30 to 70° C (-22 to 158° F)Ambient operating humidity5 to 95% noncondensingCertificationsCE, FCC, IC, UKCASoftwareWiFi standards802.11a/b/g/n/acWireless securityWEP, WPA-PSK, WPA-Enterprise (WPA/WPA2,TKIP/AES)VLAN802.1QBSSIDUp to 4 per radioAdvanced QoSPer-user rate limitingGuest traffic isolationSupportedPower saveSupportedWMMVoice, video, best effort, andbackgroundConcurrent clients250+Supported Data Rates802.11a802.11b802.11g802.11n(WiFi4)802.11ac(WiFi5)802.11ax(WiFi6)Warranty1 Year04 Router ModelDream Machine Pro MaxUDM-Pro-MaxMechanicalUbiquity(UniFi) Pc 01 2,500,000 2,500,000442.4 x 43.7 x 285.6 mm (17.4x 1.7 x 11.2&quot;)Weight4.7 kg (10.4 lb)Enclosure materialAluminium CNC, SGCC steelMount materialSGCC steelHardwareProcessorQuad-core ARM® Cortex®-A57at 2.0 GHzSystem memory8 GB DDR4On-board storage32 GB eMMCIntegrated 128 GB SSDManagement interfaceEthernetBluetoothNetworking interfaceLAN:(8) GbE RJ45 ports(1) 10G SFP+ portWAN:(1) 2.5 GbE RJ45 port(1) 10G SFP+ portIDS/IPS throughput5 Gbps\*\*Measured with iPerf3.Power method(1) Universal AC input,100—240V AC, 2A Max., 50/60Hz(1) USP-RPS DC input, 11.5VDC, 8.7APower supplyAC/DC, internal, 100WSupported voltage range100—240V ACMax. power consumption100WESD/EMP protectionAir: ± 15kV, contact: ± 8kVLCM display(1) 1.3&quot; touchscreenButtonFactory resetAmbient operatingtemperature-10° to 40° C (14° to 104° F)Ambient operating humidity5 to 95% noncondensingCertificationsCE, FCC, ICGateway FeaturesPerformanceRedundant WAN with failoverand load balancingWiFi QoS with UniFi APsApplication, domain, andcountry-based QoSApplication and device typeidentificationAdditional internet failover withLTE BackupInternet quality and outagereportingNext-generation securityApplication-aware firewall rulesSignature-based IPS/IDS threatdetectionContent, country, domain, andad filteringVLAN/subnet-based trafficsegmentationFull stateful firewallAdvanced networkingLicense-free SD-WANWireGuard, L2TP andOpenVPN serverOpenVPN clientOpenVPN and IPsec site-to-siteVPNOne-click Teleport and IdentityVPNPolicy-based WAN and VPNroutingDHCP relayCustomizable DHCP serverIGMP proxyIPv6 ISP supportLEDsEthernetGreen: link/activitySFP+Green: link/activityHDDWhite: disk activityAmber: disk errorRPSBlue: ready |  |
| **10** | **Biometric Machines**  **Option 1**  **General Type**  Face Recognition Terminal  **Model:** DS-K1T680DF-E1  **Display:** Screen size 8 inch  Operation method Capacitive touch screen  **Type:** LCD  **Video**  Lens:2  **Resolution:** 2 MP  FOV: HFOV = 88°; VFOV = 44°; DFOV = 108°  **Network:** Wired network Support  **Interface**  Network interface: 1 RJ-45, 10/100/1000 M self-adaptive  Lock control: 1  **Exit button:** 1  Door contact input: 1  **Alarm input:** 2  **Alarm output:** 1  **TAMPER:** 1  **RS-485:** 1 RS-485 (Half duplex, HIKVISION)  **Wiegand:** 1 Wiegand (Hik 26bit, Hik 34bit)  **USB:** 1  Authentication  Card type DESFire card, Felica card  **General**  Power supply: 12 to 24 VDC, 3 A, Standard PoE  Working temperature: -30 °C to 60 °C (-22 °F to 140 °F)  Working humidity: 0 to 90% (No condensing)  Protective level IP65  **Dimensions:** 127.3 mm × 232.1 mm × 23.5 mm (5.0'' × 9.1'' × 0.9'‘)  **Function:** Hik-Connect Support  **Language:** English  **QR code recognition:** Support. The dimension of the recognized QR code picture should be larger than 6 cm  × 6 cm.  **Face anti-spoofing:** Support  **Accessory for wall mounting:** DS-KAB6-W1 |  |
|  | **Option 2**  **Model DS-K1T680DF-E1**  Face Recognition Terminal  Face Recognition Terminal  8-inch touch screen with bezel-less design  Presents card on the screen to authenticate  Face recognition distance: 0.3 m to 3 m, duration  ＜ 0.2 s/User, accuracy rate ≥ 99% ν100,000 face capacity, 100,000 card capacity (Felica, DESfire, M1), 10,000 fingerprint capacity, and -- 150,000 event capacity ν  Supports ISAPI, ISUP 5.0, Wiegand, RS-485, TCP/IP, and PoE ν  Two-way audio with indoor station and main station ν  Configuration via the web client and mobile client ν  Customizes attendance status name |  |
| **11** | **CCTV Camera- Indoor**  **Model**  4 MP Smart Hybrid Light with ColorVu Motorized Varifocal Dome **Network Camera**  **Part Number**  DS-2CD2141G0-IU#ZAC  **Type**  Indoor  **Camera**  **Image Sensor**  1/1.8" Progressive Scan CMOS  Max. Resolution  2688 × 1520  **Min. Illumination**  Color: 0.0008 Lux @ (F1.2, AGC ON),0 Lux with light  Shutter Time  1/3 s to 1/100,000 s  Day & Night  **IR cut filter**  Angle Adjustment  Pan: 0° to 355°,tilt: 0° to 75°,rotate: 0° to 355°  Lens  Lens Type  Varifocal lens, motorized lens, 2.8 to 12 mm  Focal Length & FOV  2.8 to 12 mm, horizontal FOV 114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 141.3° to 48.1°  Lens Mount  Integrated  Iris Type  Fixed  Aperture  Max. F1.2  Depth Of Field  1 m to ∞  Dori  Dori  Wide: D: 60.0m, O: 23.8 m, R: 12.0 m, I: 6.0 m  Tele: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m  Illuminator  Supplement Light Type  IR,White Light  Supplement Light Range  Up to 40 m  Smart Supplement Light  Yes  IR Wavelength  850 nm  Video  Main stream  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  Sub-Stream  50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)  Third Stream  50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  Video Compression  Main stream: H.265/H.264/H.264+/H.265+,  Sub-stream: H.265/H.264/MJPEG,  Third stream: H.265/H.264,  \*Third stream is supported under certain settings.  Video Bit Rate  32 Kbps to 8 Mbps  H.264 Type  Baseline Profile,Main Profile,High Profile  H.265 Type  Main Profile  Bit Rate Control  CBR,VBR  Scalable Video Coding (SVC)  H.264 and H.265 encoding  Region Of Interest (ROI)  1 fixed region for main stream and sub-stream  Audio  Audio Compression  MP3/AAC-LC  Audio Bit Rate  320 Kbps (MP3)  Audio Sampling Rate  8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  Environment Noise Filtering  Yes  Network  Protocols  TCP/IP  Simultaneous Live View  Up to 6 channels  API  Open Network Video Interface  User/Host  Up to 32 users  Security  Password protection  Network Storage  NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR)  Client  iVMS-4200,Hik-Connect,Hik-Central  Web Browser  Chrome 57.0+, Firefox 52.0+, Edge 89+,  Image  Image Parameters Switch  Yes  Image Settings  Rotate mode, saturation, brightness, contrast, sharpness, gain, white  balance, adjustable by client software or web browser  Day/Night Switch  Day,Night,Auto,Schedule  Image Enhancement  BLC,HLC,3D DNR  SNR  ≥ 52 dB  Wide Dynamic Range (WDR)  130 dB  Privacy Mask  4 programmable polygon privacy masks  Interface  Ethernet Interface  1 RJ45 10 M/100 M self-adaptive Ethernet port  On-Board Storage  Built-in memory card slot microSD/microSD card, up to 512 GB  Audio  1 input (line in), two-core terminal block, max. input amplitude  Alarm  1 input, 1 output (max. 24 VDC/24 VAC, 1 A)  Reset Key  Yes  Event  Basic Event  Motion detection (support alarm triggering by specified target types (human  and vehicle)  Smart Event  Scene change detection  Linkage  Upload to FTP/NAS/memory card,notify surveillance center  Power  12 VDC ± 25%, 0.88 A, max. 10.5 W,Ø5.5 mm coaxial power plug,reverse polarity protection,PoE: IEEE 802.3af, Class 3, max. 12.5 W  Language  English, |  |
| **12** | **CCTV Camera- Outdoor**  **Model**  4 MP ColorVu Motorized Varifocal Dome Network Camera  **Part No**  DS-2CD2747G2-LZS  **Camera**  **Image Senser**  1/1.8 Progressive Scan CMOS  Max. Resolution  2688 × 1520  Min Illumination  **Color**: 0.0005 Lux @ (F1.0, AGC ON), 0 Lux with white light  Shutter Time  1/3 s to 1/100,000 s  **Angle Adjustment**  Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°  **Lens**  Varifocal lens, motorized lens, 3.6 to 9 mmFocal  Length &FOV  2.8 mm, horizontal FOV 108.8°, vertical FOV 56.4°, diagonal FOV 112.2° to 55°  **Lens Mount**  Ø20  **Iris Type**  Fixed  **Aperture**  F1.0  Depth of Field  2.8mm:3.3m to 4mm:3.8m to  **Dori**  **Dori**  D: 69 m to 124 m, O: 27.4 m to 49.3 m, R: 13.8 m to 24.8 m, I: 6.9 m to 12.4 m  I**lluminator**  Supplement Light Type  **White Light**  Supplement Light Range  Up to 40 m  **Smart Supplement Light**  Yes  **Video**  **Main Stream**  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  **Sub-Stream**  50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)  **Third Stream**  50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  **Video Compression**  Main stream: H.265/H.264/H.265+/H.264+  **Audio**  **Audio Compression**  G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC  **Audio Bit Rate**  64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192  **Network**  **Protocols**  TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS  **Security**  Password protection  **Image**  Image Parameters Switch  **Yes**  **Image Settings**  Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser  **Interface**  **Ethernet Interface**  1 RJ45 10 M/100 M self-adaptive Ethernet port  **On-Board Storage**  Built-in memory card slot, support microSD/microSD card, up to **512 GB**  Power  12 VDC ± 25%, 0.9 A, max. 10.8 W, Ø5.5 mm coaxial power plug  PoE: 802.3af, Class 3, 36 V to 57 V, 0.36 A to 0.23 A, max. 12.9 W  **Language**  English  **Warranty**  1 Year |  |
| **13** | **CCTV Camera-Rotational**  **Model**  TandemVu 7-inch 4 MP 32X Colorful & IR Network Speed Dome  **Part Number**  DS-2SE7C432MW-AEB(14F1)(P3)  **Camera**  **Image Sensor**  Bullet channel,1/1.8" Progressive Scan CMOS,PTZ channel 1/1.8" progressive scan CMOS  **Min. Illumination**  Bullet channel 0.0005 Lux @ F1.0, AGC ON), 0 Lux with light;[PTZ channel]  **Shutter Speed**  1 s to 1/30,000 s  **Slow Shutter**  Yes  **Focus**  semi-auto;manual;auto  **Day & Night**  ICR  **Zoom**  PTZ channel 32 × optical, 16 × digital  **Day/Night Switch**  day, night, auto, scheduled-switch  **Lens**  Focal Length  Bullet channel: 4 mm; [PTZ channel]: 5.9 to 188.8 mm, 32 × optical  **Zoom Speed**  PTZ channel approx. 5.6 s  **FOV**  Bullet channel Horizontal field of view: 88.7°, Vertical field of view: 44.7°;  **Aperture**  Bullet channel: F1.0; [PTZ channel]: F1.5  Illuminator  **Supplement Light Type**  Bullet channel] white light, PTZ channel IR  **Supplement Light Range**  Bullet channel] white light: up to 30 m, PTZ channel IR: up to 200 m  **Smart Supplement Light**  Yes  **PTZ**  **Movement Range (Pan)**  360°  **Movement Range (Tilt)**  -15° to 90° (auto flip)  **Pan Speed**  pan speed: configurable from 0.1° to 160°/s; preset speed: 240°/s  **Tilt Speed**  tilt speed: configurable from 0.1° to 120°/s, preset speed 200°/s  **Proportional Zoom**  Yes  **Presets**  300  **Patrol Scan**  8 patrols, up to 32 presets for each patrol  **Pattern Scan**  **Power-Off Memory**  Yes  **Video**  **Stream Type**  **main stream; sub-stream; third stream**  **Main Stream**  **Bullet channel:**  50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720  **Sub-Stream**  Bullet channel:50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)60 Hz  **Third Stream**  **Bullet channel**  50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480  **Smart Features**  **Smart Record**  ANR; Dual-VCA  **Warning And Alert**  white light and audible warning  **Network**  Network Storage  NAS (NFS，SMB/ CIFS), ANR  **Protocols**  IPv4/IPv6; HTTP; HTTPS;802  **Interface**  Communication Interface  RJ45, self-adaptive 10M/100M Ethernet port  **Deep Learning Function**  **Face Capture**  [Bullet channel] no,PTZ channel yes |  |
| **14** | **LED Digital**  **Advertising Display Board**  **Application**  Indoor  **Usage**  Advertising public/Education  **Specification**  Digital Poster,Touchscreen  **Color**  Black  **Supply type**  Original ODM/ OEM  **Media Availability**  Datasheet, Photo  **Model No.**  ADV5531(Floor)  **Certicate**  CE,RoHs, FCC  **CPU**  **PX30 quoad core 64bit**  **Internal Memory**  16GB  **Ratio**  16:9  **USB**  Yes  **HDMI-IN**  Optional  **Language**  Multi-language  **Brightness**  350 cd/m2  **Packaging Details**  L195\*W85\*H23cm  **Screen Display size**  55’  **Connection**  Wireless enabled |  |
| **15** | TabletOption 1ModelGalaxy tab s10 ultra 256gb cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 14.6 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 256gb ram: 12gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |
|  | Option 2ModelGalaxy tab S10 ultra 512 cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 14.6 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 512gb ram: 16gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |
|  | Option 3ModelGalaxy tab A9- 87Network 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 11 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 128gb ram: 8gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |
|  | Option 4ModelGalaxy tab A8 cellular+wifiNetwork 2g/3g/4g/5g Connectivity Cellular+wifi Screen size Size - 11 inches Type - dynamic amoled 2x, 120hz, hdr10+ Sim capacity Nano-sim, esim stylus, 2.8ms latency (bluetooth integration, accelerometer, gyro) Memory rom: 64gb ram: 2gb microsdxc (dedicated slot) Main camera Dual 13 mp, f/2.0, 26mm (wide), 1/3.4", 1.0µm, af 8 mp, f/2.2, (ultrawide) Selfie camera Dual 12 mp, f/2.2, 26mm (wide) 12 mp, f/2.4, 120˚ (ultrawide) Chip set Qualcomm sm8550-ac snapdragon 8 gen 2 (4 nm) Battery  Li-po 11200 mah, non-removable Security feature fingerprint (under display) |  |
| **16** | **Network Switches**  **Model:** C1000-24T-4X-L  **Series:** Catalyst 1000 Series  **Port Configuration:** 24 × 10/100/1000BASE-T (RJ45), 4 × SFP+ Uplinks (10GBASE-X)  **Form Factor:** Fixed-configuration, rack-mountable (1RU)  **Switching Capacity**: 128 Gbps  **Forwarding Rate:** 95.23 Mpps (64-byte L3 packets)  **MAC Address Table:** 16,000 entries  **Active VLANs:** 256  **VLAN IDs:** 4,094  **IPv4 Routing:** Direct: 542, Indirect: 256  **IPv6 Routing:** Direct: 414, Indirect: 128  **CPU:** ARM v7, 800 MHz  **DRAM:** 512 MB  **Flash Memory:** 256 MB  **Management Interfaces:** 1 × RJ-45 console port, 1 × USB-A (for storage/Bluetooth console)  **SPAN Sessions:** 4 (ingress/egress)  Security ACLs: IPv4/MAC ACEs: 600, IPv6 ACEs: 600  Supported Protocols: SNMP v1/v2c/v3, IEEE 802.1X, LLDP, CDP  **Operating Temperature:** 32°F to 104°F (0°C to 40°C)  **Operating Humidity:** 10% to 90% non-condensing  **Operating Altitude:** Up to 10,000 ft (3,000 m)  **Power Input:** 110-220V AC (auto-sensing)  Power Consumption: Idle: 14.52W, 10% Traffic: 16.44W, 100% Traffic: 16.68W, Weighted Avg: 15.88W  **Minimum IOS Version:** Cisco IOS 15.2(7)E4 or later  **Management Options:** Cisco DNA Canter, CLI, Web UI  **Certifications:** Safety: UL 60950-1, EN 60950-1; EMC: FCC Part 15 Class A, EN55032 |  |
|  | **Model:** C1000-24P-4G-L  **Series:** Catalyst 1000 Series  **Form Factor**: Fixed-configuration, rack-mountable (1RU)  **Port Configuration:** 24 × 10/100/1000BASE-T PoE+ (RJ45), 4 × SFP Uplinks (1000BASE-X)  **Switching Capacity:** 56 Gbps (1G) / 128 Gbps (10G)  **Forwarding Rate:** 41.67 Mpps (64-byte L3 packets)  **MAC Address Table**: 16,000 entries  **Active VLANs:** 256  **VLAN IDs:** 4,094  **IPv4 Routes:** 542 direct, 256 indirect  **IPv6 Routes:** 414 direct, 128 indirect  **PoE Standards:** IEEE 802.3af (15.4W/port), IEEE 802.3at (30W/port)  **Max PoE Budget:** 195 W (total)  **PoE Power Supply:** Internal (auto-sensing 110-220V AC)  CPU: ARM v7, 800 MHz  **DRAM:** 512 MB  **Flash Memory:** 256 MB  **Management Interfaces:** 1 × RJ-45 console, 1 × USB-A (storage/Bluetooth)  **SPAN Sessions:** 4 (ingress/egress)  **Security ACLs:** IPv4/MAC ACEs: 600, IPv6 ACEs: 600  Supported Protocols: SNMP v1/v2c/v3, IEEE 802.1X, LLDP, CDP  **Operating Temperature:** 32°F to 104°F (0°C to 40°C)  **Operating Humidity:** 10% to 90% non-condensing  **Operating Altitude:** Up to 10,000 ft (3,000 m)  **Power Consumption:** Idle: 14.64 W (PoE), 16.56 W (10% traffic), 16.92 W (100% traffic), Weighted **average:** 16.04 W  **Minimum IOS Version**: Cisco IOS 15.2(7)E4 or later  **Management Options:** Cisco DNA Canter, CLI, Web UI  **Certifications**  UL 60950-1, EN 60950-1, FCC Part 15 Class A, EN55032  Manufacturer warranty |  |
|  | **Model:** C9300L-24T-4X-A  Mean Time Between Failures – MTBF (hours): 387,700 hours  **Supported IOS**  Network Advantage, Network Essentials  **Network modules options:** Fixed Modules  **Stack Technology:** StackWise-320  **Stacking bandwidth:** 320 Gbps  **Total number of MAC addresses:** 32,000  Total number of IPv4 routes (ARP plus learned routes): 32,000 (24,000 direct routes and 8,000 indirect routes)  **IPv6 routing entries:** 16,000  **Multicast routing scale:** 8,000  **QoS scale entries:** 5,120  **ACL scale entries:** 5,120  **Packet buffer per SKU:** 16 MB buffer for 24 and 48 port Gigabit Ethernet models  **Flexible NetFlow (FNF) entries:**64,000 flow on 24- and 48-port Gigabit Ethernet models  **DRAM:** 8 GB  **Flash:** 16 GB  **VLAN IDs:** 4,094  Total Switched Virtual Interfaces (SVIs): 1,000  **Jumbo frames:** 9,198 bytes  **Switching capacity**: 56 Gbps - 176 Gbps  **Forwarding rate:** 41.66 Mpps - 130.95 Mpps  Manufacturer warranty |  |
|  | **Model:**C9300-48T-A  **Part Number:** C9300-48T-A  Total 10/100/1000 or Multigigabit copper ports: 48  **Default AC Power Supply:** 350WAC  **Cisco StackWise-480:** Yes  **Cisco StackPower:** Yes  **Default Power Supply:** PWR-C1-350WAC  **Switching Capacity:** 256 Gbps on 48-port Gigabit Ethernet model  **Stacking Bandwidth:** 480 Gbps  **Total Number of MAC Addresses:** 32,000  Total Number of IPv4 Routes (ARP plus learned routes): 32,000 (24,000 direct routes and 8,000 indirect routes)  **IPv4 Routing Entries:** 32,000  **IPv6 Routing Entries:** 16,000  **Multicast Routing Scale:** 8,000  **QoS Scale Entries:** 5,120  **ACL Scale Entries:** 5,120  **Packet Buffer per SKU:** 16 MB buffer for 24- or 48-port Gigabit Ethernet models  **FNF Entries:** 64,000 flow on 24- and 48-port Gigabit Ethernet models  **DRAM:** 8 GB  **Flash:** 16 GB  **VLAN IDs**: 4,000  Total Switched Virtual Interfaces (SVIs)  2,000  **Jumbo Frames:** 9,198 bytes  Total Routed Ports per 9300 Series Stack: 208  **Wireless Bandwidth per Switch:** Up to 96 Gbps on 48-port Gigabit Ethernet model  **Forwarding Rate:** 154.76 Mpps  **Mean Time Between Failures (hours):** 299,000  Manufacturer warranty |  |
|  | **Model:** WS-C3850-24T-S  **Enclosure type:** Rack-mountable - 1U  **Ports:** 24 x 10/100/1000  **Network management Interface:** Ethernet management port: RJ-45 connectors, 4-pair Cat-5 UTP cabling and Management console port: RJ-45-to-DB9 cable for PC connections  **Available PoE Power:** None  **Switching Capacity:** 92Gbps  Maximum stacking number: up to 9 switches with same IOS feature set in same series  **Stack Bandwidth:** 480Gbps  Forwarding Performance: 68.4Mpps  **FNF entries:** 24,000 flows  **Maximum VLANs IDs:** 4,000  **MAC Address Table Size:** 32K  **CPU:** Multicore CPU  **RAM:** 4 G  **Flash Memory:** 2 G  Wireless: Number of AP per switch/stack  100  **Number of wireless clients per switch/stack:** 2000  **Total number of WLANs per switch:** 64  **Wireless bandwidth per switch:** up to 20Gbps  **Supported Aironet AP series:** 3600, 3500, 2600, 1600, 1260, 1140, 1040  Expansion / Connectivity: Console ports  USB (Type-B), Ethernet (RJ-45)  **Expansion Slot(s):** 1 network module slot and 1 power redundant slot  Network Modules Selection: C3850-NM-4-1G: 4 x 1G uplinks network module  Stacking cable: STACK-T1-50CM StackWise stacking cable with a 0.5 m length  **Stack Power Cable (recommended):** CAB-SPWR-30CM stack power cable with a 30CM length  **Power supply:** PWR-C1-350WAC  **Power Device:** Power supply - redundant - plug-in module  Power Redundancy  **Voltage range (Auto):** 100V-240V  **Power Consumption of standalone(in Watts):** 84.97 (max)  **Rack Mounting Kit:** Yes  **MTBF in hours:** 303,230  **Compliant Standards:** IEEE 802.1D Spanning Tree Protoco, IEEE 802.1p CoS Prioritization, IEEE 802.1Q VLAN, IEEE 802.1s, IEEE 802.1w, IEEE 802.1X, IEEE 802.1X-Rev, IEEE 802.11, IEEE 802.1ab (LLDP), IEEE 802.3ad, IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports, IEEE 802.3 10BASE-T, SNMP v1, v2c, and v3  **System software:** IOS IP Base (Upgradable)  **Software license:** C3850-24-S-E: IP Base to IP Services RTU paper license  With AC power supply Operating environment and altitude  Operating temperature up to 5000 ft (1500 m)  : 23ºF to 113ºF (-5ºC to +45ºC)  **Operating temperature up to 10,000 ft (3000 m):** 23ºF to 104ºF (-5ºC to +40ºC)  **Short-term exception at sea-level with single fan failure:** 23ºF to 113ºF (-5ºC to +45ºC)  **Short-term exception up to 5000 feet (1500 m):** 23ºF to 122ºF (-5ºC to 50ºC)  **Short-term exception up to 10,000 feet (3000 m):**23ºF to 113ºF (-5ºC to 45ºC)  **Operating temperature up to 6000 ft (1800 m):** 23ºF to 113ºF (-5ºC to +45ºC)  **Operating temperature up to 10,000 ft (3000 m):** 23ºF to 104ºF (-5ºC to +40ºC)  Manufacturer’s Warranty |  |
| **17** | **Network Routers**  **Indicate Model**  **General Type**  **Device Type:** Router  **Enclosure Type:** Rack-mountable - modular - 1U  **Connectivity Technology:** Wired  **Data Link Protocol:** Ethernet, Fast Ethernet, Gigabit Ethernet  **Network / Transport Protocol:** IPSec, L2TPv3  **Routing Protocol:** OSPF, IS-IS, BGP, EIGRP, DVMRP, PIM-SM, static IP routing, IGMPv3, GRE, PIM-SSM, static IPv4 routing, static IPv6 routing, policy- based routing (PBR), MPLS, Bidirectional Forwarding Detection (BFD), IPv4-to-IPv6 Multicast  **Remote Management Protocol:** SNMP, RMON, TR-069  Features: Firewall protection, VPN support, MPLS support, Syslog support, IPv6 support, Class-Based Weighted Fair Queuing (CBWFQ),, Weighted Random Early Detection (WRED), Web Services Management Agent (WSMA), NetFlow  **Compliant Standards:** IEEE 802.3, IEEE 802.1Q, IEEE 802.3af, IEEE 802.3ah, IEEE 802.1ah, IEEE 802.1ag, ANSI T1.101, ITU-T G.823, ITU-T G.824  **RAM: 512 MB** (installed) / 2 GB (max)  **Flash Memory:** 256 MB (installed) / 8 GB (max)  **Status Indicators:** Link activity, power  **Expansion and Connectivity:**  **Interfaces:** 2 x 10Base-T/100Base-TX/1000Base-T - RJ-45 ¦ Management : 1 x console - RJ-45 ¦ Management : 1 x console - mini-USB Type B ¦  Serial : 1 x auxiliary - RJ-45 ¦ USB : 2 x 4 pin USB Type A  Expansion Slot(s): 4 (total) / 4 (free) x EHWIC ¦ 2 (total) / 2 (free) x PVDM ¦ 2 (total) / 1 (free) x CompactFlash Card ¦ 1 (total) / 1 (free) x ISM  **Power:** Power Device  Power supply - internal  **Voltage Required:** AC 120/230 V ( 50/60 Hz )  **Rack Mounting Kit:**Included  **Compliant Standards:** CISPR 22 Class A, CISPR 24, EN55024, EN55022 Class A, EN50082-1, AS/NZS 60950-1, ICES-003 Class A, CS-03, R&TTE, FCC CFR47 Part 15, EN300-386, UL 60950-1, IEC 60950-1, EN 60950-1, BSMI CNS 13438, AS/NZS 3548 Class A, CAN/CSA, C22.2 No. 60950-1, VCCI V-3, EN 61000, TIA/EIA/IS-968  **Software / System Requirements**  **OS Provided:** Cisco IOS IP Base  **Min Operating Temperature:** 32 °F  **Max Operating Temperature:** 104 °F  **Humidity Range Operating:** 10 - 85%  Manufacturer Warranty |  |
| **18** | **Servers**  **Model**  HPE ProLiant DL380 Gen12  **Workloads**  Collaborative, CRM, data management, analytics and AI, VDI, SCM, ERM, and content mgmt., containers  **Number of Processors**  1-2  **Processors Supported**  Intel Xeon 6 processors  **Cores per processor**  Up to 144 E-cores (64/96/112/128/144)  Up to 86 P-cores (8/12/16/24/32/36/48/64/86)  **Maximum processor frequency/cache**  3.5 GHz maximum, depending on processor/48 to 336 MB L3, total, depending on processor  **I/O expansion slots**  Up to 8 PCIe Gen5 2 OCP 3.0 (front or rear)  **Maximum memory/No. of slots/speed**  8 TB DDR5/32/6400 MT/s  **Storage controller**  Intel Virtual RAID on CPU (Intel VROC) HPE MR216i-o and/or MR216i-p, HPE MR416i-o and/or HPE MR416i-p, HPE MR408e-p, HPE 408i-0 and/or HPE MR408i-p, depending on model  **Maximum storage drive bays**  8 or 12 LFF SAS/SATA/SSD 8, 16, or 24 SFF SAS/SATA/SSD, depending on configuration. 6 SFF rear drive optional or 2 SFF rear-drive optional, 20 SFF NVMe optional, NVMe support through Express Bay will limit maximum drive capacity, depending on model  **Maximum internal storage**  550.8 TB (36 x 15.3 TB EDSFF NVMe)  **Networking ports (embedded)/option**  Nonstandard. Choice of OCP or stand-up card required. |  |
| **19** | UPS Invertor Backup Batteries  (Data Center Support)  **Option 1**  **Indicate Model**  **General Type**  **200AH 12V Deep Cycle Gel Battery**  **Battery Type:** Gel Sealed Deep Cycle  **Battery**  **Capacity:** 200AH @10hr-rate to 1.80V  **per cell@25℃**  **Normal Voltage:** 12 Volts  **Maintenance type:** Free  **Weight:** 29.5kg  **Float voltage:** 13.5v-13.8v  **Maximum discharge current:**  2000A(5 sec)  **Internal Resistance:** Approx.4 m  Recommended Maximum Charging  **Current Limit:** 60A  Operating Temperature  **Range: Discharge: -**  20℃~60℃ Charge:0℃~50℃ Stora  ge:-20℃~60℃  **Normal Operating Temperature**  **Range:** 25℃ ± 5 ℃  **Float charging Voltage: 13.6 to 13.8V**  **DC/unit Average at 25℃**  **Equalization and Cycle Service:**  14.4to 14.6V DC/unit Average at 25℃  **Self Discharge:** GEL batteries can be  stored for more than 6 months at 25℃.  Self-discharge ratio less than 3% per  month at 25℃. Please charge batteries  before using.  **Quantity**  60  **Mount Type**  Rack Mounted |  |
|  | **Option 2**  **Indicate Model**  **General Type**  **100AH 48V 5kWh Lithium Iron**  **Phosphate (LiFePO4) Solar Battery Usable**  **Capacity:** 5KWH  **Nominal Voltage:** 51.2V  **Voltage Range**: 48-57.6V  **MAX. Charge & Discharge Current:** 100A @  30S  **Recommended Charge & Discharge Current:**  **≤50A**  **MAX. Output Power:** 5000W  **Recommended Output Power**: 2500W  DOD: ≥95%  **Modules Connection:** 1-6 in parallel  **Communication:** CAN & RS485  **Ingress Protection:** IP21  **Cycle Life:** ≥6000 cycles @ 25°C, 80%  DOD  **Working Temperature Range: Discharge: -**  20°C to +65°C, Charge: +0°C to +55°C  **Net Weight:** 63KG  **Gross Weight:** 76KG  **Product Dimension:** 575 x 430 x 258 mm  **Package Dimension**: 670 x 525 x 415 mm  Quantity  60  **Mount Type**  Rack Mounted |  |
| **20** | Uninterrupted Power Supply(UPS)  **Model**  APC 500VA UPS (BV500I-MSX)  -Maximum power output 500 VA/300 W – Line interactive technology – Automatic Voltage Regulation (AVR)  -4 x universal, multi-socket battery backup outlets. Powers your home router, allowing you to maintain your internet connection for hours  -Reliable surge protection – protects your valuable electronic devices against damaging lightning, surges and spikes  -Input 230V/Output 230V, Interface Port USB |  |
| **21** | Crimping Tool  **RJ45 Cable Crimping Tool 3 in 1 Modular Crimping Tool for RJ45 RJ12 RJ11 UTP Cat5E/Cat6 LAN Cutter 4P4C 4P2C**  **Type: 3-in-1 RJ45 Modular Crimping Tool**  **Compatibility:** RJ45, RJ11, RJ12 connectors  **Material:** High-quality steel and durable plastic  **Color: Blue or Green** |  |
| **22** | **Wireless Router**  **Model**  WiFi AX2  **Dimension and Height**  **Height**  29mm  **Weight**  216g  WiFi  **Transmission Standard:**  802.11ax/ac/a/n 2 x 2 & 802.11b/g/n 2 x 2, MIMO  M**emory**  128 Mbytes RAM + 128 Mbytes ROM  **Network Port**  Three 10/100/1000 Mbps WAN/LAN ports, auto-adaptation  **Interface**  Power port, Network port, WPS/Reset button  **LED indicator**  one LED Indicator |  |
| **23** | **Projectors**  **Option 1**  **Model**  EpiVision Flex  CO- FHO2  **Resolution** 1920 x 1080 (16:9, Full HD)  **Color Brightness (IDMS Rated)** 3,000 lumens  **White Brightness (ISO Rated)** 3,000 lumens  **Built-in Speaker** 5 W with enclosure  **Operating System** Android TV  **Keystone (Picture Skew)** Auto (Vertical)  **Dimensions (W x D x H)** 12.5" x 8.3" x 3.4"  **Weight** 5.7 lb |  |
|  | **Option 2**  **Mode**l: EB-X49 Projector  **Image Technology:** 3LCD  **Native Resolution:** XGA (1024 x 768)  **Brightness:** 3600 lumens  **Contrast Ratio:** 16,000:1  **Lamp Life (Normal/Eco):** 6,000 / 12,000 hours  **Keystone Correction:** Vertical: Auto / Horizontal: Manual  **Projection Size:** 30″ – 300″  **Connectivity:** HDMI, VGA, Composite, USB-A, USB-B, Optional Wireless LAN  **Audio:** Built-in 5W speaker |  |
|  | **Option 3**  **Model: EB-FH52**  **Projection System:** 3LCD Technology  **LCD Panel:** 0,61 inch with C2 Fine  **Color Light Output:** 4.000 Lumen- 2.400 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.000 Lumen - 2.400 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  **On-Screen Pixel Count:**2,073,600  **Contrast Ratio:** 16.000 : 1  **Light source:** Lamp  Lamp: UHE, 230 W, 5.500 h durability, 12.000 h durability (economy mode)  **Keystone Correction:** Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,14:1  **Zoom:** Manual, Factor:1,6  **Lens:** Optical  **Screen Size:** 30 inches - 300 inches  **Projection Distance Wide/Tele:** 1,76 m - 2,86 m ( 60 inch screen ),  **Projection Lens F Number:** 1,51 - 1,99  **Projection Lens Focal Length:** 18,2 mm - 29,2 mm  **Projection Lens Focus:** Manual  **Offset:** 10 : 1  **USB Display Function:** 2 in 1: Image/ Sound  **Interfaces:** USB 2.0-A, USB 2.0, VGA in, HDMI in (2x), Composite in, Miracast, Wireless LAN IEEE 802.11a/b/g/n/ac  **Noise:** Operation:37 dB (A)- Standby:28 dB (A)  **Loudspeaker:** 16 Watt  **Warranty:** 36 months Carry in, Lamp: 36 months or 1.000 h (whichever comes first) |  |
|  | **Option 4**  **Model:** CO-W01  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,59 inch with MLA (D10)  **Color Light Output:** 3.000 Lumen- 2.000 Lumen (economy) In accordance with ISO 21118:2020  **White Light Output:** 3.000 Lumen - 2.000 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** WXGA  **Resolution Enhancement:** HD ready  **Aspect Ratio:** 16:10  **Light source:** Lamp  Lamp: UHE, 188 W, 6.000 h durability, 12.000 h durability (economy mode)  **Keystone Correction: Manual vertical:** ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 8 Bits: 2D Vertical  **Refresh Rate:** 100 Hz - 120 Hz  **Colour Reproduction:** 16.77 million colours  **Throw Ratio:** 1,27 - 1,71:1  **Zoom:** Digital, Factor:1 - 1,35  Lens: Optical  **Screen Size:** 25 inches - 378 inches  **Projection Distance Wide:** 0,9 m - 10,4 m  Projection Distance Tele: 0,9 m - 10,4 m  **Projection Distance Wide/Tele:** 1,64 m (60 inch screen),  **Projection Lens F Number:** 1,44  Projection Lens Focus: Manual  **Offset:** 7 : 1  **Interfaces:** HDMI 1.4, USB 2.0-A, USB 2.0 Type B (Service Only)  **Power consumption:** 270 Watt (Normal Peak-mode), 214 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  **Supply Voltage:** AC 100 V - 240 V, 50 Hz - 60 Hz  **Loudspeaker:** 5 Watt |  |
|  | **Option 5**  **Model:** EB-L260F  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,62 inch with C2 Fine  **Color Light Output:** 4.600 Lumen- 3.200 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.600 Lumen - 3.200 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  On-Screen Pixel Count: 2,073,600  **Contrast Ratio:** 5.000.000 : 1  Light source: Laser  **Laser Light source**: 20.000 hours Durability High, 30.000 hours Durability Eco  Keystone Correction: Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **2D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,12:1  **Zoom:** Manual, Factor:1 - 1,62  **Projection Lens Zoom Ratio:** 1,32 - 2,12 : 1  **Lens:** Optical  **Screen Size:** 31 inches - 310 inches  **Interfaces:** USB 2.0-A, USB 2.0, RS-232C, Ethernet interface (100 Base-TX / 10 Base-T), Wi-Fi Direct, VGA in (2x), VGA out, Composite in, Miracast, Jack plug out, Jack plug in (2x), Cinch audio out, Microphone input, HDMI (HDCP 2.2) (2x), Wireless LAN IEEE 802.11a/b/g/n/ac  **Power consumption:** 199 Watt (Normal On-Mode), 144 Watt (Eco On-Mode), 260 Watt (Normal Peak-mode), 191 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  Heat Dissipation: 884 BTU/hour (max)  **Supply Voltage:** AC 220 V - 240 V, 50 Hz - 60 Hz  Warranty: 60 months Carry in or 12.000 h |  |
|  | **Option 6**  **Model:** Epson Epiq Vision@ Flex CO. FHO2  **Resolution:** 1920X1080 (16:9, Full HD)  **Color Brightness (IDMS rated):** 3,000 lumens  **White Brightness (ISO Rate):** 3,000 lumens  **Contrast Ratio:** 15,000:1  **Lamp Life:** 6,000 hours (Normal Mode), 12,000 hours (Eco Mode).  **Image Size:** Projections can range from 34 to39l.  Ports: HDMI, USB-A(power), USB-B (service).  One Year Warranty |  |
|  | **Option 7**  **Model:** EB-X49 Projector  **Image Technology:** 3LCD  **Native Resolution:** XGA (1024 x 768)  **Brightness:** 3600 lumens  **Contrast Ratio:** 16,000:1  **Lamp Life (Normal/Eco):** 6,000 / 12,000 hours  **Keystone Correction:** Vertical: Auto / Horizontal: Manual  **Projection Size:** 30″ – 300″  **Connectivity:** HDMI, VGA, Composite, USB-A, USB-B, Optional Wireless LAN  **Audio:** Built-in 5W speaker  Manufacturers Warranty |  |
|  | **Option 8**  **Model:** EB-FH52  **Projection System:** 3LCD Technology  **LCD Panel:** 0,61 inch with C2 Fine  **Color Light Output:** 4.000 Lumen- 2.400 Lumen (economy) In accordance with IDMS15.4  **White Light Output:** 4.000 Lumen - 2.400 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  On-Screen Pixel Count:2,073,600  **Contrast Ratio:** 16.000 : 1  **Light source:** Lamp  **Lamp:** UHE, 230 W, 5.500 h durability, 12.000 h durability (economy mode)  **Keystone Correction:** Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction:** Upto 1.07 billion colours  **Throw Ratio:** 1,32 - 2,14:1  Zoom: Manual, Factor:1,6  **Lens:** Optical  **Screen Size:** 30 inches - 300 inches  **Projection Distance Wide/Tele:** 1,76 m - 2,86 m ( 60 inch screen ),  **Projection Lens F Number:** 1,51 - 1,99  **Projection Lens Focal Length:** 18,2 mm - 29,2 mm  **Projection Lens Focus:** Manual  **Offset:** 10 : 1  **USB Display Function:** 2 in 1: Image/ Sound  **Interfaces:** USB 2.0-A, USB 2.0, VGA in, HDMI in (2x), Composite in, Miracast, Wireless LAN IEEE 802.11a/b/g/n/ac  **Noise: Operation:**37 dB (A)- Standby:28 dB (A)  **Loudspeaker:** 16 Watt  **Warranty:** 36 months Carry in, Lamp: 36 months or 1.000 h (whichever comes first) |  |
|  | **Option 9**  **Model:** EB-L260F  **Projection System:** 3LCD Technology, RGB liquid crystal shutter  **LCD Panel:** 0,62 inch with C2 Fine  **Color Light Output:** 4.600 Lumen- 3.200 Lumen (economy) In accordance with IDMS15.4  White Light Output: 4.600 Lumen - 3.200 Lumen (economy) In accordance with ISO 21118:2020  **Resolution:** 1080p  **Resolution Enhancement:** Full HD  **Aspect Ratio:** 16:9  **On-Screen Pixel Count:** 2,073,600  **Contrast Ratio:** 5.000.000 : 1  Light source: Laser  **Laser Light source:** 20.000 hours Durability High, 30.000 hours Durability Eco  Keystone Correction: Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing:** 10 Bits  **2D Vertical Refresh Rate:** 192 Hz - 240 Hz  **Colour Reproduction: Upto** 1.07 billion colours  **Throw Ratio:** 1,32 - 2,12:1  Zoom: Manual, Factor:1 - 1,62  **Projection Lens Zoom Ratio:** 1,32 - 2,12 : 1  Lens: Optical  **Screen Size:** 31 inches - 310 inches  **Interfaces:** USB 2.0-A, USB 2.0, RS-232C, Ethernet interface (100 Base-TX / 10 Base-T), Wi-Fi Direct, VGA in (2x), VGA out, Composite in, Miracast, Jack plug out, Jack plug in (2x), Cinch audio out, Microphone input, HDMI (HDCP 2.2) (2x), Wireless LAN IEEE 802.11a/b/g/n/ac  **Power consumption:** 199 Watt (Normal On-Mode), 144 Watt (Eco On-Mode), 260 Watt (Normal Peak-mode), 191 Watt (Eco Peak-Mode), 0,5 Watt (Energy saving standby)  **Heat Dissipation:** 884 BTU/hour (max)  **Supply Voltage:** AC 220 V - 240 V, 50 Hz - 60 Hz  Warranty: 60 months Carry in or 12.000 h |  |
|  | **Option 10**  **Model:** EB-1780W  **Technology:** Projection System  3LCD Technology, RGB liquid crystal shutter  **LCD Panel**  0,59 inch with C2 Fine  **Image**  **Color Light Output**  3.000 Lumen- 1.900 Lumen (economy) In accordance with IDMS15.4  **White Light Output**  3.000 Lumen - 1.900 Lumen (economy) In accordance with ISO 21118:2020  **Resolution**  WXGA 2  R**esolution Enhancement**  HD ready  Aspect Ratio  **16:10**  **On-Screen Pixel Count**  1,024,000  **Contrast Ratio**  10.000 : 1  **Light source**  **Lamp**  Lamp  206 W, 4.000 h durability, 7.000 h durability (economy mode)  **Keystone Correction**  Auto vertical: ±30 °, Manual horizontal ±30 °  **Colour Video Processing**  10 Bits  **2D Vertical Refresh Rate**  100 Hz - 120 Hz  **Colour Reproduction**  Upto 1.07 billion colours  **Optical**  **Throw Ratio**  1,04 - 1,26:1  Zoom  **Manual, Factor:1 - 1,2**  Screen Size  **30 inches - 300 inches**  Projection Distance Wide  0,7 m - 6,8 m  **Projection Distance Tele**  0,8 m - 8,2 m  **Projection Distance Wide/Tele**  1,35 m - 1,62 m ( 60 inch screen ),  **Projection Lens F Number**  1,58 - 1,7  **Projection Lens Focal Length**  13,52 mm - 16,22 mm  **Projection Lens Focus**  Manual  Offset  10 : 1  **Connectivity**  **USB Display Function**  3 in 1: Image / Mouse / Sound  **Interfaces**  USB 2.0-A, USB 2.0, VGA in, HDMI in, Composite in, Jack plug in, MHL, Wireless LAN IEEE 802.11b/g/n, Wireless LAN b/g/g 25GHz  **Epson iProjection App**  Ad-Hoc / Infrastructure  **Advanced Features**  Security  Kensington lock, Wireless LAN security, Password protection  **Other features**  AV Mute Slide, Built-in speaker, Document Camera Compatible, Home Screen, Instant on/off, JPEG Viewer, Long lamp life, MHL audio/video interface, PC Free, Projection App for Chromebook, Quick Corner, Split-Screen-Function, Wireless LAN capable, iProjection App  Video Color Modes  Blackboard, Cinema, Dynamic, Presentation, sRGB, DICOM SIM  **General**  Power consumption  252 Watt (Normal On-Mode), 178 Watt (Eco On-Mode), 277 Watt (Normal Peak-mode), 200 Watt (Eco Peak-Mode), 0,34 Watt (Energy saving standby)  **Supply Voltage**  AC 100 V - 240 V, 50 Hz - 60 Hz  **Product dimensions**  292‎ x 213 x 44 mm (Width x Depth x Height)  **Product weight**  1,8 kg  Noise Level  Normal:39 dB (A) - Economy:30 dB (A)  **Supported Temperature**  Operation 5° C - 40° C, Storage -10° C - 60° C  **Supported Humidity**  Operation 20% - 80%, Storage 10% - 90% If the projector is suspended from a ceiling or wall mount and installed in an environment with heavy oil smoke or places where oils or chemicals are volatilized, places where a lot of smoke or bubbles are used for event staging, or where aroma oils are frequently burned, it can make certain parts of our products susceptible to a material degradation which over time could break and cause the projector to drop from the ceiling.  If you are concerned about the environment in which your projector is installed, or if you have any other questions, please contact our support department and they can provide additional assistance.  **Included Software**  EasyMP Multi PC Projection  **Options**  Air filter, Ceiling mount, Document camera, Setting plate, Spare lamp, WP System - ELPWP20, Wireless transmitter - ELPWT01  **Loudspeaker**  1 Watt  Room Type / Application  Boardroom, Huddle space / Portable, Large Meeting Room / Auditorium  **Positioning**  Ceiling Mounted, Desktop  **Colour**  White / Black  **Other**  Warranty  60 months Carry in, Lamp: 60 months or 1.000 h (whichever comes first) |  |
| **24** | **Projector Screens**  **Suitable for business, study and leisure uses**  **For all conventional kinds of front projection**  **Easy to set up**  **Size 180cm x 180cm, 200cm x 200cm and 244cm x 244cm**  **Black backing to eliminate light penetration. Four side black borders enhance picture contrast, perfect for watching sporting events, movies, television and presentations. Complete your home entertainment setup ready for Superbowl LII**  **This projector screen is easy to mount and maintain, featuring a lightweight case and an anti-fabric, anti-static screen**  **Easily installs to wall or ceiling** |  |
| **25** | **Interactive Smart Boards**  **Model:**  RX series with iQ  **Display**  Screen sizes (diagonal) 65" | 75" | 86"  Backlight LED  **Aspect ratio**  16:9  Maximum display resolution  **4K UHD (3840 × 2160)**  **Refresh rate 60 Hz**  Lifespan ≥ 50,000 hours  **Brightness1 490 cd/m²**  Display response time ≤ 8 ms  **Viewing angle 178°**  **Glass**  Optically bonded | Anti-glare | Antifingerprint | Heat-tempered  **Frame**  Color White  **Convenience buttons**  Power | Home | Volume | Microphone mute | Freeze frame  Sensors Proximity | Ambient light | Infrared | Room temperature | Humidity | Equivalent carbon dioxide (eCO2) | Volatile organic compound (VOC) | Particulate Matter  (PM2.5)2  **Audio**  Integrated soundbar featuring two 20 W speakers and a 15 W subwoofer Integrated linear eight-microphone array with visual mute status indicator and support for onboard acoustic echo cancellation 1Brightness of individual displays can vary. 2The display’s environmental sensors are not life safety rated sensors: they provide general information only. NFC Integrated RFID **NFC**  Reader/writer CCID (chip card interface device) when used with a native operating system driver for Windows®, Linux®, or Mac Supported protocols: ISO 14443A/B, ISO 15693, NFC Tag 1-4 **Interactive experience**  Touch technology  HyPr Touch™ with Advanced IR  **Touch features**  Tool Explorer™ v2 Simultaneous tool differentiation Object Awareness™ Pen ID™ Silktouch™ Palm rejection  **Typical touch response time**  ≤ 4 ms  Accuracy 1 mm  **Frame rate ≥ 300 Hz**  **Minimum object size**  2 mm  **Multitouch capabilities**  Up to 50 touch points (OS dependent)  **Tools included**  Stylus with multi-color select and fine eraser (×2) Erasers with angle of orientation (×2)  **Tool holders**  Intelligent | Magnetic | Frame-mounted  **Optional tools**  Stamps (available in 2024) |  |
| **26** | **Projector HDMI Cables**  **Color**  Black  **Length**  3 Meters/ 30m/ 300m 4K  **Type**  Tough Cable |  |
| **27** | **Modem Backup**  **Type**  Cellular Modems  **Speed**  Upto 2.4 Ghz  **Color**  Black/White  **Resett Pin**  Yes  **SIM card support**  Yes  **Network**  Wireless |  |
| **28** | CCTV Camera Accessories  **CCTV Camera Accessories**  Western Digital WD22PURZ SATA 6Gb/s SC HA520 Designed for NVR ( 24 X 7 Systems)  Storage 2TB Surveillance Hard Drive |  |
|  | DVR CCTV Surveillance  H.265+/H.265 dual -stream video compression  Supports HDCVI/AHD/TVI/CVBS/IP Video inputs  Max:12 channels IP camera inputs  Supports 1 SATA HDD  Smart search and intelligent video system  Channels- 8 |  |
|  | NVR CCTV Surveillance  H.265+/H.265 dual -stream video compression  Supports HDCVI/AHD/TVI/CVBS/IP Video inputs  Max:12 channels IP camera inputs  Supports 1 SATA HDD  Smart search and intelligent video system  Channels- 16 |  |
|  | Taf 30 Metres  HDMI A Male to A Male cable: Supports Ethernet 3D ,4K video and audio return channel (ARC)  Connects HDMI -enabled devices to TVs, displays A/V receivers  Color - Black |  |
|  | Desktop PC Power Supplies  12V  Range: 10-20 Amps 280 Watts |  |
|  | 12 Channel 12 Volt DC Output 5A CCTV Distributed Power Supply Box for Security Camera with AC Plug and Lock for Security Cameras, DVRs, NVRs CCTV Power Supply (5A 12-Channel) |  |
| **29**  **30** | **Assorted Laptop Batteries**  **Assorted Brands**  14.6v-2600mAh/38Wh  Store between O0C To 600C  320F To 1400F  Rechargeable Li-ion Battery |  |
|  | **Cleaning Agents**  Computer Foam Hand Boss High Adhesive Cleaning Material  Generic Universal |  |
|  | Computer Foam WD-40 Stain or Rust Remover 330ML |  |
| **31** | **External Hard Disks**  **Model**  Canvio Flex Portable External Hard Drive  **Number**  HDTX110XSCAA  Capacity1Up to 1TB  InterfaceUSB 3.0 USB 2.0  Interface Transfer Rate2Up to 5 Gb/s (USB 3.0) Up to 480 Mb/s (USB 2.0)  Drive FormatexFAT  Size (mm)1TB/2TB: 80(W) x 111(L) x 13.5(H) 4TB: 80(W) x 111(L) x 19.5(H)  ColorSilver  Weight (g)1TB/2TB: |  |
| **32** | **Flash Disks**  **Capacit**y: 32GB, 16GB, 8GB · **Color**: White. · **Weight**: 0.2Kg · Hard **drive** interface: **USB**. · Write / delect protection switch · Durable data storage · **USB** . |  |
| **33** | **Desktop PC Wireless Adapters**  **Model**  N300 Wi-Fi USB Adapter  300 Mbps PCI Express wireless High-Speed Performance – ideal Wi-Fi dongle for smooth HD video, voice streaming and online gaming |  |
|  | **Model**  AXE3000 USB 3.0 WiFi Adapter (A8000)  Nighthawk® AXE3000 WiFi 6E USB 3.0 Adapter |  |
| **34** | **Computer Mice**  **Option 1**  **Model**  **Logitech M100 Corded Mouse**  **FULL-SIZE COMFORT** – A comfortable, ambidextrous shape feels good in either hand, so you feel more comfortable as you work – even at the end of the day  **CONVENIENT CONTROLS –** Side-to-side scrolling plus zoom lets you instantly zoom in or out and scroll horizontally and vertically. Perfect for working with spreadsheets and presentations.  **ZERO SETUP REQUIRED** – Flexible wired connectivity means you just plug the cable into your USB or PS/2 port – it works right out of the box.  PRECISE CURSOR CONTROL – With 800 dpi sensitivity, you’ll get precise cursor control so you can edit documents and navigate the Web more efficiently. |  |
|  | **Option 2**  **Model**  MX Master 3S  **Sensor technology**  Sensor technology: Darkfield high precision  **Nominal value: 1000 DPI**  DPI (Minimal and maximal value): 200-8000 DPI (can be set in increments of 50 DPI)  **Buttons**  7 buttons (Left/Right-click, Back/Forward, App-Switch, Wheel mode-shift, Middle click)  **Scroll Wheel: Yes, with smart-shift**  Thumb wheel: Yes  Gesture button: Yes  **Customization app**  Supported by Logi Options+ on Windows and macOS  Wireless operating distance10 m  **Wireless technology**  **Required: Bluetooth Low Energy Technology**  **Battery**  Rechargeable Li-Po (500 mAh) battery  Get three hours of use from a one-minute quick charge |  |
| **35** | **Digital HD Camera**  **Grade**  A  **Accessories**  Original Accessories  **Model Number**  a7 rll A7SII  **Type**  DSLR  **Sensor Element Type**  CMOS  **MegaPixel**  4600MP  **Image Resolution**  4K HD  **Optical Zoom**  x2- x7  **Focal Length**  28-77mm  **Memory Card Type**  SD Memory card  **Appearance**  No scratch  **Selling units**  Single item  **Single package size**  30X25X20 cm  **Single Gross Weight**  1.000kg  **Lense**  Yes  **Feature**  E-mount  **Warranty**  1 Year |  |
| **36** | **Universal Softbox Lighting Kit Photography Photo Studio Softbox**  **Private Mold**  Yes  Mold Number  65cm/90cm Deep port parabolic softbox  **Color**  Black  **Product name**  Deep port parabolic softbox  **Depth**  43cm/62cm  **Weight**  1.5kg/2kg  **Application**  Studio Photography Lighting  **Function**  Photograph  **Package**  Carton Box  **Feature**  Portable Foldable |  |
|  | **Option 2**  **Model**  **EOS Rebel T7 DSLR Camera**  24.1MP APS-C CMOS Sensor  DIGIC 4+ Image Processor  3.0" 920k-Dot LCD Monitor  Full HD 1080/30p Video Recording  9-Point AF with Center Cross-Type Point  ISO 100-6400, Up to 3 fps Shooting  Built-In Wi-Fi with NFC  Scene Intelligent Auto Mode  Creative Filters and Creative Auto Modes  EF-S 18-55mm f/3.5-5.6 IS II Lens |  |
| **37** | **Camera Kits**  **Model**  NEEWER 150W Bi Color LED Panel Video  Light  **Item Type:** Bi Color LED Panel Light  **LEDs Qty:** 1440PCS  **Maximum Power:** 150W  **Maximum Illumination:** 49500Lux@0.5m,  17200Lux@1m  Color Temperature: 2500K-8500K (in 100K  increments)  **Brightness:** 0-100% (increments of 0.1%)  **CRI/TLCL:** CRI 96+, TLCI 97+  **Special Scene Effects:** 13 types  **Light Source Matching:** 14 types Power Supply: AC adapter 20V / V mount  battery 14.8-26V (battery & D tap cable sold  separately)  Beam Angle: 45°  **Control Methods:** APP, 2.4G, panel, DMX  control |  |
| **38** | **Video Conferencing Kits**  **Group Video Conferencing System.**  **Camera**  Smooth motorized pan, tilt and zoom  controlled from remote or console  Pan +/- 90° Tilt +35° / -45  10x lossless HD zoom  Field of View Diagonal: 90°  Horizontal: 82.1°  Vertical: 52.2°  Full HD 1080p 30fps  H.264 UVC 1.5 with Scalable Video Coding  (SVC)  Autofocus  5 camera presets  Far-end control (PTZ) of ConferenceCam  product (with supported services)  Kensington security slot  Video mute/unmute LED indicator  Standard tripod thread  **Remote Control**  Camera, speakerphone, and call control  5 camera presets  Docks on speakerphone  IR 8.5 m range  CR2032 battery (included)  **Speaker Phone**  Full-duplex performance  Acoustic echo cancellation  Noise reduction technology  Ultra-wideband audio  Pairs with mobile devices via Bluetooth and  NFC  LCD for caller ID, call duration and other  functional response  LEDs for speakerphone streaming, mute,  hold, and Bluetooth  Tactile buttons for call answer/end, volume  and mute, Bluetooth, and camera controls  5 camera presets for pan, tilt, and zoom  settings  Kensington security slot  **Microphones**  Pickup Range: 6 m  Pickup range with expansion mics: 8.5 m  Four omnidirectional, beamforming  Microphones  Frequency Response: 100Hz – 11KHz  Sensitivity: -28 dB +/-3dB  Distortion: <5% from 200Hz  Hubs/Cable/Power  Central Hub connects and powers all  components  Under-table mounting adhesive included  One cable to camera: 5 m  One cable to speakerphone: 5 m  Extended cables available: 10 and 15 m  One USB cable for connection to PC/Mac:  2 m  AC Power adapter with regional plugs  Power cable: 3 m  **Mount**  Dual-purpose bracket works for both wall  mounting and tabletop elevation  **Compatibility and Certifications**  Plug-and-play USB connectivity  Certified for Skype for Business and ready  for Teams  Fuze® Certified  Microsoft Cortana  Cisco Jabber®  Compatible with BlueJeans, BroadSoft,  GoToMeeting, Vidyo, and other video  conferencing, recording, and broadcasting  applications that support USB cameras |  |
| **39** | **Ethernet Cable**  **Model**  **SKU: CTL0001**  **Type**  Cat6a Ethernet UTP Network /LAN/Ethernet Cable  Designed with Reverse sequential numbering  Round jacket  Bare copper for superior conductivity.  Packing; 305 Meters (1000ft ) for full box  The jacket material is lead-free  Has Minimal center isolation reducing diameter of the cable  **Standards Compliance**  ISO/IEC 11801:Ed.2.2 (CAT. 6)  UL verified for Data transmission performance  ANSI/TIA-568-C.2 – (CAT. 6)  CSA FT6 and UL CMP.  RoHS compliant.  **Ethernet Applications Support**  1000BASE-T Gigabit and 100BASE-T/10BASE-T- Fast Ethernet Speeds |  |
| **40** | **RJ 45 Connectors**  **1000 Pcs in 1 Pack**  **Metalic** |  |
| **41** | **Cable Clips**  100 pcs Per Plastic Packaging Box |  |
| **42** | **Cables Ties**  100 Pcs Per Roll  Preferably in White and Black  Ranges 150x2.5mm  Ranges 200x4.8mm |  |
| **43** | **Desktop PC CMOS Battery**  **Model**  CR2032 lithium coin cell battery  **Type:**CR2032 (3V lithium coin cell)  **Voltage:**3 Volts  **Typical Battery Life:**2-10 years, depending on usage and environmental conditions  **Location:**Usually found on the motherboard, often near the RAM or chipset  **Functions:**Stores BIOS settings, date and time, even when the PC is off.  **Ladders** |  |
| **44** | **Model**  Telescope  20.3FT Telescoping Ladder, Portable Extension Folding Ladder, Multi-Purpose Comp |  |
|  | **Model**  Telescope  22 FT Portable Foldable Ladder Multifunctional Aluminum Alloy Telescopic Ladder |  |
| **45** | **Model**  **DMS-1250 Series**  8-Port Multi-Gigabit Smart Managed Switch  DMS-1250-10SPL  PoE compatility |  |
| **46** | **Indicate Model and Pack Distributions**  General Type  Microsoft Office 2016-2021 License Pack Annual  Windows 11 Pro License Pack Annual  Kaspersky Anti-Virus  MyQ Software License for Print Services Under Leasing Annual  Smadav Anti-Virus Software (Education) Multi User Annual  Autodesk AutoCAD: Design and drafting software (Multi-User Annual)  Auto Desk Revit (Multi User- Annual)  Ease US Data Recovery Software License Pack Annual  MATLAB(Education) Multi User License Annual Pack  Adobe Software Distribution (Photoshop, Illustrator, InDesign) Annual Licence Multi-User  Shutter Encorder Annual License Pack Multi-User |  |
| **47** | **UPS Inverters**  **Indicate Model**  Pure sine wave, lithium support  5kVA PRO |  |
| **48** | **Power Stabilizers**  **Phase** Single Phase  **Model Name/Number( Indicate)** Stabiliser  **Voltage** 2KV  **Dispatch Time** Immediate  **Display Type** LCD  **LCD Display** 7 LED  **Microprocessor** Controller |  |
| **49** | **Associated Computer Software**  **Indicate Model and Pack Distributions**  General Type  Microsoft Office 2016-2021 License Pack Annual  Windows 11 Pro License Pack Annual  Kaspersky Anti-Virus  MyQ Software License for Print Services Under Leasing Annual  Smadav Anti-Virus Software (Education) Multi User Annual  Autodesk AutoCAD: Design and drafting software (Multi-User Annual)  Auto Desk Revit (Multi User- Annual)  Ease US Data Recovery Software License Pack Annual  MATLAB(Education) Multi User License Annual Pack  Adobe Software Distribution (Photoshop, Illustrator, InDesign) Annual Licence Multi-User  Shutter Encorder Annual License Pack Multi-User |  |
| 50 | **LED Display monitors**  **Model** Designation of the modelX34Model alias2V7W6AADisplaySize Class34 inchesDiagonal863.6mmWidth799.8mmHeight334.8mmPanel ManufactureBOEPanel ModelMV34OVWM-NGOPanel TypeIPSPanel bit depth8bitsFRCNoColors16777216 Colors 24bitsAspect Ratio2.389.1Resolution3440 x 1440 pixelsPixel Depth0.233mmPixel density109pppiDisplay area89.09%BacklightW-LEDsRGB99%Peak brightness400cd/m2Static contrast1000:1Dynamic contrast1000034HDRDisplay HFR 400Horizontal Angle1780CoatingAnt-glare (Math (3) **Small form factor pluggable (SFP)**  **Product Code**  SFP-10G-SR-S=  **10GBASE-SR SFP Module, Enterprise-Class**  **Estimated Lead Time(days)**  14 |  |
|  | Rack ServerModelHPE ProLiant DL3845 Gen11Management SoftwareInfrastructure managementHPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, and HPE OneView Advanced (require licenses) Compute Ops Management SoftwareServer ControllersNetwork controllerChoice of optional OCP plus standup, depending on modelStorage controllerHPE Tri-Mode Controllers, refer to the QuickSpecs for more detailServer CoolingSystem fan features6 fans includedServer DrivesDrive supportedUp to 12 LFF SAS/SATA with 4 LFF mid drive optional, 4 LFF rear drive Up to 24 SFF SAS/SATA/NVMe with 8 SFF mid drive optional and 2 SFF rear drive optional Up to 36 EDSFFServer ExpansionsExpansion slots8 maximum, for detailed descriptions refer to the QuickSpecsServer Form FactorForm factor2U RackServer Memory **Memory type**  HPE DDR5 Smart Memory  **Maximum memory**  6.0 TB with 256 GB DDR5  **Memory slots**  24  **Memory protection features**  ECC Server Power **Power supply type**  2 Flexible Slot power supplies maximum, depending on model Processor **Processor type**  AMD  **Processor family**  4th Generation AMD EPYC™ Processors  **Processor number**Up to 2  **Processor core available**Up to 128, depending on the processor  **Processor speed**4.4 GHz maximum, depending on the processor  **Processor cache**  64 MB, 128 MB, 256 MB, 384 MB or 1152 MB L3 cache, depending on processor model HPE ProLiant DL385 Gen11Management Software **Infrastructure management**  HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, and HPE OneView Advanced (require licenses) Compute Ops Management Software  Server Controllers  **Network controller**  Choice of optional OCP plus standup, depending on model  **Storage controller**  HPE Tri-Mode Controllers, refer to the QuickSpecs for more detail Server Cooling **System fan features**  6 fans included Server Drives **Drive supported**  Up to 12 LFF SAS/SATA with 4 LFF mid drive optional, 4 LFF rear drive Up to 24 SFF SAS/SATA/NVMe with 8 SFF mid drive optional and 2 SFF rear drive optional Up to 36 EDSFF Server ExpansionsExpansion slots8 maximum, for detailed descriptions refer to the QuickSpecsServer Form FactorForm factor2U RackServer MemoryMemory typeHPE DDR5 Smart MemoryMaximum memory6.0 TB with 256 GB DDR5Memory slots24Memory protection featuresECCServer PowerPower supply type2 Flexible Slot power supplies maximum, depending on modelProcessorProcessor typeAMDProcessor family4th Generation AMD EPYC™ ProcessorsProcessor numberUp to 2Processor core availableUp to 128, depending on the processorProcessor speed4.4 GHz maximum, depending on the processorProcessor cache64 MB, 128 MB, 256 MB, 384 MB or 1152 MB L3 cache, depending on processor model |  |
| 51 | **Server racks**  **Model**  45U  Standard 24" width for optimal use of floor space  48" depth for extra space need for mounting deep equipment  Ships fully assembled or flat packed options  Locking, removable, reversible front and rear doors  Locking, removable side panels keyed alike with doors  3000 lbs (1360.8 kgs) stationary / 2250 lbs (1020.6 kgs) rolling load capacity  Color Black |  |
| 52 | **Network rack**  **Model**  18U  600 x 450 x 901mm (Width x Dept. x Height )  2 x 4-inch Fan (Low Noise) on Vented Top Flush Panel  2 x Side Door with Cam Lock  Front Door –Glass with Cam Lock  Panel Mount with Unit Indication  1 x Integrated Wall Mounting Panel  1 Packet of M6 Cage Nuts Assembly  Finish with Epoxy Powder Coating  Color : Black |  |
|  | **Model**  9U  Product line: F-Line  Basic dimensions 19"/[9U](https://netrack.store/en/prestablog?id=4)  Height [mm] *507*  Width [mm] *600*  Depth [mm]600  Back: closed, can be opened  Side opening: *yes, lock o from the inside, lock - option*  Number of rack rails: *4*  Rack rails adjustment: yes, fully adjustable  Possibility of mounting fans: yes, 2x120x120mm (105x105mm)  Libra [kg]: 27.2  Carrying capacity [kg]: 60  Color: black RAL 9005  Manufacturing standards:  Compliance with ANSI/EIA RS-310-D, DIN41491 PART1, IEC297-2, DIN41494 PART7, GB/T3047.2-92  Compatibility with standards: ETSI metric and international 19”. Adaptation to general parameters 10” - no standar  Wall mount |  |
| 53 | **Offline server backup Disk**  **SKU #** C8S07B  **Detailed product description**  HPE RDX external docking station  **Capacity**  500 GB Without compression 1 TB Without compression 2 TB Without compression  **Transfer rate**  200 MB/sec  **Load/unload cycles**  5000, minimum cartridge usage life  **Media compatibility**  Forward and backward compatibility with all current and future RDX cartridges and USB 2.0 docks  **Host interface**  USB 3.0 Ports  **Cartridge robustness**  1 m, 39.4-inch (3 feet) drop to tile over concrete floor  **Warranty**  3/0/0  **Weight**  0.97 Kg (2.13 lb)  **Dimensions**  249 x 92 x 168 cm (9.8 x 3.62 x 6.61 in) |  |
| 54 | **LED Display Monitor**  **Brand Series M**odel  X34  **Other Alais Model**  2V7W6AA  **Display**  Size Class  34’  **Diagonal**  863.6mm  **Width**  799.8mm  **Height**  334.8mm  **Panel Manufacturer**  BOE  **Panel Model**  MV340V |  |
| 55 | Network Rack   * 6U Height * 600x600mm Depth * Wall Mountable   Includes Fan, Shelf & PDU |  |
| 56 | Uninterrupted Power Supply (UPS):   * Model: APC BV1000I-MSX EASY UPS (1000VA, AVR, Universal Outlet, 230V) * Output * Max Configurable Power (Watts): 600 Watts / 1.0kVA * Output Frequency (sync to mains): 50/60 Hz +/- 1 Hz Unsynchronized: Topology * Line interactive * Waveform type: Stepped approximation to a sinewave * Transfer Time: 6 ms typical : 10 ms maximum * Input * Input frequency: 50/60 Hz +/- 5 Hz Auto-sensing * Input voltage range for main operations: 170 – 280V * Number of Power Cords: 1 * Batteries & Runtime * Battery type: Lead-acid battery * Expected Battery Life (years): 3 – 5 * Efficiency * Communications & Management: Control panel * LED Status display with on line : on battery * Audible Alarm * Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm * Surge Protection and Filtering * Surge energy rating: 156Joules * Physical * Maximum Height: 93MM, 9.25CM * Maximum Width: 161MM, 16.05CM * Maximum Depth: 305MM, 30.5CM * 143MM, 14.3CM * Color: Black * Operating Temperature: 0 – 40 °C * Operating Relative Humidity: 0 – 90 % * Operating Elevation: 0 – 2032.1meters * Storage Temperature: -20 – 50 °C * Storage Elevation: 0 – 15240meters * Audible noise at 1 meter from surface of unit: 40.0dBA   Protection Class: IP20 |  |
| 57 | Indoor Ethernet Network Cable:   * Model: Siemon Cat 6 UTP Ethernet Cable 305M * jacket: Nominal O.D: 5.84mm * Conductor: 23AWG solid copper * Cross Pair Separator   Conductor Insulation: 0.99mm |  |
| 58 | Indoor access points  Ubiquiti UMA-D UniFi mesh dual- band directional WiFi antena   * Model: Ubiquiti Unifi Access Point AC LR * Dimensions: 175.7 x 175.7 x 43.2 mm (6.92 x 6.92 x 1.70") * Networking Interface: (1) 10/100/1000 Ethernet Port * Buttons: Reset * Power Method: 802.3af/A PoE * 24V Passive PoE (Pairs 4, 5+; 7, 8 Return) * Power Supply: 24V, 0.5A Gigabit PoE Adapter * Power Save: Supported * Maximum Power Consumption: 6.5W * Maximum TX Power: 2.4 GHz: 24 dBm * 5 GHz: 22 dBm * Antennas: (1) Dual-Band Antenna, Tri-Polarity, 2.4 GHz: 3 dBi, 5 GHz: 3 dBi * Wi-Fi Standards: 802.11 a/b/g/n/r/k/v/ac * Wireless Security: WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) * BSSID: Up to 8 per Radio * Mounting: Wall/Ceiling (Kits Included) * Operating Temperature: -10 to 70° C (14 to 158° F) * Operating Humidity: 5 to 95% Noncondensing * Certifications: CE, FCC, IC * Advanced Traffic Management * VLAN: 802.1Q * Advanced QoS: Per-User Rate Limiting * Guest Traffic Isolation: Supported * WMM Voice, Video, Best Effort, and Background * Concurrent Clients: 250+ * Supported Data Rates (Mbps) * 802.11ac: 6.5 Mbps to 867 Mbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80) * 802.11n: 6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40) * 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps   802.11b: 1, 2, 5.5, 11 Mbps |  |
| 59 | Out door access points   * Model: Ubiquiti UniFi AP AC Mesh Access Point (UAP-AC-M) * Networking interface: (1) GbE RJ45 port * Management interface: Ethernet * Bluetooth * Power method: PoE * Passive PoE: 24V (Pairs 4, 5+; 7, 8 return) * Power supply: Gigabit PoE adapter 24V, 0.5A\* * Supported voltage range: 44—57V DC * Max. power consumption: 8.5W * Max. TX power * 2.4 GHz: 20 dBm * 5 GHz: 20 dBm * 6 GHz: - * MIMO * 2.4 GHz: 2 x 2 (DL MU-MIMO) * 5 GHz: 2 x 2 (DL MU-MIMO) * Max. data rate * 2.4 GHz: 300 Mbps (BW40) * 5 GHz: 867 Mbps (BW80) * Antenna gain * 2.4 GHz: 3 dBi * 5 GHz: 4 dBi * Button: Factory reset * Mounting: Wall, pole, fast-mount (Included) * Ambient operating temperature: -30 to 70° C (-22 to 158° F) * Ambient operating humidity: 5 to 95% noncondensing * Certifications: CE, FCC, IC, UKCA * Software * WiFi standards: 802.11a/b/g/n/ac * Wireless security: WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) * VLAN: 802.1Q * BSSID:Up to 4 per radio * Advanced QoS: Per-user rate limiting * Guest traffic isolation Supported * Power save: Supported * WMM: Voice, video, best effort, and background * Concurrent clients: 250+ * Supported Data Rates (Mbps) * 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11b: 1, 2, 5.5, 11 Mbps * 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps * 802.11n: 6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40) * 802.11ac: 6.5 Mbps to 867 Mbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80)   One year warranty |  |
| 60 | Ubiquiti UMA-D UniFi Mesh Dual-Band Directional WiFi   * Dimensions: 201.3 x 128.0 x 32.5 mm * Outdoor UV Stabilized Plastic * RF Connections: 2 x RP-SMA Female * Supported Frequency Range: 2.4 – 2.5 GHz, 5.1 – 5.9 GHz * HPOL Beamwidth: * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * VPOL Beamwidth * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * Elevation Beamwidth * 2.4 GHz: 90 degrees * 5 GHz: 45 degrees * Maximum VSWR: 2:1 * Polarization: Dual-Linear Cross-Pol Isolation * 2.4 GHz: 25 dB * 5 GHz: 30 dB * Antenna Gain * 2.4 GHz: 10 dBi * 5 GHz: 15 dBi   Mounting Wall/Pole: (Kits Included) |  |
| 61 | Adhesive Trunking PVC 16mmx16mm   * Colour: White * Item Dimension: 16mmx16mmx2900mm   Material: PVC |  |
| 62 | Conduit pipes: 25mm PVC conduit pipe  Colour: white  Item dimension:25mm diameter by 2.9m on length  Material:PVC  Application : cable management |  |
| 63 | Concrete nails  One –inch concrete nails |  |
| 64 | PVC plastic u shape cable wall clip 1 2.5MM   * Type: Round Cable Clips, Circle Nail Clip * Color: White/Grey * Material: PVC * Feature: Fixable, Good Elasticity   Application: Cable And Wire |  |
| 65 | PVC Flex Conduit 25mm X 25 meters   * Colour: White * Item Dimension: 25mm X 25 meters * Material: PVC   Application: Cable Management |  |
| 66 | **Network switches**   * Device Type:   Switch - 24 ports - Managed - stackable   * Device Model: WS-C2960X-48FPS-L * Enclosure Type: Rack-mountable 1U * Subtype: Gigabit Ethernet * Ports: 24 x 10/100/1000 (PoE+) + 4 x Gigabit SFP * Power Over Ethernet (PoE): PoE+ * PoE Budget: 740 W * Performance * Switching capacity: 216 Gbps * Forwarding performance (64-byte packet size): 107.1 Mpps * Capacity * Virtual interfaces (VLANs): 1023 * Jumbo Frame Support: 9216 bytes * Remote Management Protocol: SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, HTTP, TFTP, SSH, CLI * Power: AC 120/230 V (50/60 Hz) * Power Redundancy: Optional   Manufacturer Warranty: One Year |  |
| 67 | **Scanners**  **Model** LIDE 400 Flatbed Scanner****Technical Specifications:****– 4800 x 4800 dpi, USB Type-C – Scanner Type: Flatbed – Scanning Element: Contact Image Sensor (CIS) – Light Source: Three Color (RGB) LED – Features: 5 ‘EZ’ Buttons, Advanced Z-lid Expansion Top, Auto Dust & Scratch Reduction, Auto Document Fix, Auto Scan Mode, Digital Filing, Fading Correction, Grain Correction, Gutter Shadow Correction, High-Speed Scanning, Image Correction, Low Power Consumption, Multi-Page PDF, OCR, One Cable For Data & Power, Send to Cloud, Upright Scanning – Scanner Buttons: 5 ‘EZ’ Buttons; Auto Scan, Copy, PDF x2 (Scan Start, Scan Finish), Send – Max. Resolutions: Optical: 4800 x 4800 dpi, Interpolated: 19,200 x 19,200 dpi – Scanning Speed: Document: Approx. 8 Seconds (300 dpi/Letter Size/Color), Photo: Approx. 4 Seconds (300 dpi/Color) – Scanning Mode: Color: 48-bit Internal / 48-bit or 24-bit External, Grayscale: 16-bit Internal / 8-bit External – Max. Document Size: 8.5″ x 11.7″ (Letter/A4) – Dimensions (W x D x H): 14.5″ (W) x 9.9″ (D) x 1.7″ (H) – Weight: 3.6 lbs. – OS Compatibility: Windows 11, Windows 10, Windows 8.1, Windows 7 SP1, Mac OS X v10.11 – macOS v10.13 (High Sierra), Linux – Power Requirements: USB Type-C (One Cable For Data & Power) – Software: CanoScan LIDE 400 Color Image Scanner Driver, IJ Scan Utility (Windows) / IJ Scan Utility Lite (Mac), ScanGear MP Driver (Linux), Quick Menu – Power Source: USB Type-C (One Cable For Data & Power) – Max. Power Consumption: 4.5 W (0.3 W Standby) – Operating Temperature: 41 – 95°F (Without Condensation) – Operating Humidity: 10 – 90% (Relative Humidity) – Warranty: 1-Year Limited Warranty with InstantExchange Program – Certification: ENERGY STAR Certified – Scanner Method: LiDE (LED Indirect Exposure) |  |
| 68 | Supply of binding machine: Atlas perfect solution (AS-BM CMBSTARTER) or any other preferred make, A4 size, heavy duty. |  |
| 69 | Laminator, heavy duty 300mm, A3 and A4 SIZE |  |
| 70 | Supply of digital standing fan heavy duty |  |
| 71 | VGA- HDM converters |  |
| 72 | **Modems**  **Type**  Cellular Modems  **Speed**  Upto 2.4 Ghz  **Color**  Black/White  **Resett Pin**  Yes  **SIM card support**  Yes  **Network**  Wireless |  |
| 73 | CCTV Power Supply  **Power supply unit 12v 10amps**  Input : AC 110V /220 - + 15% 50/60Hz  Output: 10A |  |
| 74 | Assorted Laptop Batteries  **Assorted Brands in [DELL, HP, Lenovo]**  14.6v-2600mAh/38Wh  Store between O0C To 600C  320F To 1400F  Rechargeable Li-ion Battery |  |
| 75 | **External Hard Drives**  **Model**  Canvio Flex Portable External Hard Drive  **Number**  HDTX110XSCAA  Capacity1Up to 1TB  InterfaceUSB 3.0 USB 2.0  Interface Transfer Rate2Up to 5 Gb/s (USB 3.0) Up to 480 Mb/s (USB 2.0)  Drive FormatexFAT  Size (mm)1TB/2TB: 80(W) x 111(L) x 13.5(H) 4TB: 80(W) x 111(L) x 19.5(H)  ColorSilver  Weight (g)1TB/2TB: |  |
| 76 | **Universal Serial Bus(USB) Removable Flash Disks**  **Capacit**y: 32GB, 16GB, 8GB · **Color**: White. · **Weight**: 0.2Kg · Hard **drive** interface: **USB**. · Write / delect protection switch · Durable data storage · **USB** . |  |
| 77 | Speaker/sounding bar 4 speaker 1,000pro 7.1.4 sound bar with 10inch wireless subwoofer detachable rear speaker and 2m 8k ultra high speed HDM cable |  |

The detailed technical evaluation will examine the technical specification of the items offered in column c and determine whether this meets the minimum specification in column b. Bidders must complete column c or the bid will be rejected. **Bidders are required to include technical literature to support the details provided in column c.**

**Part 3: Section 7. General Conditions of**

**Contract**

**Section 7. General Conditions of Contract**

**Definitions**

1.1 The following words and expressions shall have the meanings hereby assigned to them:

* 1. “Completion” means the fulfilment of the Supplies or Services by the Provider in accordance with the terms and conditions set forth in the Contract.
  2. “Contract” means the Agreement entered into between the Procuring and Disposing Entity and the Provider, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
  3. “Contract Documents” means the documents listed in the Agreement, including any amendments thereto.
  4. “Contract Price” means the price payable to the Provider as specified in the Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
  5. “Day” means working day.
  6. “Delivery” means the transfer of the Supplies or Services from the Provider to the Procuring and Disposing Entity in accordance with the terms and conditions set forth in the Contract.
  7. “Eligible Countries” means the countries and territories eligible as listed in the SCC.
  8. “GCC” means the General Conditions of Contract.
  9. “Procuring and Disposing Entity” means the entity purchasing the Supplies or Services, as specified in the Agreement.
  10. “Provider” means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Procuring and Disposing Entity and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Provider.
  11. “SCC” means the Special Conditions of Contract.
  12. “Subcontractor” means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Supplies to be provided or execution of any part of the Services is subcontracted by the Provider.
  13. “Supplies” means goods, raw materials, products, equipment or objects of any kind and description in solid, liquid or gaseous form, or in the form of electricity, or intellectual and proprietary rights as well as services incidental to the provision of such supplies where the value of such services does not exceed the value of the supplies.
  14. “The Site,” where applicable, means the place named in the SCC.

**Contract Documents**

The documents forming the Contract shall be interpreted in the following order of priority:

* 1. Agreement,
  2. any Letter of Bid Acceptance,
  3. The Provider’s Bid, as amended by any clarifications,
  4. Special Conditions of Contract,
  5. General Conditions of Contract,
  6. Statement of Requirements,
  7. any other document listed in the SCC as forming part of the Contract.

2.2 Subject to the order of precedence set forth in Sub-Clause 2.1, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.

**Corrupt Practices**

3.1 It is the Government of Uganda’s policy to require that Procuring and Disposing Entities, as well as Bidders and Providers under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Government of Uganda:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

* + 1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
    2. “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring and Disposing Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring and Disposing Entity of the benefits of free and open competition;

(b) will suspend a firm, either indefinitely or for a stated period of time, from being awarded a Government funded contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government funded Contract.

* 1. The Provider shall permit the Government of Uganda to inspect the Provider’s accounts and records relating to the performance of the Provider and to have them audited by auditors appointed by the Government of Uganda, if so required by the Government.
  2. In pursuit of the policy defined in Sub-Clause 3.1, the Procuring and Disposing Entity may terminate a Contract for Supplies or Services if it at any time determines that corrupt or fraudulent practices were engaged in by representatives of the Procuring and Disposing Entity or of a Provider, during the procurement or the execution of that contract, without the Procuring and Disposing Entity having taken timely and appropriate action satisfactory to the Government of Uganda to remedy the situation.

**Interpretation**

* 1. If the context so requires it, singular means plural and vice versa.
  2. Incoterms
  3. Unless otherwise specified in the SCC, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.
  4. EXW, CIF, CIP, and other similar terms, shall be governed by the rules prescribed in the edition of Incoterms, published by the International Chamber of Commerce as specified in the SCC.
  5. Entire Agreement

The Contract constitutes the entire agreement between the Procuring and Disposing Entity and the Provider and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

* 1. Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorised representative of each party thereto.

* 1. Nonwaiver
  2. Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
  3. Any waiver of a party’s rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorised representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

**Language**

* 1. The Contract as well as all correspondence and documents relating to the Contract exchanged by the Provider and the Procuring and Disposing Entity, shall be written in English unless specified otherwise in the SCC. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.
  2. The Provider shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

**Joint Venture, Consortium or Association**

6.1 Unless otherwise specified in the SCC, if the Provider is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Procuring and

Disposing Entity for the fulfillment of the provisions of the Contract and shall

designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Procuring and Disposing Entity.

**Eligibility**

* 1. The Provider and its Subcontractors shall have the nationality of an eligible country. A Provider or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
  2. All Supplies or Services to be provided under the Contract shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the Supplies have been grown, mined, cultivated, produced, manufactured, or processed, or through manufacture, processing, or assembly, another commercially recognised article results that differs substantially in its basic characteristics from its imported components.

**Notices**

* 1. Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term “in writing” means communicated in written form with proof of receipt.
  2. A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

**Governing Law**

9.1 The Contract shall be governed by and interpreted in accordance with the laws of Uganda unless otherwise specified in the SCC.

**Settlement of Disputes**

* 1. The Procuring and Disposing Entity and the Provider shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
  2. If the parties fail to resolve such a dispute or difference by mutual consultation within twenty-eight (28) days from the commencement of such consultation, either party may require that the dispute be referred for resolution under the Arbitration law of Uganda or such other formal mechanism specified in the SCC.

**Scope of Supply**

* 1. The Supplies or Services to be provided shall be as specified in the Statement of Requirements.
  2. The Supplies or Services shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Supplies or Services as if such items were expressly mentioned in the Contract.

**Delivery and Documents**

12.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Supplies and Completion of the or Services shall be in accordance with the Bills of Quantities, Delivery and Completion Schedule specified in the Statement of Requirements. The details of

shipping and other documents to be furnished by the Provider are specified in the SCC.

**Provider’s Responsibilities**

13.1 The Provider shall provide all the Supplies or Services included in the Terms of Reference or Specifications in accordance with GCC Clause 11, and the Bills of Quantities, Delivery and Completion Schedule, as per GCC Clause 12.

**Procuring and Disposing Entity’s Responsibilities**

* 1. Whenever the provision of Supplies or Services requires that the Provider obtain permits, approvals, and import and other licenses from local public authorities in Uganda, the Procuring and Disposing Entity shall, if so required by the Provider, make its best effort to assist the Provider in complying with such requirements in a timely and expeditious manner.
  2. The Procuring and Disposing Entity shall pay all costs involved in the performance of its responsibilities, in accordance with GCC Sub-Clause 14.1.

**Contract Price**

* 1. The Contract Price shall be as specified in the Agreement subject to any additions and adjustments thereto, or deductions therefrom, as may be made pursuant to the Contract.
  2. Prices charged by the Provider for the Supplies delivered and Services performed under the Contract shall not vary from the prices quoted by the Provider in its bid, with the exception of any price adjustments authorised in the SCC.

**Terms of Payment**

* 1. The Contract Price shall be paid as specified in the SCC.
  2. The Provider’s request for payment shall be made to the Procuring and Disposing Entity in writing, accompanied by invoices describing, as appropriate, the Supplies delivered and Services performed, and by the documents submitted pursuant to GCC Clause 12 and upon fulfilment of all the obligations stipulated in the Contract.
  3. Unless otherwise specified in the SCC, payments shall be made promptly by the Procuring and Disposing Entity, no later than thirty (30) days after submission of an invoice or request for payment by the Provider, and its certification by the Procuring and Disposing Entity. The Procuring and Disposing Entity shall certify or reject such invoices or payment requests within five (5) days from receipt. Where such invoices or payment requests are rejected, the Procuring and Disposing Entity shall advise the Provider of the reasons for rejection.
  4. The currency or currencies in which payments shall be made to the Provider under this Contract shall be specified in the SCC.

**Taxes and Duties**

* 1. Except as otherwise specifically provided in the SCC, the Provider shall bear and pay all taxes, import duties, and levies imposed on the Provider, by all municipal, state or national government authorities, both within and outside Uganda, in connection with the Supplies or Services to be supplied under the Contract.
  2. Notwithstanding GCC Sub-Clause 17.1, and unless otherwise specified in the SCC, the Procuring and Disposing Entity shall bear and promptly pay all taxes, import

duties, and levies imposed by law in Uganda on the Supplies or Services when such Supplies or Services are supplied from and delivered or completed outside Uganda.

* 1. If any tax exemptions, reductions, allowances or privileges may be available to the Provider in Uganda, the Procuring and Disposing Entity shall use its best efforts to enable the Provider to benefit from any such tax savings to the maximum allowable extent.
  2. For the purpose of the Contract, it is agreed that the Contract Price specified in the Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in Uganda (called “tax” in this sub-clause). If any tax rates are increased or decreased, a new tax is introduced, an existing tax is abolished, or any change in interpretation or application of any tax occurs in the course of the performance of the Contract, which was or will be assessed on the Provider, its Subcontractors, or their employees in connection with performance of the Contract, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to or reduction from the Contract Price, as the case may be.

**Performance Security**

* 1. If so stated in the SCC, the Provider shall, within twenty-eight (28) days of the notification of contract award, provide a Performance Security for the due performance of the Contract in the amount and currency specified in the SCC or in a freely convertible currency acceptable to the Procuring and Disposing Entity.
  2. The proceeds of the Performance Security shall be payable to the Procuring and Disposing Entity as compensation for any loss resulting from the Provider’s failure to complete its obligations under the Contract.
  3. The Performance Security shall be in one of the forms stipulated by the Procuring and Disposing Entity in the SCC, or in another form acceptable to the Procuring and Disposing Entity.
  4. The Performance Security shall be discharged by the Procuring and Disposing Entity and returned to the Provider not later than twenty-eight (28) days following the date of completion of the Provider’s performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the SCC.

**Copyright**

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Procuring and Disposing Entity by the Provider herein shall remain vested in the Provider, or, if they are furnished to the Procuring and Disposing Entity directly or through the Provider by any third party, including Providers of materials, the copyright in such materials shall remain vested in such third party.

**Confidential Information**

* 1. The Procuring and Disposing Entity and the Provider shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Provider may furnish to its Subcontractor such

documents, data, and other information it receives from the Procuring and Disposing

Entity to the extent required for the Subcontractor to perform its work under the Contract, in which event the Provider shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Provider under GCC Clause 20.

* 1. The Procuring and Disposing Entity shall not use such documents, data, and other information received from the Provider for any purposes unrelated to the contract. Similarly, the Provider shall not use such documents, data, and other information received from the Procuring and Disposing Entity for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.
  2. The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:
  3. the Procuring and Disposing Entity or Provider need to share with any institution participating in the financing of the Contract;
  4. now or hereafter enters the public domain through no fault of that party;
  5. can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
  6. otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
  7. The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.
  8. The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

**Subcontracting**

* 1. The Provider shall notify the Procuring and Disposing Entity in writing of all subcontracts awarded under the Contract if not already specified in the bid. Subcontracting shall in no event relieve the Provider from any of its obligations, duties, responsibilities, or liability under the Contract.
  2. Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

**Specifications and Standards**

22.1 Technical Specifications and Drawings

* 1. The Provider shall ensure that the Supplies or Services comply with the Statement of Requirements and other provisions of the Contract.
  2. The Provider shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Procuring and Disposing Entity, by giving a notice of such disclaimer to the Procuring and Disposing Entity.
  3. The Supplies and Services completed, delivered or performed under this Contract shall conform to the standards mentioned in the Statement of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country

of origin of the Supplies or Services.

22.2 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Statement of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Procuring and Disposing Entity and shall be treated in accordance with GCC Clause 33.

**Packing and Documents**

* 1. The Provider shall provide such packing of the Supplies as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Supplies’ final destination and the absence of heavy handling facilities at all points in transit.
  2. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Procuring and Disposing Entity.

**Insurance**

24.1 Unless otherwise specified in the SCC, the Supplies or Services provided under the Contract shall be fully insured, in a freely convertible currency from an eligible country, against loss, personal injury or death or damage of Plant, and Materials and supplies incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterm or in the manner specified in the SCC.

**Transportation**

25.1 Responsibility for transportation of the Supplies shall be in accordance with the Incoterm specified in the SCC.

**Inspections and Tests**

* 1. The Provider shall at its own expense and at no cost to the Procuring and Disposing Entity carry out all such tests and/or inspections of the Supplies or Services as are specified in the Statement of Requirements.
  2. The inspections and tests may be conducted at the site, on the premises of the Provider or its Subcontractor, at point of delivery, and/or at the Supplies’ final destination, or in another place in Uganda as specified in the SCC. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Provider or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring and Disposing Entity.
  3. The Procuring and Disposing Entity or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Procuring and Disposing Entity bears all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all travelling and board and lodging expenses.
  4. Whenever the Provider is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Procuring and

Disposing Entity. The Provider shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Procuring and Disposing Entity or its designated representative to attend the test and/or inspection.

* 1. The Procuring and Disposing Entity may require the Provider to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Supplies or Services comply with the Statement of Requirements’ codes and standards under the Contract, provided that the Provider’s reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Provider’s performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
  2. The Provider shall provide the Procuring and Disposing Entity with a report of the results of any such test and/or inspection.
  3. The Procuring and Disposing Entity may reject any Supplies or Services that fail to pass any test and/or inspection or do not conform to the terms of reference and technical specifications. The Provider shall either rectify or replace such rejected Supplies or parts thereof or make alterations necessary to meet the specifications or correct the notified Defect at no cost to the Procuring and Disposing Entity, and shall repeat the test and/or inspection, at no cost to the Procuring and Disposing Entity, upon giving a notice pursuant to GCC Sub-Clause 26.4.
  4. The Provider agrees that neither the execution of a test and/or inspection of the Supplies or Service, nor the attendance by the Procuring and Disposing Entity or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Provider from any warranties or other obligations under the Contract.

**Liquidated Damages**

27.1 If so stated in the SCC and except as provided under GCC Clause 32, if the Provider fails to deliver any or all of the Supplies or perform the Services within the period specified in the Contract, the Procuring and Disposing Entity may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the Contract Price for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those SCC. Once the maximum is reached, the Procuring and Disposing Entity may terminate the Contract pursuant to GCC Clause 35.

**Warranty**

* 1. The Provider warrants that all the Supplies are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
  2. Subject to GCC Sub-Clause 22.1, the Provider further warrants that the Supplies shall be free from defects arising from any act or omission of the Provider or arising from design, materials, and workmanship, under normal use in the conditions prevailing in Uganda.
  3. Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Supplies, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen

(18) months after the date of shipment or loading in the country of origin, whichever period concludes earlier. The Defects Liability Period shall be specified in the SCC and extended for as long as the Defects remain to be corrected.

* 1. The Procuring and Disposing Entity shall give notice to the Provider stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Procuring and Disposing Entity shall afford all reasonable opportunity for the Provider to inspect such defects.
  2. Upon receipt of such notice, the Provider shall, within two weeks or such other period specified in the SCC, expeditiously repair or replace the Supplies or parts thereof, at no cost to the Procuring and Disposing Entity.
  3. If having been notified, the Provider fails to remedy the defect within the period specified in Sub-Clause 28.5, the Procuring and Disposing Entity may proceed to take within a reasonable period such remedial action as may be necessary, at the Provider’s risk and expense and without prejudice to any other rights which the Procuring and Disposing Entity may have against the Provider under the Contract.

**Patent Indemnity**

29.1 The Provider shall, subject to the Procuring and Disposing Entity’s compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Procuring and Disposing Entity and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney’s fees and expenses, which the Procuring and Disposing Entity may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

* 1. the installation of the Supplies by the Provider or their use in Uganda or where the Site is located; and
  2. the sale in any country of the products produced by the Supplies.

Such indemnity shall not cover any Supplies or Services or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the Supplies or Services or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Provider, pursuant to the Contract.

* 1. If any proceedings are brought or any claim is made against the Procuring and

Disposing Entity arising out of the matters referred to in GCC Sub-Clause 29.1, the Procuring and Disposing Entity shall promptly give the Provider a notice thereof, and the Provider may at its own expense and in the Procuring and Disposing Entity’s name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

* 1. If the Provider fails to notify the Procuring and Disposing Entity within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Procuring and Disposing Entity shall be free to conduct the same on its own behalf.
  2. The Procuring and Disposing Entity shall, at the Provider’s request, afford all available assistance to the Provider in conducting such proceedings or claim, and shall be reimbursed by the Provider for all reasonable expenses incurred in so doing.
  3. The Procuring and Disposing Entity shall indemnify and hold harmless the Provider and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney’s fees and expenses, which the Provider may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Procuring and Disposing Entity.

**Limitation of Liability**

30.1 Except in cases of gross negligence or wilful misconduct:

* 1. neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Provider to pay liquidated damages to the Procuring and Disposing Entity; and
  2. the aggregate liability of the Provider to the Procuring and Disposing Entity, whether under the Contract, in tort, or otherwise, shall not exceed the total contract value or such other amount specified in the SCC, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Provider to indemnify the Procuring and Disposing Entity with respect to patent infringement.

**Change in Laws and Regulations**

31.1 Unless otherwise specified in the Contract, if after the date of the Bidding Document, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Uganda or where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Provider has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

**Force Majeure**

* 1. The Provider shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
  2. For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Provider that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Provider. Such events may include, but not be limited to, acts of the Government of Uganda in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
  3. If a Force Majeure situation arises, the Provider shall promptly notify the Procuring and Disposing Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring and Disposing Entity in writing, the Provider shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

**Change Orders and Contract Amendments**

33.1 The Procuring and Disposing Entity may at any time order the Provider through notice in accordance with GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

* 1. drawings, designs, or specifications, where Supplies to be furnished under the Contract are to be specifically manufactured for the Procuring and Disposing Entity;
  2. the method of shipment or packing;
  3. the place of delivery; and
  4. the Related Services to be provided by the Provider.
  5. If any such change causes an increase or decrease in the cost of, or the time required for, the Provider’s performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Provider for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Provider’s receipt of the Procuring and Disposing Entity’s change order.
  6. Prices to be charged by the Provider for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Provider for similar services.

**Extensions of Time**

* 1. If at any time during performance of the Contract, the Provider or its subcontractors should encounter conditions impeding timely delivery of the Supplies or Services pursuant to GCC Clause 12, the Provider shall promptly notify the Procuring and Disposing Entity in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Provider’s notice, the Procuring and Disposing Entity shall evaluate the situation and may at its discretion extend the Provider’s time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.
  2. Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Provider in the performance of its Delivery and Completion obligations shall render the Provider liable to the imposition of liquidated damages pursuant to GCC Clause 27, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

**Termination**

35.1 Termination for Default

(a) The Procuring and Disposing Entity, without prejudice to any other remedy for breach of Contract, by notice of default sent to the Provider, may terminate the Contract in whole or in part if:

* + 1. the Provider fails to deliver, complete or perform any or all of the Supplies, and Services within the period specified in the Contract, or within any

extension thereof granted by the Procuring and Disposing Entity pursuant to GCC Clause 34;

* + 1. the Provider fails to perform any other obligation under the Contract; or
    2. the Provider, in the judgment of the Procuring and Disposing Entity has engaged in corrupt or fraudulent practices, as defined in GCC 3, in competing for or in executing the Contract.

(b) In the event the Procuring and Disposing Entity terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Procuring and Disposing Entity may procure, upon such terms and in such manner as it deems appropriate Supplies or Services similar to those undelivered or not performed, and the Provider shall be liable to the Procuring and Disposing Entity for any additional costs for such similar Supplies or Services. However, the Provider shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency

(a) The Procuring and Disposing Entity may at any time terminate the Contract by giving notice to the Provider if the Provider becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Provider, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Procuring and Disposing Entity.

35.3 Termination for Convenience

* 1. The Procuring and Disposing Entity, by notice sent to the Provider, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring and Disposing Entity’s convenience, the extent to which performance of the Provider under the Contract is terminated, and the date upon which such termination becomes effective.
  2. The Supplies that are complete and ready for shipment within twenty-eight (28) days after the Provider’s receipt of notice of termination shall be accepted by the Procuring and Disposing Entity at the Contract terms and prices. For the remaining Supplies, the Procuring and Disposing Entity may elect:
     1. to have any portion completed and delivered at the Contract terms and prices; and/or
     2. to cancel the remainder and pay to the Provider an agreed amount for partially completed Supplies and Services and for materials and parts previously procured by the Provider.

**Assignment**

36.1 Neither the Procuring and Disposing Entity nor the Provider shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

**Part 3: Section 8. Special Conditions of Contract**

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

|  |  |
| --- | --- |
| **GCC clause reference** | **Special Conditions** |
|  | The Procurement Reference Number is: **MU/SPLS/2024-25/00015** |
| **GCC 1.1(i)** | The Procuring and Disposing Entity is: **MUNI UNIVERSITY** |
| **GCC 1.1 (g)** | The Eligible Countries are those listed in Section 5 of the Bidding Document. |
| **GCC 1.1 (o)** | The Site(s) is/are: **MUNI UNIVERSITY** |
| **GCC 1.1** | In addition to the definitions in GCC 1.1, the following words and expressions shall have the meanings hereby assigned to them:   1. “Framework Contract” means a contract arrangement for an estimated quantity or minimum value of Supplies or Services at fixed rates, where actual quantities are purchased by means of call-off orders and payment is made for the actual quantities delivered. 2. “Call-Off Order” means an order issued by the Procuring and Disposing Entity for the purchase of specified quantities of the Supplies or Services under a framework contract. 3. “Response Time” means the period for delivery of the Supplies or Services, calculated from the date of a call-off order. |
| **GCC 2.1(g)** | The other documents forming part of the Contract are the call-off orders issued under the Contract. |
| **GCC 4.2 (b)** | The version of Incoterms shall be: **“Incoterms 2020”** |
| **GCC 5.1** | The language shall be: **English.** |
| **GCC 6.1** | The individuals or firms in a joint venture, consortium or association be jointly and severally liable. |
| **GCC 8.1** | For **notices**, and the issue of call-off orders, the Procuring and Disposing Entity’s address shall be:  Attention: **University Secretary/Accounting Officer**  Street Address: **Arua- Muni -Ocoko Road**  Floor/Room number: **First Floor, Procurement & Disposal Unit, Room 2.7**  Town/City:  **Arua**  Postal Code: **P. O. Box 725, Arua**  Country: **Uganda**  The deadline for bid submission is: `  Date: **5th September, 2025**  Time (local time): **11:00am**  Facsimile number: **-**  Email: [**pdu@muni.ac.ug**](mailto:pdu@muni.ac.ug) |
|  | For **notices**, including call-off orders, the Provider’s address shall be:  Attention:  Street Address:  Floor/Room number:  Town/City:  Postal Code/PO Box:  Country:  Telephone:  Facsimile number:  Email address: |
| **GCC 9.1** | The Governing law shall be the law of Uganda. |
| **GCC 10.2** | The formal mechanism for the resolution of disputes shall be: **ARBITRATION** |
| **GCC 11.1** | Notwithstanding the provisions of GCC 11.1, the quantities specified in the Statement of Requirements are estimated and are not purchased by this contract. The quantity of Supplies or Services to be provided shall be as specified in call-off orders. |
| **GCC 12.1** | The Delivery of the Supplies and Services shall be in accordance with each call-off order. Delivery and Completion shall be within the response times specified in the Bills of Quantities and Delivery and Completion Schedule specified in the Statement of Requirements, calculated from the date of each call-off order.  The documents to be furnished by the Provider for each call-off order are: **Invoices and delivery notes.** |
| **GCC 15.1** | Notwithstanding the provisions of GCC 15.1 and GCC 1.1(d), the Contract Price specified in the Agreement shall be the estimated price payable to the Provider and the actual price payable to the Provider shall be calculated on the basis of the unit prices specified in the Price Schedule and the quantities specified in call-off orders, subject to any minimum value specified in the Statement of Requirements. |
| **GCC 15.2** | The price adjustment shall be: **AGREED UPON at the beginning of each month** |
| **GCC 16.1** | Payment shall be made in full for each call-off order following delivery of the Supplies or Services specified in the call-off order and submission of an invoice and the documents listed in clause 12.1. |
| **GCC 16.3** | The payment period shall be: **WITHIN THIRTY (30) DAYS** |
| **GCC 16.4** | The currency(ies) for payments shall be: **UGANDA SHILLINGS** |
| **GCC 17.1** | The Provider shall be responsible for all taxes, import duties and levies imposed on the Provider. |
| **GCC 17.2** | The Procuring and Disposing Entity shall be responsible for all taxes, import duties and levies imposed by law in Uganda on the Supplies or Services. |
| **GCC 18.1** | A Performance Security **SHALL NOT** be required.  The amount of the Performance Security shall be: N/A  The currency shall be: N/A |
| **GCC 18.3** | The forms of acceptable Performance Securities are: N/A |
| **GCC 25.1** | The INCOTERM shall be: **Incoterms 2020** |
| **GCC 27.1** | Liquidated Damages **Shall** apply if the Provider fails to deliver any or all of the Supplies and Services specified in any call-off order within the response times specified in the Statement of Requirements.  Notwithstanding the provisions of GCC 27.1, the amount of liquidated damages shall be calculated as a percentage of the value of the call-off order and shall apply only to the call-off order under which the Provider has failed to deliver the Supplies or perform the Services.  The liquidated damage shall be: **0.1% of the value of the call-off order.** The maximum amount of liquidated damages shall not exceed **0.5% of the value of the call off order.** |

**Part 3: Section 9. Contract Forms**

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**Agreement**

**For a Framework Contract**

**Procurement Reference No:**

THIS AGREEMENT made the \_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_, between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(hereinafter “the Procuring and Disposing Entity”), of the one part, and

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the

Provider”), of the other part:

WHEREAS the Procuring and Disposing Entity invited bids for certain Supplies and

Related Services, viz.,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and has accepted a Bid by the Provider for the provision of those Supplies and Related Services in the sum of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the Contract

Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
2. In consideration of the payments to be made by the Procuring and Disposing Entity to the Provider as indicated in this Agreement, the Provider hereby covenants with the Procuring and Disposing Entity to provide the Supplies and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
3. The Procuring and Disposing Entity hereby covenants to pay the Provider in consideration of the provision of the Supplies and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The quantities of Supplies specified in the Statement of Requirements are estimated quantities only and are not purchased by this contract. If the call-off orders under this contract do not result in total orders of the quantities described as estimates, that fact shall not constitute the basis for an equitable adjustment.
5. The Procuring and Disposing Entity shall order from the Provider all the Supplies specified in the contract that are required to be purchased by the Procuring and Disposing Entity during the period stated below, unless any Supplies are urgently required in an emergency situation and the Provider is unable to deliver such Supplies within the period required by the Procuring and Disposing Entity.
6. The Procuring and Disposing Entity guarantees to order at least the value of Supplies specified as the minimum value in the Statement of Requirements.
7. Any Supplies to be provided under this contract shall be ordered by the issue of calloff orders, which shall be issued by the Procuring and Disposing Entity as Notices in accordance with GCC Clause 8, using the format attached to this Agreement. The authorised signatory for call-off orders shall be the official named in SCC Clause 8.
8. Call-off orders may be issued at any time during a period of one year from the date of contract indicated above. Any call-off order issued, but not completed, during this period, shall be governed by the Contract in the same way as if it had been completed during that period.
9. Call-off orders are subject to the following limitations and exceptions:
   1. where the value of a call-off order is less than 2½% of the contract price, the Provider is not obliged to provide the Supplies, provided that the Provider gives the Procuring and Disposing Entity a notice, within three working days of the date of the call-off order, stating its intention not to provide the Supplies;
   2. where the value of a call-off order, or the total value of all call-off orders within a period of one month, is more than 25% of the contract price, the Provider shall not be bound by the response times specified in the Statement of Requirements, provided that the Provider gives the Procuring and Disposing Entity a notice, within three working days of the date of the call-off order, stating its inability to deliver the Supplies within the response time and specifying the delivery period which will apply.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the law specified in the Special Conditions of Contract on the day, month and year indicated above.

Signed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (for the Procuring and Disposing Entity)

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Position:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (for the Provider)

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Position:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Call-Off Order**

**Under a Framework Contract**

**Procurement Reference No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Call-Off Order Reference No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Procuring and Disposing Entity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Provider: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date of Call-Off Order: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

The Procuring and Disposing Entity indicated above issues this call-off order under the framework contract referenced above.

This call-off order is subject to the terms and conditions of the framework contract referenced above. In the event of a conflict, between this call-off order and the contract, the contract shall prevail.

Please proceed with delivery of the Supplies detailed on the attached List of Supplies and Price Schedule, in accordance with the response times specified in the contract.

The total value of this call-off order is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Please confirm your receipt of this call-off order and that you are proceeding with delivery of the Supplies, in accordance with the terms and conditions of the contract.

**Authorised by:**

|  |  |
| --- | --- |
| Signature: |  |
| Name: |  |
| Position: |  |

**List of Supplies and Price Schedule**

**Procurement Reference No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Call-Off Order Reference No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** 