

# **PHILIPPINE BIDDING DOCUMENTS**

## **PROCUREMENT OF VARIOUS EQUIPMENT FOR USE OF THE DIFFERENT/PROGRAMS AS REQUIRED BY THEIR RESPECTIVE CMO's IN ACCREDITATION AND COPC VISITS**

022-25-PB

Government of the Republic of the Philippines

**August 2025**

# Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Goods to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

- d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.
- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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# ***Glossary of Acronyms, Terms, and Abbreviations***

**ABC** – Approved Budget for the Contract.

**BAC** – Bids and Awards Committee.

**Bid** – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

**Bidder** – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

**Bidding Documents** – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**Consulting Services** – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

**CDA** - Cooperative Development Authority.

**Contract** – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

**CIF** – Cost Insurance and Freight.

**CIP** – Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means “delivered duty paid.”

**DTI** – Department of Trade and Industry.

**EXW** – Ex works.

**FCA** – “Free Carrier” shipping point.

**FOB** – “Free on Board” shipping point.

**Foreign-funded Procurement or Foreign-Assisted Project**– Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**GFI** – Government Financial Institution.

**GOCC** – Government-owned and/or –controlled corporation.

**Goods** – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

**GOP** – Government of the Philippines.

**GPPB** – Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**Infrastructure Projects** – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PhilGEPS** - Philippine Government Electronic Procurement System.

**Procurement Project** – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

**UN** – United Nations.

## ***Section I. Invitation to Bid***

### **Notes on the Invitation to Bid**

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.





REPUBLIC OF THE PHILIPPINES

**BICOL UNIVERSITY**

Legazpi City

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## **INVITATION TO BID FOR PROCUREMENT OF VARIOUS EQUIPMENT FOR USE OF THE DIFFERENT/PROGRAMS AS REQUIRED BY THEIR RESPECTIVE CMO'S IN ACCREDITATION AND COPC VISITS**

1. The *Bicol University-PDO*, through the *Corporate Budget approved by the Board of Regents (C.O Fund 01)* intends to apply the sum of *Sixteen Million Four Hundred Thirty-Eight Thousand Four Hundred pesos (Php 16,438,400.00)* being the ABC to payments under the contract for *Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *Bicol University* now invites bids for the above Procurement Project. Delivery of the Goods is required 60 calendar days. Bidders should have completed, within *5 years* from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
  - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
4. Prospective Bidders may obtain further information from *Bicol University* and inspect the Bidding Documents at the address given below during *8:00AM-5:00PM*
5. A complete set of Bidding Documents may be acquired by interested Bidders on *August 13, 2025 to September 4, 2025* from the given address and website(s) below *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Twenty-Five Thousand pesos &00/100 (Php 25,000.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *through electronic means by depositing payments for the bidding documents directly to Bicol University LBP Account, and transmittal of scanned bank verified deposit slip for the issuance of Official Receipt: Bank Account details are as follows:*

Account Name	BU-STF (F-164)
Account Number	0132-0265-48

6. The *Bicol University* will hold a Pre-Bid Conference<sup>1</sup> on *August 22, 2025, 9:00AM* at *2F A.P Bonto Building, PRMO Conference Room, Legazpi City for Pre-Bid Conference*, and/or through video conferencing or webcasting *zoom*, which shall be open to prospective bidders.

<https://bicol-u-edu-ph.zoom.us/j/6282346738?pwd=7NXwaTYZZVbBPIRLCbz2inM9fwb6Y2.1>

Meeting ID: 628 234 6738

Passcode: 809781

7. Bids must be duly received by the BAC Secretariat through at the office address indicated below on or before September 4, 2025, 8:30AM. Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on *September 4, 2025, 8:30AM* at the given address below. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. *For further information, please refer to:*

BAC Secretariat  
Bicol University  
2/F A.P Bonto Building  
BU Main Campus, Legazpi City  
[university-bac@bicol-u.edu.ph](mailto:university-bac@bicol-u.edu.ph)  
Mobile no. 09171874046

11. You may visit the following websites:

For downloading of Bidding Documents: *Bicol University Website* or <https://bac.bicol-u.edu.ph> or *FB page BU Procurement*

(Original Signed)  
**SONNIE A. RAMOS, CPA, MBA**  
BAC Chairperson

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<sup>1</sup> May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a Pre-Bid Conference.

## ***Section II. Instructions to Bidders***

### **Notes on the Instructions to Bidders**

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

## **1. Scope of Bid**

The Procuring Entity, *BICOL UNIVERSITY* wishes to receive Bids for the *Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*, with identification number 022-25-PB.

The Procurement Project “*Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*” is composed of [Lot 1- 35 items and Lot 2- 21 items] the details of which are described in Section VII (Technical Specifications).

## **2. Funding Information**

2.1. The GOP through the source of funding as indicated below for 2025 in the amount of *Sixteen Million Four Hundred Thirty-Eight Thousand Four Hundred pesos (Php 16,438,400.00)*.

2.2. The source of funding is Capital Outlay (C.O.) Fund 01.

a. GOCC and GFIs, the proposed Corporate Operating Budget

## **3. Bidding Requirements**

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

## **4. Corrupt, Fraudulent, Collusive, and Coercive Practices**

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex “I” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

## 5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. *[Select one, delete other/s]*
- a. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
    - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
    - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
    - iii. When the Goods sought to be procured are not available from local suppliers; or
    - iv. When there is a need to prevent situations that defeat competition or restrain trade.
  - b. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
- a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

## 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

## **7. Subcontracts**

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that:

- a. Subcontracting is not allowed.

## **8. Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on August 22, 2025, 9:00AM at PRMO Conference Room, 2F A.P Bonto, BU Main Campus, Legazpi City.

## **9. Clarification and Amendment of Bidding Documents**

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

## **10. Documents comprising the Bid: Eligibility and Technical Components**

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *[state relevant period as provided in paragraph 2 of the **IB**]* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

## **11. Documents comprising the Bid: Financial Component**

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.

- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

## 12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in the **BDS**.
  - b. For Goods offered from abroad:
    - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
    - ii. The price of other (incidental) services, if any, as listed in the **BDS**.

## 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:

*[Select one, delete the other/s]*

- a. Philippine Pesos.
- b. *[indicate currency if procurement involves a foreign-denominated bid as allowed by the Procuring Entity, which shall be tradeable or acceptable by the BSP].*

## 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration<sup>2</sup> or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid until *January 2, 2026*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

## 15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

## 16. Deadline for Submission of Bids

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

## 17. Opening and Preliminary Examination of Bids

- 17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

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<sup>2</sup> In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.



- 17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

## **18. Domestic Preference**

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

## **19. Detailed Evaluation and Comparison of Bids**

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:
- Option 1 – One Project having several items that shall be awarded as one contract.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

## **20. Post-Qualification**

- 20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

## **21. Signing of the Contract**

- 21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

## ***Section III. Bid Data Sheet***

### **Notes on the Bid Data Sheet**

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

# Bid Data Sheet

ITB Clause	
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <ul style="list-style-type: none"> <li>a. Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits.</li> <li>b. completed within <i>five (5) years</i> prior to the deadline for the submission and receipt of bids.</li> </ul>
7.1	<i>Subcontracting is not allowed</i>
12	The price of the Goods shall be quoted in Philippine Peso.
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:</p> <ul style="list-style-type: none"> <li>a. The amount of not less than <i>to two percent (2%) of ABCJ</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> <li>b. The amount of not less than <i>to five percent (5%) of ABCJ</i> if bid security is in Surety Bond.</li> </ul>
19.4	<p>The Project shall be awarded as follows:</p> <p>Option 1 – One Project having several items that shall be awarded as one contract.</p>
20.2	<i>No additional requirements.</i>

## ***Section IV. General Conditions of Contract***

### **Notes on the General Conditions of Contract**

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

## **1. Scope of Contract**

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

## **2. Advance Payment and Terms of Payment**

2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

## **3. Performance Security**

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184

## **4. Inspection and Tests**

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project. In addition to tests in the **SCC**, **Section VII (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

## **5. Warranty**

- 5.1 In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

## **6. Liability of the Supplier**

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

## ***Section V. Special Conditions of Contract***

### **Notes on the Special Conditions of Contract**

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.



## Special Conditions of Contract

GCC Clause	
1	<p><i>[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]</i></p> <p><b>Delivery and Documents –</b></p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>[For Goods supplied from abroad, state:]</i> “The delivery terms applicable to the Contract are DDP delivered <i>[indicate place of destination]</i>. In accordance with INCOTERMS.”</p> <p><i>[For Goods supplied from within the Philippines, state:]</i> “The delivery terms applicable to this Contract are delivered <i>[indicate place of destination]</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is <i>[indicate name(s)]</i>.</p> <p><b>Incidental Services –</b></p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:</p> <p><i>Select appropriate requirements and delete the rest.</i></p> <ol style="list-style-type: none"> <li>a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;</li> <li>b. furnishing of tools required for assembly and/or maintenance of the supplied Goods;</li> <li>c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;</li> <li>d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and</li> </ol>

	<p>e. training of the Procuring Entity’s personnel, at the Supplier’s plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.</p> <p>f. <i>[Specify additional incidental service requirements, as needed.]</i></p> <p>The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p> <p><b>Spare Parts –</b></p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <p><i>Select appropriate requirements and delete the rest.</i></p> <ol style="list-style-type: none"> <li>1. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and</li> <li>2. in the event of termination of production of the spare parts: <ol style="list-style-type: none"> <li>i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and</li> <li>ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.</li> </ol> </li> </ol> <p>The spare parts and other components required are listed in <b>Section VI (Schedule of Requirements)</b> and the costs thereof are included in the contract price.</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of <i>[indicate here the time period specified. If not used indicate a time period of three times the warranty period]</i>.</p> <p>Spare parts or components shall be supplied as promptly as possible, but in any case, within <i>[insert appropriate time period]</i> months of placing the order.</p>
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	<p><b>Packaging –</b></p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, 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 below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity  Name of the Supplier  Contract Description  Final Destination  Gross weight  Any special lifting instructions  Any special handling instructions  Any relevant HAZCHEM classifications</p>
	<p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p><b>Transportation –</b></p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>

	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p><b>Intellectual Property Rights –</b></p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
	<p><b>Regular and Recurring Services –</b></p> <p>[In case of contracts for regular and recurring services, state:] “The contract for regular and recurring services shall be subject to a renewal whereby the performance evaluation of the service provider shall be conducted in accordance with Section VII. Technical specifications.”</p>
2.2	<i>No partial delivery/payment is allowed, state.</i>
4	<i>No additional requirements.</i>

## ***Section VI. Schedule of Requirements***

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item No.	Description	Quantity	Delivered, Weeks/Months
			SIXTY (60) calendar days after receipt of NTP
			<i>Bidders must state here either “<b>Comply</b>” or “<b>Not Comply</b>” with the delivery period against each item in the bid</i>
	<i><b>Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO’s in Accreditation and COPC Visits</b></i>		

No.	Unit	Item Description	Quantity	<i>Bidders must state here either “<b>Comply</b>” or “<b>Not Comply</b>” with the delivery period against each item in the bid</i>
<i><b>Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO’s in Accreditation and COPC Visits</b></i>				
<b>Lot 1 – GENERAL LABORATORY EQUIPMENT</b>				
<b>1</b>	<b>Unit</b>	<b>Flammable Storage Cabinet</b>  45 gal, 65" X 18" X 43", yellow Bi-fold self-closing doors. Each door can be latched open with a fusible link. In case of fire, the link melts at 165 deg Fahrenheit closing the doors automatically Warning labels included. 2" high rim on cabinet bottom to contain leaks and spills with adjustable levelling glide for uneven Non-sparking, three-point latching mechanism Additional security provided by keyed paddle Latch with removable panel to service three-point latching mechanism.	<b>1</b>	

		<p>18-gauge double walled steel construction, along with 1-1/20 air spaces between the walls. Durable powder coat paint to resist solvents, acids, and alkalies.</p> <p>Two grounding attachment points at the rear of all cabinets for easy grounding. Continuous full-door height piano hinges. Polyethylene trays in the bottom sill area catch incidental spills and leaks. Upper and lower diametrically opposed side vent with flame arrestor for proper venting.</p>		
2	Set	<p><b>Unmanned Aerial Vehicle (Drone) with Accessories</b></p> <p>Weight: 720g Dimensions: 207x100.5x91.1mm Video Transmission System: 04 Operating frequencies: 2.4 ghz, 5.1 ghz, 5.8ghz Max Transmission Distance: Fcc:20km, CE:10km Battery: 4241 mAh Li-ion d 4s Battery weight: 267g Flight time: 46 Mins Hover time: 42 Mins Charge time: 65 Watts approx. 80 mins Max Speed 21 m/s Max ascent speed 10 m/s Max wind resistance 12 m/s</p> <p>Main camera: CMOS 1/1.3 inch 48 MP 24 mm equivalent, FOV 82°, Aperture f/1.7 Medium telecamera: CMOS 1/1.3 inch 48 MP 70 mm equivalent, FOV 35°, Aperture f/2.8 Max Image Size 8064 x 6048 Photo Resolution 12 MP and 48 MP Video Resolution 4K up to 100 fps FHD up to 200 fps 2.7K vertical shooting at up to 60 fps FHD vertical shooting at up to 60 fps</p> <p>Hovering Accuracy Vision Positioning: Vertical: ±0.3' / 0.1 m Horizontal: ±1.0' / 0.3 m GNSS Vertical: ±1.6' / 0.5 m High-Precision Positioning System Horizontal: ±1.6' / 0.5 m</p> <p>Inclusions: Drone x 1 Drone Remote Controller x 1</p>	8	

		<p>Drone Intelligent Flight Battery x 1  Low-Noise Propellers (Pair) x 6  Battery Charging Hub x 1  Shoulder Bag x 1  Drone Gimbal Protector x 1  Type-C to Type-C Cable x 1</p> <p><b>Additional Inclusion:</b>  One (1) Remote Control (Android)  Two (2) Extra Flight batteries  One (1) Foldable Landing Gear  One (1) Set ND Filters  One (1) Extra propeller set (Low-Noise Propellers)  One (1) 64Gb Compatible Memory Card  One (1) <b>Hard Case</b> compatible with the drone  Training, CAAP Licensing support, and Aircraft Insurance</p>		
3	Set	<p><b>UAV with Multispectral + RGB Imaging System with Accessories</b></p> <p><b>Aircraft</b>  Technical Specifications:  Maximum Horizontal Speed: 21 m/s  Maximum Ascent Speed: 8 m/s  Maximum Descent Speed: 6 m/s  Maximum Wind Resistance: 12 m/s  Flight Ceiling: 6000m  Maximum Flight Time: 43min  Maximum Hover Time: 37min  Maximum Tilt Angle: 30°-35°  Hovering Accuracy: RTK, Horizontal: ± 0.1 m, Vertical: ± 0.1 m, GNSS, Vertical: ± 0.5 m  Vision Positioning: Horizontal: ± 0.3 m, Vertical: ± 0.1 m  Maximum Angular Velocity: 200°/s (Pitch)  Rotor Configuration: 4  Operating Temperature: -10 to 40°C</p> <p>Camera  Image Sensor: 4/3"-Type CMOS  Sensor Resolution: Effective: 20 Megapixel  20MP RGB &amp; 4 x 5MP Multispectral Camera  Green, Red, Red Edge &amp; Near Infrared  Focal Length: 24mm (35mm Equivalent)  Field of View: 84°  Maximum Aperture: f/2.8  Minimum Aperture: f/11  Minimum Focus Distance: 1m  ISO Sensitivity Range: 100 to 6400</p>	2	

		<p>Shutter Speed: Electronic Shutter, 1/8000 to 8 Seconds, Mechanical Shutter, 1/2000 to 8 Seconds</p> <p>Internal Recording Modes: H.264/MP4/MPEG-4, 3840 x 2160 at 30.00 fps [130 Mb/s], 1920 x 1080 at 30.00 fps [70 Mb/s]</p> <p>Still Image Support: DNG / JPEG, 20 MP (5280 x 3956)</p> <p>Photo Modes: Burst Shooting, Single Shot</p> <p>Gimbal Number of Axes: 3-Axis (Pitch (Tilt), Roll, Yaw (Pan)) Rotation Range: Mechanical Range.7, Pitch (Tilt): 180° (-135 to 45°), Roll: 90° (-45 to 45°), Yaw (Pan): 54° (-27 to 27°), Controllable Range, Pitch (Tilt): 125° (-90 to 35°) Follow Speed: Tilt: 100°/s Stabilization Accuracy: ±0.007°</p> <p>Vision/Sensing System Vision System: Downward / Upward / Forward / Backward / Left / Right Sensing System Capabilities: Forward, Measurement Range: 0.5 to 20 m, Detection Range: 0.5 to 200 m, Max Speed: 15 m/s Field of View: 90° (Horizontal) / 103° (Vertical), Backward, Measurement Range: 0.5 to 16 m Max Speed: 12 m/s, Field of View: 90° (Horizontal) / 103° (Vertical), Lateral, Measurement Range: 0.5 to 25 m, Max Speed: 15 m/s, Field of View: 90° (Horizontal) / 85° (Vertical), Upward, Measurement Range: 0.2 to 10 m, Max Speed: 6 m/s, Field of View: 100° (Vertical) / 90° (Horizontal) Downward, Measurement Range: 0.3 to 18 m, Max Speed: 6 m/s, Field of View: 130° (Vertical) / 160° (Horizontal)</p> <p>Operating Environment: Surface with Clear Patterns at &gt;15 lux Required Object Reflectivity: &gt;20%</p> <p>Remote Controller / Transmitter Control Method: Included Transmitter Operating Frequency: 2.4 GHz (2.400 to 2.4835), 5.8 GHz (5.725 to 5.850) Maximum Operating Distance: 9.3 Miles / 15 km Transmitter Power: 2.4/5.8 G: 33 dBm Transmitter I/O: 1x Mini-HDMI Output Battery Type: 1x Built-In</p>		
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		<p>Battery Chemistry: Lithium-Ion  Battery Capacity: 5000 mAh  Wi-Fi: Wi-Fi 6 (802.11ax) with MU-MIMO Support (2 x 2)  Bluetooth: 5.1  Mobile App Compatible: Yes: Android Only  Built-In Display Size / Type: 5.5" LCD  Display Resolution: 1920 x 1080  Display Brightness: 1000 nits / cd/m2</p> <p>Flight Battery  Battery Capacity: 5000 mAh / 77 Wh  Battery Configuration: 4 S / 15.4 V  Maximum Charging Power: 17.6 V  Charging Temperature: 41 to 104°F / 5 to 40°C</p> <p>Charger  AC Input Power: 100 to 240 VAC, 50 / 60 Hz at 2.5 A  Power Rating: 100 W</p> <p>General  GNSS Support: GPS, GLONASS, Galileo  Weight: 2.1 lb / 951 g (With Propellers)  2.3 lb / 1050 g Maximum for Takeoff</p> <p>1Year warranty and support</p> <p><b>Inclusions</b>  Three (3) Additional Compatible Flight Batteries  One (1) Charging Hub  100w USB-C Portable Charger/  Power Adapter  USB-C Cable</p>		
4	Set	<p><b>UAV with LIDAR + RGB Survey Camera with Accessories</b></p> <p><b>Aircraft (Drone)</b>  Dimensions (unfolded, without propellers)  810×670×430 mm (L×W×H)  Dimensions (folded, with propellers)  430×420×430 mm (L×W×H)  Diagonal Wheelbase: 895 mm  Weight (with single downward gimbal)  Without batteries: Approx. 3.77 kg</p> <p>With two TB65 batteries:  Approx. 6.47 kg  Single Gimbal Damper's Max  Payload: 960 g  Max Takeoff Weight: 9.2 kg  Operating Frequency  2.4000-2.4835 GHz  5.150-5.250 GHz (CE: 5.170-5.250</p>	1	

		<p>GHz) 5.725-5.850 GHz</p> <p>Transmitter Power (EIRP) 2.4000-2.4835 GHz: &lt; 33 dBm (FCC) &lt; 20 dBm (CE/SRRC/MIC)</p> <p>5.150-5.250 GHz (CE: 5.170-5.250 GHz): &lt; 23 dBm (CE)</p> <p>5.725-5.850 GHz: &lt; 33 dBm (FCC/SRRC) &lt; 14 dBm (CE)</p> <p>Hovering Accuracy (with moderate or no wind) Vertical: ±0.1 m (with vision positioning) ±0.5 m (with GNSS positioning) ±0.1 m (with RTK positioning)</p> <p>Horizontal: ±0.3 m (with vision positioning) ±1.5 m (with GNSS positioning) ±0.1 m (with RTK positioning) RTK Positioning Accuracy (RTK FIX) 1 cm + 1 ppm (horizontal) 1.5 cm + 1 ppm (vertical) Max Angular Velocity Pitch: 300°/s Yaw: 100°/s Max Pitch Angle: 30° Max Ascent Speed: 6 m/s Max Descent Speed (vertical): 5 m/s Max Tilted Descent Speed: 7 m/s Max Horizontal Speed: 23 m/s Max Flight Altitude: 5000 m When using the 2110s propellers and with the takeoff weight ≤ 7.4 kg.</p> <p>Max Wind Speed Resistance: 12 m/s Max Flight Time: 55 minutes</p> <p>Supported Gimbal Configurations Single downward gimbal Single upward gimbal Dual downward gimbals Single downward gimbal + single upward gimbal Dual downward gimbals + single upward gimbal Ingress Protection Rating: IP55</p> <p>Global Navigation Satellite System GPS + GLONASS + BeiDou + Galileo Operating Temperature -20° to 50° C (-4° to 122° F)</p> <p>Remote Controller</p>		
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		<p>Screen 7.02-inch LCD touchscreen; resolution: 1920×1200; max brightness: 1200 nits</p> <p>Weight Approx. 1.25 kg (without WB37 battery) Approx. 1.42 kg (with WB37 battery)</p> <p>Global Navigation Satellite System GPS + Galileo + BeiDou</p> <p>Built-in Battery Type: Li-ion (6500 mAh@7.2 V)</p> <p>Charging Type: Use the battery station or USB-C fast charger with a max power of 65 W (max voltage of 20 V).</p> <p>Charging Time: 2 hours</p> <p>Chemical System: LiNiCoAlO<sub>2</sub></p> <p>External Battery (WB37 Intelligent Battery) Capacity: 4920 mAh Voltage: 7.6 V Type: Li-ion Energy: 37.39 Wh Chemical System: LiCoO<sub>2</sub></p> <p>Ingress Protection Rating IP54</p> <p>Operating Time Built-in Battery: approx. 3.3 hours Built-in Battery + External Battery: approx. 6 hours</p> <p>Operating Temperature -20° to 50° C (-4° to 122° F)</p> <p>Operating Frequency 2.4000-2.4835 GHz 5.725-5.850 GHz</p> <p>Transmitter Power (EIRP) 2.4000-2.4835 GHz: &lt; 33 dBm (FCC) &lt; 20 dBm (CE/SRRC/MIC)</p> <p>5.725-5.850 GHz: &lt; 33 dBm (FCC) &lt; 14 dBm (CE) &lt; 23 dBm (SRRC)</p> <p>Wi-Fi Protocol Wi-Fi 6</p> <p>Wi-Fi Operating Frequency 2.4000-2.4835 GHz 5.150-5.250 GHz 5.725-5.850 GHz</p> <p>Bluetooth Protocol Bluetooth 5.1</p> <p>Bluetooth Operating Frequency 2.4000-2.4835 GHz</p> <p>Video Transmission Video Transmission System</p> <p>Antenna</p>		
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		<p>4 video transmission antennas, 2T4R</p> <p>Max Transmission Distance (unobstructed, free of interference) 20 km (FCC) 8 km (CE/SRRC/MIC)</p> <p>Max Transmission Distance (with interference)</p> <p>Low Interference and Obstructed by Buildings: approx. 0-0.5 km</p> <p>Low Interference and Obstructed by Trees: approx. 0.5-3 km</p> <p>Strong Interference and Unobstructed: urban landscape, approx. 1.5-3 km</p> <p>Medium Interference and Unobstructed: suburban landscape, approx. 3-9 km</p> <p>Low Interference and Unobstructed: suburb/seaside, approx. 9-20 km</p> <p>Vision System</p> <p>Obstacle Sensing Range Forward/Backward/Left/Right: 0.7-40 m Upward/Downward: 0.6-30 m</p> <p>FOV Forward/Backward/Downward: 65° (horizontal), 50° (vertical) Left/Right/Upward: 75° (horizontal), 60° (vertical)</p> <p>Operating Environment Surfaces with discernible patterns and adequate lighting (lux &gt; 15)</p> <p>Infrared Sensing System</p> <p>Obstacle Sensing Range 0.1-8 m</p> <p>FOV 30° (±15°)</p> <p>Operating Environment Large, diffuse, and reflective obstacles (reflectivity &gt; 10%)</p> <p>LED Auxiliary Light</p> <p>Effective Illumination Distance: 5 m</p> <p>Illumination Type: 60 Hz, solid glow</p> <p>FPV Camera</p> <p>Resolution: 1080p FOV: 142° Frame Rate: 30fps</p> <p>Flight Battery</p> <p>Capacity: 5880 mAh Voltage: 44.76 V Type: Li-ion Energy: 263.2 Wh Weight Approx. 1.35 kg Operating Temperature -20° to 50° C (-4° to 122° F) Ideal Storage Temperature</p>		
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		<p>22° to 30° C (71.6° to 86° F) Charging Temperature -20° to 40° C (-4° to 104° F)</p> <p>Intelligent Battery Station Dimensions: 580×358×254 mm (L×W×H) Net Weight: Approx. 8.98 kg Compatible Stored Items Eight TB65 Intelligent Flight Batteries Four WB37 Intelligent Batteries Input Voltage 100-120 VAC, 50-60 Hz 220-240 VAC, 50-60 Hz Max Input Power 1070 W Output Power 100-120 V: 750 W 220-240 V: 992 W Operating Temperature -20° to 40° C (-4° to 104° F)</p> <p><b>LIDAR + RGB Camera Module</b></p> <p>20MP 1-inch CMOS on a 3-axis stabilized gimbal Mechanical Shutter Integrates a Lidar module, an RGB camera, and a high-accuracy IMU High Efficiency - 2 km² covered in a single flight High Accuracy: Vertical Accuracy: 5 cm / Horizontal Accuracy: 10 cm Point Rate: 240,000 pts/s Supports 3 Returns Detection Range: 450 m (80% reflectivity, 0 klx) IP44 Ingress Protection Level Point Cloud LiveView</p> <p><b>Battery Station</b> Fully charge a battery in up to 70 minutes Built-in padlock holes for added security with optional padlocks Battery station securely closes via two built-in locking clasps Built-in carry handle Built-in pressure valve Air intake and air vent Status LEDs Firmware updates via USB Type-C</p> <p><b>Compatible Intelligent Flight Battery</b> Capacity: 5880 mAh Voltage: 44.76 V Type: Li-ion</p>		
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		Energy: 263.2 Wh Weight: Approx. 1.35 kg  <b>1 Year Warranty on Parts and Support</b>		
<b>5</b>	<b>Set</b>	<b>Analog Speech Lab – with Multimedia (35seaters)</b>  1 unit master console with table Size 24'x44"x30 (w x h x L)  1 unit stage carpet Size:4.5ft x 5ft L x 6" elevation  2units speaker with amplifier 100watts  35 units student cubicle with front glass Size: 18" Depth x 24" L x 48"H  35 units student control  36 units headset with microphone	<b>1</b>	
<b>6</b>	<b>Unit</b>	<b>Laptop</b>  13th Gen Intel Core i7-13620H Processor 2.4 GHz (24M Cache, up to 5 GHz, 14 cores: 6 P-cores and 8 E-cores)   16GB DDR5-4800 SO-DIMM, Max Capacity: 32GB, Support dual channel memory   512GB PCIe 4.0 NVMe M.2 SSD   15.6-inch, FHD (1920 x 1080) 16:9, Value IPS-level, Anti-glare display, sRGB:100%, Adobe:75.35%, Refresh Rate:144Hz, G-Sync, MUX Switch + NVIDIA Advanced Optimus   NVIDIA GeForce RTX 4050 Laptop GPU, 2420MHz* at 140W (2370MHz Boost Clock+50MHz OC, 115W+25W Dynamic Boost), 6GB GDDR6   Wi-Fi 6(802.11ax) (Dual band) 2*2 + Bluetooth® 5.2 Wireless Card   Windows 11 Home	<b>1</b>	
<b>7</b>	<b>Unit</b>	<b>4k Gasoline Engine with Transmission and Stand</b>	<b>1</b>	
<b>8</b>	<b>Unit</b>	<b>SMART/ Android TV 65inches</b>  Resolution: 4K (3,840x2,160) Connectivity: 3 USB: 2 x USB-A Product type: QLED Display: Screen Size: 65" Refresh Rate: 60Hz <u><b>Video:</b></u> Picture Engine: Quantum Processor Lite 4K HDR: Quantum HDR	<b>11</b>	

		<p> HDR 10+: Support  AI Upscale: 4K upscaling  Contrast: Dual LED  Micro Dimming: Supreme UHD Dimming  Contrast Enhancer: Yes  Motion Technology: Motion Xcelerator  Smart Calibration: Basic  Filmmaker Mode (FMM): Yes  <b>Audio:</b>  Object tracking Sound: OTS Lite  Q-Symphony: Yes  Sound Output (RMS): 20W  Speaker type: 2CH  Adaptive Sound: Yes  <b>Smart Service:</b>  Web browser: Yes  Smart Things Hub/Quick Remote: Yes  <b>Smart Feature:</b>  Multi Device Experience: Mobile to TV, TV initiate mirroring, Sound mirroring, wireless TV ON, Tap View  Multi view: up to 2 videos  Ambient Mode: Ambient  NFT: Nifty Gateway  Apple Airplay: Yes  Daily+: Yes  <b>Game Feature:</b>  Auto Game Mode (ALLM): Yes  Game Motion Plus: Yes  Super Ultra Wide Game View: Yes  Mini Map Zoom: Yes  HGIG: Yes  <b>Tuner/Broadcasting:</b>  Digital Broadcasting: ISDB-T  Analog Tuner: Yes  TV Key Support: Yes  <b>Connectivity:</b>  HDMI: 3  USB: 2 x USB-A  HDMI (High Frame Rate): 4K 60Hz (for HDMI 1/2/3)  Ethernet (LAN): 1  Digital Audio Out (Optical): 1  RF In (Terrestrial/Cable input): 1/1 (Common Use for Terrestrial)/0  Wi-Fi: Yes (WiFi 5)  Bluetooth: Yes (BT5.2)  Anynet+(HDMI-CEC): Yes  HDMI Audio Return Channel: eARC/ARC  Design: AirSlim  <b>Accessibility:</b>  Accessibility-Voice Guide: UK English, Chinese, Korean, Indonesian, Vietnamese </p>		
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		<p>Low Vision Support: Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Color Inversion, Grayscale, Auto Picture Off</p> <p>Hearing Impaired Support: Closed Caption (subtitle), multi-output audio, sign language zoom</p> <p>Motor Impaired: Slow button, repeat, remote control app. For all.</p> <p><b>Power &amp; Eco Solution:</b>  Eco Sensor: Yes  Power Supply: AC100-240V, 50/60Hz  Power consumption 175W  Auto Power off: Yes  Auto Power Saving: Yes  Package size (WxHxD):  1612x950x164 mm</p> <p><b>Accessory:</b>  Remote Controller Model: TM2360E  Slim Fit Wall-mount support: Yes  Optional stans support: Yes  Mini Wall Mount support: Yes  User Manual: Yes  Full motion slim wall mount: Yes  Webcam Support: Yes  Zigbee/Thread Module: Built in  Power cable: Yes</p> <p>Wall brackets included</p>		
9	Unit	<p><b>Engine Scanner</b></p> <p>Display/size: Color touchscreen/5inch  Bluetooth/ handheld: No/Yes  I/M Readiness Test: Yes  Displays live data: Yes  Number of Keys: 4  Warranty: 2 years  Size 9.1 x 4.9 x1.4 inches  Weight: 1.6 pounds</p> <p>10.1in Touch Screen, Android 10.0, 6300mAh, 2.0GHz and 4 core, BT5.1 Bluetooth, Dual-wifi 2.4GHz/ 5GHz, 4GB RAM and 64GB ROM, 8.0MP camera</p> <p>OEM topology mapping  + compatibility with 12V &amp; 24Vdiesel heavy trucks, J2534 Programming  +ECU Online Coding, All System Diagnostics  + Bi-directional control  +Over 50+ maintenance features  +Auto Auth for FCA SGW  +CANFD &amp; DOIP, Power Balance Test  +Drive Test  +Adaptation</p>	3	



		<p>+Matching +Flash Hidden Functions + Setting &amp; Changeover +Modification +Offline Coding + Initialization + Adaptation + Matching+ Customization + Personalization.</p> <p>Engine Scanner, Smartlink C, US/UK/EU Plug, HD15F to OBDII 16 Connector, Type-A to Type-B USB cable, Type-A to Type-C USB cable, PIN envelope, Quick start Guide, User Manual. 12 Connectors &amp; 4 Cables: BENZ-38, B-20, HONDA-3, TOYOTA-17, TOYOTA-22, GV-12, BZ-14, FORD 6+1, NISSAN14+16, CHRYSLER-6, Network Cable, KIA- 20, CIGARETTEER, MH12+16, Power cable clips, Fuse.</p> <p>Warranty: 2 years</p>		
<b>10</b>	<b>Unit</b>	<p><b>Lab center table with end sink – 10 seaters (Dimension: 3.5M (L) x 1.0M (W) x 0.9M (H))</b></p> <ul style="list-style-type: none"> <li>• Countertop: 18mm solid core phenolic resin laboratory grade</li> <li>• Carcass: 18mm MOM sink base cabinet &amp; open shelves</li> <li>• Framing: Powder coated metal tubular w/ adjustable leveler</li> <li>• Sink: polypropylene laboratory sink</li> <li>• Faucet: Powder coated goose neck faucet solid brass w/ serrated nozzle</li> <li>• Gas: Powder coated dual outlet serrated nozzle</li> <li>• Drying rack: polypropylene laboratory pegboard 27- pegs</li> <li>• Reagent rack: powder coated metal tubular framing &amp; phenolic shelves with 8mm SS-304 rod</li> </ul> <p>Hardware:</p> <ul style="list-style-type: none"> <li>• Adjustable plinth foot</li> <li>• Electrical outlet – 2 units</li> <li>• Powder coated outlet pedestal box</li> </ul>	<b>2</b>	

		<ul style="list-style-type: none"> <li>Aluminum Grab Handle</li> <li>Concealed hinges</li> </ul> <p>Inclusion: 10 laboratory stools Installation included</p>		
<b>11</b>	<b>Unit</b>	<b>Benchtop Furnace</b>  Specifications: Max Temp.: 1400°C Capacity: 4.5L Continuous working temp: ≤ 1300°C Heating element: SiC heating rod Thermal couple: S type Chamber material: Alumina ceramic fiber Heating rate: 0~30°C/mm, suggest to be 10°C/min Thermal control accuracy: ±1°C Temperature uniformity: ±5°C max power: 4kW Other features: * safety interlock with automatic power off when furnace door is opened * PID automatic control via current limiting phase angle fired resistor * Power control with 30 segments programmable English labels (switches, buttons, etc.) * Standard product certification Standard warranty	<b>1</b>	
<b>12</b>	<b>Unit</b>	<b>Pressure Canner</b>  Specifications: Capacity: 41L Other features: * Extra heavy duty cast aluminum construction * Stay-cool bake lite top handle * Geared steam gauge * Automatic venting for safety (safety control valve & over pressure plug) * Pressure regulator weight settings of 5, 10, 15 psi * Smooth, easy to clean satin finish * Double thickness edges for additional protection on points of heaviest wear * with English User's Manual Standard product certification Standard warranty	<b>3</b>	
<b>13</b>	<b>Unit</b>	<b>Mechanical Can Sealer</b>  Specifications: Power supply: 220V (50/60Hz) Tank diameter: 45 ~ 110mm Other features: * Rust and corrosion resistant treated surface * Manual operation * Suitable for can height range of 39-200mm * Simple operation with an on/off switch and foot switch to start sealing * with English User's Manual Standard product certification Standard warranty	<b>1</b>	
<b>14</b>	<b>Unit</b>	<b>Pasteurizer</b>  Specifications: Capacity 75L Material: SUS 304 stainless steel Power supply: 220V (50/60Hz) Power	<b>1</b>	

		consumption: 2-9kW Temperature: 0 ~ 100°C Operation: Automatic control, with LED control panel Warranty: 3 years (core components) Other features: * motorized stirrer* Adjustable speed and temperature* Three layered tank: beverage-hot water-insulation* English labels (switches, buttons, etc.)* English User's manual* Standard product certification* Standard warranty		
<b>15</b>	<b>Unit</b>	<b>Benchtop Water Activity Meter</b>  Specifications: Working temp: -10 ~ 50°C Water activity: 0 ~ 1.000 aw Working humidity: 0 ~ 95% Display: LCD Measurement time: 5 ~ 40 mins Measurement Point: 1 ~ 4 Temp. coefficient: ≤ 0.0005/°C Activity Repeat ability: ≤ 0.008 Correction mode: multi-point calibration, single-point calibration Print function: Print at the end of measurement; real-time print Interface: USB Power supply: 220V (50/60Hz) Other features: * English labels (switches, buttons, etc.)* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>16</b>	<b>Unit</b>	<b>Anaerobic System/Vacuum Glove Box</b>  Specifications: Dimension (WxDxH): 420mm x 440mm x 450mm Main body: Transparent reinforced acrylic, sealed lid Valve: 2, Φ8mm / Φ14mm (for intake and exhaust) Pressure resistance: approx. 133 Pa Other features: * Includes 1 pair of gloves* English labels* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>17</b>	<b>Unit</b>	<b>Benchtop Vacuum Pump</b>  Specifications: Pump head: 1 Speed of Evacuation: 30 L/Min Ultimate Vacuum: 200 mbar Pressure: ≥ 30 Positive, Positive or negative pressure Inlet: φ6 mm Outlet: φ6 mm Working Temp: 7 ~ 40°C Noise Level: <60 dB Motor Power: 160W Power supply: 220V/50/60Hz Diaphragm: Imported Rubber Other features: * English labels* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>18</b>	<b>Unit</b>	<b>Differential Scanning Calorimeter</b>	<b>1</b>	

		<p>Specifications: DSC range: 0 ~ ±600mW Temperature range: -170 ~ 650 °C Heating rate: 0.1 ~ 80 °C / min Temperature resolution: 0.001 °C Temperature fluctuations: ±0.01°C Temperature repeatability: ±0.1°C DSC range: 0 ~ ±600mW DSC resolution: 0.001mW DSC sensitivity: 0.001 mW Display: 7 inches LCD touch screen display Data interface: standard USB connector Product standard: ISO/TR10837:1991, ASTM D3895-1998, ASTM E 967, ASTM E 968, ASTM E 793, ASTM D 3895, ASTM D 3417, ASTM D 3418, ISO 11357-6 Other features: * English labels* Standard product certification* Standard warranty</p>		
<b>19</b>	<b>Unit</b>	<p><b>Forced Air Drying Oven</b></p> <p>Capacity: 43L Circulation: Forced air and Natural convection Dimensions: Internal (W*D*H): 350mm * 359mm * 350mm Dimensions: External (W*D*H): 640mm * 500mm * 600mm Temp range: RT+10-300 °C Temp fluctuation: ±1 Temp resolution: ±0.1 Uniformity: ≤Max. Temp. ±3.5°C Sensor: Shelves: 2 pcs./adjustable Display: LCD , real-time display of parameters Running function: fixed Value running, timing running Interior finish: High-quality corrosion-resistant stainless steel Exterior finish: Galvanized with antimicrobial powder coating Safety device: Leakage protector; Over-temperature alarm Power supply: 220V (50/60Hz) Other features: * With observation window* Anti-scalding door handle* With limited temperature control sound and light alarm system* Microprocessor controller* English labels* Standard product certification* Standard warranty</p>	<b>1</b>	
<b>20</b>	<b>Unit</b>	<p><b>UV-Vis Spectrophotometer</b></p> <p>Specifications: Optical system: Single-beam Wavelength range: 190 ~ 1000nm Bandwidth: 2nm Wavelength repeatability: &lt;0.3nm Wavelength accuracy: ±1nm Wavelength setting: Auto Photometric accuracy: ±0.5% Photometric repeatability: 0.2% Photometric range: -0.3 ~ 3A / 0 ~ 200%T</p>	<b>1</b>	

		<p>Stray light: <math>\leq 0.05\%</math> T stability: <math>\pm 0.001 \text{ A/h}</math> @ 500nm Display: 128*64 LCD Detector: Silicon photodiode Light source: Tungsten lamp &amp; D2 lamp Output: USB Port &amp; parallel port Power supply: 220V AC Inclusions: 4 pcs. 1cm Glass cuvette 2 pcs. 1cm quartz cuvette Dust cover Other features: * English labels * English User's Manual * Standard product certification * Standard warranty</p>		
<b>21</b>	<b>Unit</b>	<p><b>Vacuum Oven</b></p> <p>Capacity: 25L temp. Range: 1- ~ 200°C Ambient temp: 5 ~ 40 °C Temp. fluctuation: <math>\pm 1^\circ\text{C}</math> shelves: at least 2 Vacuum degree: &lt;133 Pa Power supply: 220V AC (50/60Hz) Other features: * PID microprocessor temp control with LCD display * Polished stainless steel inner chamber * Silicone rubber seal</p>	<b>1</b>	
<b>22</b>	<b>Unit</b>	<p><b>Colorimeter</b></p> <p>Specifications: Type: Economical (small aperture) Color: Green Geometry: D/8 (Diffused illumination, 8° viewing) SCI (specular component included), SCE (specular component excluded) Repeatability: Chromaticity Value: Standard deviation <math>\Delta E^*ab \leq 0.04</math> Average: <math>dE^*ab \leq 0.05</math> Max.: <math>dE^*ab \leq 0.08</math> (When a white tile is measured 30 times at 5 seconds interval) Inter-instrument agreement: <math>\Delta E^*ab \leq 0.4</math> Light source: LED Sensor: CMOS Spectroscopic method: Integrated optics Wavelength range: 400-700nm Wavelength interval: 10nm Reflectance Range: 0-200% Reflectance Resolution: 0.01% Measurement time: About 1 sec. Storage capacity: 100 pieces of data Language: English Battery: Rechargeable, 8,000 times continuous tests, 3.7V/3000mAh Color Space and Indices: Reflectance, CIE-Lab, CIE-LCh, Hunter Lab, CIE-Luv, XYZ, Yxy, RGB, Color Difference (<math>\Delta E^*ab</math>, <math>\Delta E^*cmc</math>, <math>\Delta E^*94</math>, <math>\Delta E^*00</math>), Whiteness Index (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), Yellowness</p>	<b>1</b>	

		<p>Index(ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness  Index(My,dM), Staining Fastness, Color Fastness, Tint(ASTM E313-00), Color Density CMYK(A,T,E,M), Metamerism Index Milm, Munsell, Opacity, Color Strength  Software:  Color analysis software (Windows)*  Display: IPS full color screen ,2.4 inches  English User's manual* Flour measuring device* Liquid measuring device* Microprinter Other features:*  English labels* Standard product certification* Standard warranty</p> <p>English labels* Standard product certification* Standard warranty</p>		
<b>23</b>	<b>Unit</b>	<p><b>Munsell Book of Color</b></p> <p>Specifications:* Glossy "master atlas" of Munsell color* Complete range of colors creating a physical model of the Munsell Color Space* <math>\geq 1,600</math> removable high-gloss color sample*  Language: English</p>	<b>2</b>	
<b>24</b>	<b>Unit</b>	<p><b>Water Bath</b></p> <p>Specifications: Temperature range: -5 ~ 100°C Capacity: 6LTank material: SUS 304 Stainless steel Temp. accuracy: <math>\pm 0.1^{\circ}\text{C}</math> Time range: 1 ~ 9999mins Power supply: 220V AC (50/60Hz) Other features:* With heating and cooling* PID controller* Over-temperature alarm* Protection device from overheating and overcurrent* English labels* English User's manual* Standard product certification* Standard warranty</p>	<b>1</b>	
<b>25</b>	<b>Unit</b>	<p><b>Fume Hood</b></p> <p>External size (WxDxH): 1220mm * 850mm * 2150mm Internal size (WxDxH): 1100mm * 730mm * 745mm  Max opening: 520mm Work surface height: 750mm Blower: Buil-in centrifugal blowers, adjustable speed  Air velocity: 0.3 ~ 0.8 m/s Noise: <math>\leq 68\text{dB}</math> LED Lamp: Intensity <math>\geq 900\text{Lx}</math> UV Lamp: emission of 253nm for decontamination Front window: tempered glass, anti-UV  Exterior body: Electro-galvanized steel with anti-bacteria powder coating Work table: chemical resistant, solid physicochemical</p>	<b>2</b>	

		board Power supply: 220V AC (50/60Hz) Other features: * Water tap* Gas tap* Sink* Base stand, 4 casters.		
<b>26</b>	<b>Unit</b>	<b>Analytical Balance, 210g Capacity</b>  Weighing capacity 210g Resolution: 0.0001g Stable time: ≤3s Repeatability: ±0.0002g Liner: ±0.0003g Display: LCD (white back light with black font) Cal. Weight: External Calibration	<b>1</b>	
<b>27</b>	<b>Unit</b>	<b>Air Oven</b>  Cycle Mode: Dual Convection: Force Air and Natural convection Capacity: 43liters Temp Range: RT+10~300 °C Temp Resolution: 0.1 °C Temp. Fluctuation: ±1 °C Temp. Uniformity: ≤Max. Temp. ±3.5°C Shelves: 2pcs/adjustable Consumption: 1300W	<b>1</b>	
<b>28</b>	<b>Unit</b>	<b>Laboratory Autoclave</b>  Working Chamber Size (Ø x D )/Capacity: 400 x 600 mm/53 L Carrier (Ø x D): 1 of 350 x 550 mm Gross Dimension/Weight: 970 x 720 x 1290 mm/97 kg	<b>1</b>	
<b>29</b>	<b>Unit</b>	<b>Can Sealing Machine</b>  Automatic; Electric 220V; 220V-SOHZ	<b>1</b>	
<b>30</b>	<b>Unit</b>	<b>Universal Drying Oven</b>  digital-based, Temperature range up to +300 °C; Capacity up to 32 to 1060 litres volume; Temperature display, timer set up, high-quality, corrosion-resistant and easily cleanable stainless steel for the working chamber and housing	<b>1</b>	
<b>31</b>	<b>Unit</b>	<b>Spectrophotometer</b>  Wavelength Range: 190- 1100nm; Spectral Bandwidth: 2.0nm Wavelength Accuracy: ±2nm ; Photometric Accuracy. ±0.5%T	<b>1</b>	
<b>32</b>	<b>Unit</b>	<b>Water Activity Meter</b>  Operating temp.: 0° C to 50°C; with case Range 0-1.0aw Resolution ±0.01aw	<b>1</b>	

		Accuracy $\pm 0.02$ aw Sampling time: 5 mins.		
33	Unit	<b>Laboratory Table</b>  <b>Dimension: 3.5M (L) x 1.0M (W) x 0.9M (H)</b> <ul style="list-style-type: none"> <li>Countertop: 18mm solid core phenolic resin laboratory grade</li> <li>Carcass: 18mm MOM sink base cabinet &amp; open shelves</li> <li>Framing: Powder coated metal tubular w/ adjustable leveler</li> <li>Sink: polypropylene laboratory sink</li> <li>Faucet: Powder coated goose neck faucet solid brass w/ serrated nozzle</li> <li>Gas: Powder coated dual outlet serrated nozzle</li> <li>Drying rack: polypropylene laboratory pegboard 27-pegs</li> <li>Reagent rack: powder coated metal tubular framing &amp; phenolic shelves with 8mm SS-304 rod</li> </ul> Hardware: <ul style="list-style-type: none"> <li>Adjustable plinth foot</li> <li>Electrical outlet – 2 units</li> <li>Powder coated outlet pedestal box</li> <li>Aluminum Grab Handle</li> <li>Concealed hinges</li> </ul>	1	
34	Unit	<b>Incubator</b>  Feature Digital PID Control Tempered safety glass window Dust-free gravity- flow convection Safety and convenience Specification Dimensions inner: 400 x 400 500 Outer: 550 x 610 x 850 Capacity: 80 Temperature range: ambient+15°C to 250°C Set accuracy: +1.0°C Uniformity: +5.0°C at 120°C Heater: 1.5kw Display: LED 4 Digits display Controller: PID Multi-Function Controller Alarm, Auto Tuning Timer: 99 min 59 sec/ 99hr 59min/99days 23ours /Continuous selectable Material exterior: stainless steel Exterior: Epoxy powder coated steel Shelves: 2EA Door: tempered	1	



		glass window with silicone Packing (model without glass door available) Insulation: ceramic and glass wool Safety: over heat protector over current & leakage breaker Electric supply: 110v, 60Hz or 220V 50/60Hz		
<b>35</b>	<b>Unit</b>	<b>Drying Oven</b>  digital-based, Temperature ranges up to +300 °C; Capacity up to 32 to 1,060 litres volume; Temperature display, timer set up, high-quality, corrosion-resistant and easily cleanable stainless steel for the working chamber and housing	<b>1</b>	

### Lot 2 – MEDICAL/DENTAL EQUIPMENT

<b>1</b>	<b>Set</b>	<b>Sam Skeleton with Muscles and Ligaments on Hanging Stand</b> <ul style="list-style-type: none"> <li>• Hand-painted muscle origins and insertions</li> <li>• Flexible spine and ligaments</li> <li>• Slipped disc between the 3rd and 4th lumbar vertebrae</li> <li>• Protruding spinal nerves and vertebral arteries</li> <li>• 3-part assembled skull with individually inserted teeth</li> <li>• Made from a durable, unbreakable synthetic material</li> <li>• Top quality, life size natural casting</li> <li>• Close to the realistic weight of around 200 bones Final assembly carried out by hand</li> <li>• On a stable metal stand with 5 casters (painted white)</li> <li>• Can be removed from stand</li> <li>• Full flexibility of limbs on left side, right side has full flexibility of knee and hip with limited flexibility of elbow and shoulder</li> </ul> Easy to remove limbs  Provided with metal stand and transparent dust cover. 3-year parts warranty. Compatible with Anatomy App.	<b>2</b>	
<b>2</b>	<b>Set</b>	<b>Complete Nursing Skills Manikin - Light</b>  Complete lifelike range of motion, realistic patient positioning, and non-pinching joints - moves like a person.	<b>2</b>	

		<ul style="list-style-type: none"> <li>• Lightweight - approximately 28 lbs.</li> <li>• Full-size adult manikin - measures 58 in.</li> <li>• Overall female appearance</li> <li>• Converts to male with removal of wig and attachment of male genitals</li> </ul> <p><b>Visual Inspection:</b></p> <ul style="list-style-type: none"> <li>• Normal and Cancerous Mole</li> <li>• Stage 1 Sacral Ulcer</li> <li>• Dilated and Constricted pupils</li> <li>• Reddened Skin Folds</li> </ul> <p><b>Patient Care Simulation:</b></p> <ul style="list-style-type: none"> <li>• Bandaging and Wound Dressing</li> <li>• Bed Baths</li> <li>• Clothing Changes</li> <li>• Denture Placement and Removal, Upper and Lower</li> <li>• Ear Canal Irrigation, Otic Drops, and Hearing Aid Placement</li> <li>• Eye Irrigation</li> <li>• Finger and Toe Manipulation with Bandaging - Flexible and Individually Molded</li> <li>• Hair Care Washing and Combing</li> <li>• Intramuscular Injection Sites: Arm, Thigh, Buttock</li> <li>• Oral and Nasal Hygiene: Lavage, Gavage, and Suctioning</li> <li>• Ostomy Care: Ileostomy and Colostomy Tissue</li> <li>• Maintenance and Appliance Application, Lavage, and Suctioning</li> <li>• Patient Positioning</li> <li>• Patient Transfer Techniques</li> <li>• Pericare</li> <li>• Tracheostomy Care, Lavage and Suctioning</li> </ul> <p><b>also includes:</b></p> <ul style="list-style-type: none"> <li>• Gastrostomy Procedures, Lavage and Gavage</li> <li>• Enema Administration, Female Only</li> <li>• Urinary Catheterization, Female and Uncircumcised Male</li> <li>• Pap Smears and Douching</li> <li>• Prostate Exam, Stage B</li> <li>• Nasogastric Tube Placement</li> <li>• Internal Fluid Reservoirs</li> </ul> <p>Five-Year Warranty. Ship Weight: 32 lbs. Dimensions. (inches): 11 x 37 x 24</p>		
3	Set	<b>CPR Mannequin/ Manikin Model (Half Body)</b>	2	

		<p>Kit Includes:</p> <ul style="list-style-type: none"> <li>- (1) Adult Manikin</li> <li>- (1) Child Manikin</li> <li>- (1) Infant Manikin</li> <li>- (1) Nylon Carrying case</li> <li>- (10) Adult face-shield/ lung bags</li> <li>- (10) Child face-shield/ lung bags</li> <li>- (10) Infant face-shield/ lung bags</li> </ul> <p>Adult, pedia, infant and family pack CPR Manikins Weight: 8.1pounds Color: Medium Tone and Dark Tone with LED Indicator</p>		
<b>4</b>	<b>Set</b>	<p><b>ECG Machine 3-Channel</b></p> <ul style="list-style-type: none"> <li>• Ultra-compact and lightweight design</li> <li>• High resolution color touch screen</li> <li>• Comprehensive filters &amp; amp; anti-noise technology</li> <li>• Enhanced powerful technical specifications provides reliable signal quality</li> <li>• 12-lead simultaneous acquisition and display</li> <li>• Support linear / 2D barcoded scanner</li> <li>• Signal quality identification</li> <li>• Long time sampling</li> <li>• Large storage capacity</li> <li>• Support USB flask and micro SD to extend memory</li> <li>• Built-in rechargeable Li-Ion battery</li> <li>• Bi-directional communication with SE-1515 Data Management System</li> <li>• LAN/build-in Wi-Fi (optional) connections</li> <li>• Multi-formates reports export (optional)</li> <li>• Support external printer via USB port</li> </ul>	<b>1</b>	
<b>5</b>	<b>Set</b>	<p><b>Birthing Simulator</b></p> <p>Includes: Birthing Simulator Detachable, padded stomach cover with advanced insert for caesarian section Inflatable uterus insert for Leopold Maneuver including cover that can be cut for caesarian section Birth canal (portio, cervix, vulva)</p>	<b>2</b>	

		Fastening belt Lubricant Amniotic fluid and (100) inserts Assembly kit Fully articulating fetal baby Fully articulating fetal baby (19.29"/49cm;2.3lb./1.06kg) Umbilical cord Placenta		
6	Unit	<b>Biosafety cabinet level II (Class II A2)</b>  Internal size: 1300mmW x 520D x 640mm H External size: 1465mm W x 760mm D x 2200mm Tested Opening Maximum opening 470mm:inflow velocity: <0.5m/s; down flow velocity: 0.25~0.40m/s Cleanliness level: ISO level 4 Filters: ULPA *2pcs Filtration efficiency: ≥99.9995%,@0.12µm	1	
7	Unit	<b>Chemical/ solvent cabinet with ducting and exhaust system</b>  1200mm W x 500mm D x 2100mm H	1	
8	Unit	<b>Colony Counter</b>  Specifications: Digital display: 3- or 4-digit LED Display Power Supply: AC 120-240 V (50/60Hz) Lamp: 50W Counter capacity: 0 – 9999 Counting plate diameter: φ155mm Magnification: 3x-9x Other features:* With sound indicator for correct counting* Special pen* Magnifier flexible arm* Standard product certification* Standard warranty	1	
9	Unit	<b>Soxhlet Fat Extractor with Recirculating Chiller</b>  No. of extracted sample per batch: 6 Controller: 4.3-inch LCD touch screen Electric heating power: 1000W temp control range: RT +5 ~ 280°C Temp. accuracy: ±1°C Mode of heating: aluminum module heating Extraction sample volume: generally 2 ~ 5g, depending on sample Solvent cup volume: 80mL Warming up time: Approx.. 10 min Measuring range: 0.-100% Solvent recovery: >80% Other features:* shortened extraction time 20~80% *with temperature sensor, high temperature control	1	

		precision and good uniformity* Built-in circulating water pipeline*		
<b>10</b>	<b>Unit</b>	<b>Kjeldahl Protein Analyzer</b>  Sample tube type: diameter around $\phi 42\text{mm}$ Measure range: 0.1mg ~ 240mg N Analysis time: 5 ~ 10mins/sample Recovery: $\geq 99.5\%$ Sampling: Solid $\leq 5\text{g}$ ; Liquid $\leq 20\text{ml}$ Burette accuracy: 2 $\mu\text{L}$ /step Reproducibility: Average value relative error $\pm 0.5\%$ Steam generator temp monitor: Yes Condenser material: anticorrosion metal Acid, alkali, and dilute water adding quantified: Yes Automatic Titration cup discharge and clean: Yes Auto receiver solution adding: Yes Safety door: Yes Data storage capacity: 1000 Power supply: 220V AC (50/60Hz) Other features: * Automatic distillation and titration functions designed based on classic Kheldahl nitrogen determination method* English labels* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>11</b>	<b>Unit</b>	<b>Refrigerated Centrifuge</b>  Max. Speed: 15,000rpm (200-15,000rpm) in 100rpm increments Max. RCF: 21,380 $\times g$ , step: 10 $\times g$ Capacity: 1.5/2mL $\times 24$ , 0.5mL $\times 36$ , PCR8 $\times 4$ , 5mL $\times 12$ , 5mL $\times 18$ Temperature setting: -20 $^{\circ}\text{C}$ - 40 $^{\circ}\text{C}$ Acceleration and deceleration time: 25s $\uparrow$ 25s $\downarrow$ Motor Type: DC brushless motor Safety Performance: Dual door lock, over-speed detection, over-temperature detection with Internal diagnosis system Power Requirements: 220V, 60Hz Noise: $\leq 56\text{dB}$ Dimensions(mm): 332(Width) $\times$ 553(depth) $\times$ 283(height) Weight: 30kg	<b>1</b>	
<b>12</b>	<b>Unit</b>	<b>Semi-micro Kjeldahl Nitrogen Equipment</b> Heater Capacity: (VV):200 6 stepless variable type Width: 600mm; Depth: 220mm; Height: 560mm Exhaust tube Included; Accessories: Kjeldahl flask: capacity 150mL with 6 bottles	<b>1</b>	
<b>13</b>	<b>Unit</b>	<b>Crude Fat Analyzer</b>  emp. Range: RI +5 $^{\circ}\text{C}$ -250 $^{\circ}\text{C}$ ; Measuring Range: Grain, feed,	<b>1</b>	

		grease and various fat products with oil content in the range of 0.5%-60% Temperature Control Mode: Independent temperature control Capacity 6pcs/batch; Solvent Recovery: Automatic solvent recovery with valve Power Supply: AC 220V + 10%, 50HZ; External Size(W*D"H):		
<b>14</b>	<b>Unit</b>	<b>Microbiological incubator</b>  45 L capacity, Temperature range: RT+5~70 °C Circulation Mode: Natural Convection	<b>1</b>	
<b>15</b>	<b>Unit</b>	<b>Ultrasonic Scaler</b>  Optic with light Power supply-AC 100V-240V AC 50/60Hz Frequency-50Hz Capacity-60L/20Layers Disinfection time-15min With 1 year warranty	<b>1</b>	
<b>16</b>	<b>Unit</b>	<b>Dental Chair</b>  LED Lamp with sensor: Fitted with 6 light sources and sensor  <ul style="list-style-type: none"> <li>• Ceramic cuspidor: rotatable 180° and removable</li> <li>• Multi-functional foot pedal</li> <li>• Big Main tray: Big size with 6-slotted tool holder &amp; built-in film viewer</li> <li>• Elegant side box</li> <li>• Aluminum suction heads: assistant tray fitted strong &amp; weak suction heads made of aluminum</li> <li>• USA Air &amp; Water tubes</li> <li>• Microfiber leather upholstery</li> <li>• Flash &amp; adjustable light arm</li> <li>• Double arm rest</li> <li>• Stool chair with metal legs</li> <li>• Folding assistant tray</li> <li>• Built-in LED viewer</li> <li>• Accessories include: Built-in scaler + lightcure + intraoral camera _ monitor</li> </ul>	<b>1</b>	
<b>17</b>	<b>Unit</b>	<b>Dental Training Mannequin/ Dental Simulator</b>  LED operating light. Mannequin covered with silicone mask. Double articulating head neck.	<b>2</b>	

		<p>Jaw- lateral and protrusive movement. Magnet or screw type of jaw.</p> <p>Fits any type of typodont.</p> <p>Can be reclined with lateral movement for the head and the jaw.</p> <p>Nas a base unit support.</p> <p>Material used are plastic, aluminum and stainless steel.</p> <p>Safety positioning lock for stability and balance.</p> <p>Stainless swing metal tray</p> <p>Working tray in addition to the main working table.</p> <p>Main control panel system for 1 high speed attachment, 1 low speed attachment and 1 three-way syringe.</p> <p>Assistant panel control system for 1 syringe, 1 saliva ejector, 2 extra empty holder .</p> <p>Foot control in all sides function.</p> <p>Water flow system with 2 clear plastic tempered bottle.</p> <p>Pressure gauge for safety control reading.</p> <p>Base with option of castor wheels or fixed on the floor.</p> <p>Dentist's stool with metal foot.</p> <p>220V / 60 Hz.</p>		
<b>18</b>	<b>Unit</b>	<p><b>Peri-Apical X-Ray machine (Wall Mounted)</b></p> <p>Rating voltage: ac 230v Frequency: 50/60hz Maximum power. 900va</p> <p>Focal spot: 0.7mm Tube voltage: 70kv 10%</p> <p>Radiation leakage: 1meter 0.14mgy/h</p> <p>Exposure time range: 0.06-2.0s</p> <p>Anode current: 7ma 2096</p> <p>With 1 year warranty on parts and service</p>	<b>1</b>	
<b>19</b>	<b>Unit</b>	<p><b>Wireless Endo Motor</b></p> <ul style="list-style-type: none"> <li>- Cordless endodontic handpiece</li> <li>- with torque and auto-reverse</li> <li>- power supply: AC 230V 50/60Hz and battery pack</li> <li>- Max torque: 4Ncm</li> <li>- Charge/ continues use 90 min/1.2h</li> <li>- speed range 100-2,500min</li> <li>- slim head and neck</li> <li>- 90 minutes quick charge with non-contact type charger</li> <li>- Large LCD panel</li> <li>- Lightweight</li> </ul> <p>Smart auto-reverse and alarm function</p> <p>-At least 5programs for different file systems</p> <p>With 1 year warranty</p>	<b>1</b>	

<b>20</b>	<b>Unit</b>	<b>Fabricated Stainless Steel Necropsy Table</b>  Technical Specifications 48" wide x 96" long (122cm x 244cm) • Stainless steel top with raised edge • Stainless steel base construction • One drain hole • 2-way tilt • 6" swivel casters • Self-contained power unit (available 110V/60 cycle or other power configurations for international use) • Lowered height 15" (38cm) • Raised height 48" (122cm) • Rated for 2,500 lbs. (1,134 kg)	<b>2</b>	
<b>21</b>	<b>Unit</b>	<b>Analytical Balance, 120g Capacity</b>  Capacity (g): 120 • Capacity (kg): 0.12 • Draft Shield Size: 240mm*190mm*265mm** • Dimensions W", H", D": Display: LCD • Readability (g): 0.0001 • Linearity (g): ±0.0003 • Repeatability (g): ±0.0002 • Weighing units: g, mg, ct, oz, lb. • Stabilization time: ≤ seconds • Power (VAC): 110/220 VAC • Cal. Weight: Internal Calibration Warranty • One (1) year on parts and services under normal use Delivery • 30-60 days upon Receipt of PO, Notice of Award or Notice to Proceed Installation, • On-Site by a Certified and Trained Service Engineer Training • On-Site by a Certified and Trained Applications Specialist	<b>1</b>	

\_\_\_\_\_  
[signature]

\_\_\_\_\_  
[in the capacity of]

Duly authorized to sign Bid for and on behalf of \_\_\_\_\_



## ***Section VII. Technical Specifications***

### **Notes for Preparing the Technical Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

#### **Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a

particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words “*or at least equivalent.*” References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

In case of Renewal of Regular and Recurring Services, the Procuring Entity must indicate here the technical requirements for the service provider, which must include the set criteria in the conduct of its performance evaluation.

## Technical Specifications

Item	Specification	Quantity	Statement of Compliance
			<i>[Bidders must state here either “<b>Comply</b>” or “<b>Not Comply</b>” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder’s statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i>

No.	Unit	Item Description	Quantity	<i>Bidders must state here either “<b>Comply</b>” or “<b>Not Comply</b>” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered</i>
<b>Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO’s in Accreditation and COPC Visits</b>				
<b>Lot 1 – GENERAL LABORATORY EQUIPMENT</b>				
<b>1</b>	<b>Unit</b>	<b>Flammable Storage Cabinet</b>  45 gal, 65" X 18" X 43", yellow Bi-fold self-closing doors. Each door can be latched open with a fusible link. In case of fire, the link melts at 165 deg Fahrenheit closing the doors automatically Warning labels included. 2" high rim on cabinet bottom to contain leaks and spills with adjustable levelling glide for uneven	<b>1</b>	

		<p>Non-sparking, three-point latching mechanism Additional security provided by keyed paddle Latch with removable panel to service three-point latching mechanism. 18-gauge double walled steel construction, along with 1-1/20 air spaces between the walls. Durable powder coat paint to resist solvents, acids, and alkalies.</p> <p>Two grounding attachment points at the rear of all cabinets for easy grounding. Continuous full-door height piano hinges. Polyethylene trays in the bottom sill area catch incidental spills and leaks. Upper and lower diametrically opposed side vent with flame arrestor for proper venting.</p>		
2	Set	<p><b>Unmanned Aerial Vehicle (Drone) with Accessories</b></p> <p>Weight: 720g Dimensions: 207x100.5x91.1mm Video Transmission System: 04 Operating frequencies: 2.4 ghz, 5.1 ghz, 5.8ghz Max Transmission Distance: Fcc:20km, CE:10km Battery: 4241 mAh Li-ion d 4s Battery weight: 267g Flight time: 46 Mins Hover time: 42 Mins Charge time: 65 Watts approx. 80 mins Max Speed 21 m/s Max ascent speed 10 m/s Max wind resistance 12 m/s</p> <p>Main camera: CMOS 1/1.3 inch 48 MP 24 mm equivalent, FOV 82°, Aperture f/1.7 Medium telecamera: CMOS 1/1.3 inch 48 MP 70 mm equivalent, FOV 35°, Aperture f/2.8 Max Image Size 8064 x 6048 Photo Resolution 12 MP and 48 MP Video Resolution 4K up to 100 fps FHD up to 200 fps 2.7K vertical shooting at up to 60 fps FHD vertical shooting at up to 60 fps</p> <p>Hovering Accuracy Vision Positioning: Vertical: ±0.3' / 0.1 m Horizontal: ±1.0' / 0.3 m GNSS</p>	8	

		<p>Vertical: <math>\pm 1.6'</math> / 0.5 m High-Precision Positioning System Horizontal: <math>\pm 1.6'</math> / 0.5 m</p> <p>Inclusions: Drone x 1 Drone Remote Controller x 1 Drone Intelligent Flight Battery x 1 Low-Noise Propellers (Pair) x 6 Battery Charging Hub x 1 Shoulder Bag x 1 Drone Gimbal Protector x 1 Type-C to Type-C Cable x 1</p> <p><b>Additional Inclusion:</b> One (1) Remote Control (Android) Two (2) Extra Flight batteries One (1) Foldable Landing Gear One (1) Set ND Filters One (1) Extra propeller set (Low-Noise Propellers) One (1) 64Gb Compatible Memory Card One (1) <b>Hard Case</b> compatible with the drone Training, CAAP Licensing support, and Aircraft Insurance</p>		
3	Set	<p><b>UAV with Multispectral + RGB Imaging System with Accessories</b></p> <p><b>Aircraft</b> Technical Specifications: Maximum Horizontal Speed: 21 m/s Maximum Ascent Speed: 8 m/s Maximum Descent Speed: 6 m/s Maximum Wind Resistance: 12 m/s Flight Ceiling: 6000m Maximum Flight Time: 43min Maximum Hover Time: 37min Maximum Tilt Angle: 30°-35° Hovering Accuracy: RTK, Horizontal: <math>\pm 0.1</math> m, Vertical: <math>\pm 0.1</math> m, GNSS, Vertical: <math>\pm 0.5</math> m Vision Positioning: Horizontal: <math>\pm 0.3</math> m, Vertical: <math>\pm 0.1</math> m Maximum Angular Velocity: 200°/s (Pitch) Rotor Configuration: 4 Operating Temperature: -10 to 40°C</p> <p>Camera Image Sensor: 4/3"-Type CMOS Sensor Resolution: Effective: 20 Megapixel 20MP RGB &amp; 4 x 5MP Multispectral Camera Green, Red, Red Edge &amp; Near Infrared Focal Length: 24mm (35mm Equivalent)</p>	2	

		<p>Field of View: 84°  Maximum Aperture: f/2.8  Minimum Aperture: f/11  Minimum Focus Distance: 1m  ISO Sensitivity Range: 100 to 6400  Shutter Speed: Electronic Shutter, 1/8000 to 8 Seconds, Mechanical Shutter, 1/2000 to 8 Seconds  Internal Recording Modes:  H.264/MP4/MPEG-4, 3840 x 2160 at 30.00 fps [130 Mb/s], 1920 x 1080 at 30.00 fps [70 Mb/s]  Still Image Support: DNG / JPEG, 20 MP (5280 x 3956)  Photo Modes: Burst Shooting, Single Shot</p> <p>Gimbal  Number of Axes: 3-Axis (Pitch (Tilt), Roll, Yaw (Pan))  Rotation Range: Mechanical  Range.7, Pitch (Tilt): 180° (-135 to 45°), Roll: 90° (-45 to 45°), Yaw (Pan): 54° (-27 to 27°), Controllable Range, Pitch (Tilt): 125° (-90 to 35°)  Follow Speed: Tilt: 100°/s  Stabilization Accuracy: ±0.007°</p> <p>Vision/Sensing System  Vision System: Downward / Upward / Forward / Backward / Left / Right  Sensing System Capabilities:  Forward, Measurement Range: 0.5 to 20 m, Detection Range: 0.5 to 200 m, Max Speed: 15 m/s  Field of View: 90° (Horizontal) / 103° (Vertical), Backward, Measurement Range: 0.5 to 16 m Max Speed: 12 m/s, Field of View: 90° (Horizontal) / 103° (Vertical), Lateral, Measurement Range: 0.5 to 25 m, Max Speed: 15 m/s, Field of View: 90° (Horizontal) / 85° (Vertical), Upward, Measurement Range: 0.2 to 10 m, Max Speed: 6 m/s, Field of View: 100° (Vertical) / 90° (Horizontal)  Downward, Measurement Range: 0.3 to 18 m, Max Speed: 6 m/s, Field of View: 130° (Vertical) / 160° (Horizontal)</p> <p>Operating Environment: Surface with Clear Patterns at &gt;15 lux  Required Object Reflectivity: &gt;20%</p> <p>Remote Controller / Transmitter  Control Method: Included Transmitter  Operating Frequency: 2.4 GHz (2.400 to 2.4835), 5.8 GHz (5.725 to 5.850)</p>		
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		<p>Maximum Operating Distance: 9.3 Miles / 15 km  Transmitter Power: 2.4/5.8 G: 33 dBm  Transmitter I/O: 1x Mini-HDMI Output  Battery Type: 1x Built-In  Battery Chemistry: Lithium-Ion  Battery Capacity: 5000 mAh  Wi-Fi: Wi-Fi 6 (802.11ax) with MU-MIMO Support (2 x 2)  Bluetooth: 5.1  Mobile App Compatible: Yes: Android Only  Built-In Display Size / Type: 5.5" LCD  Display Resolution: 1920 x 1080  Display Brightness: 1000 nits / cd/m2</p> <p>Flight Battery  Battery Capacity: 5000 mAh / 77 Wh  Battery Configuration: 4 S / 15.4 V  Maximum Charging Power: 17.6 V  Charging Temperature: 41 to 104°F / 5 to 40°C</p> <p>Charger  AC Input Power: 100 to 240 VAC, 50 / 60 Hz at 2.5 A  Power Rating: 100 W</p> <p>General  GNSS Support: GPS, GLONASS, Galileo  Weight: 2.1 lb / 951 g (With Propellers)  2.3 lb / 1050 g Maximum for Takeoff</p> <p>1Year warranty and support</p> <p><b>Inclusions</b>  Three (3) Additional Compatible Flight Batteries  One (1) Charging Hub  100w USB-C Portable Charger/  Power Adapter  USB-C Cable</p>		
4	Set	<p><b>UAV with LIDAR + RGB Survey Camera with Accessories</b></p> <p><b>Aircraft (Drone)</b>  Dimensions (unfolded, without propellers)  810×670×430 mm (L×W×H)  Dimensions (folded, with propellers)  430×420×430 mm (L×W×H)  Diagonal Wheelbase: 895 mm  Weight (with single downward gimbal)  Without batteries: Approx. 3.77 kg</p> <p>With two TB65 batteries:  Approx. 6.47 kg</p>	1	

		<p>Single Gimbal Damper's Max Payload: 960 g  Max Takeoff Weight: 9.2 kg  Operating Frequency  2.4000-2.4835 GHz  5.150-5.250 GHz (CE: 5.170-5.250 GHz)  5.725-5.850 GHz</p> <p>Transmitter Power (EIRP)  2.4000-2.4835 GHz:  &lt; 33 dBm (FCC)  &lt; 20 dBm (CE/SRRC/MIC)</p> <p>5.150-5.250 GHz (CE: 5.170-5.250 GHz):  &lt; 23 dBm (CE)</p> <p>5.725-5.850 GHz:  &lt; 33 dBm (FCC/SRRC)  &lt; 14 dBm (CE)</p> <p>Hovering Accuracy (with moderate or no wind)  Vertical:  ±0.1 m (with vision positioning)  ±0.5 m (with GNSS positioning)  ±0.1 m (with RTK positioning)</p> <p>Horizontal:  ±0.3 m (with vision positioning)  ±1.5 m (with GNSS positioning)  ±0.1 m (with RTK positioning)  RTK Positioning Accuracy (RTK FIX)  1 cm + 1 ppm (horizontal)  1.5 cm + 1 ppm (vertical)  Max Angular Velocity  Pitch: 300°/s  Yaw: 100°/s  Max Pitch Angle: 30°  Max Ascent Speed: 6 m/s  Max Descent Speed (vertical): 5 m/s  Max Tilted Descent Speed: 7 m/s  Max Horizontal Speed: 23 m/s  Max Flight Altitude: 5000 m  When using the 2110s propellers and with the takeoff weight ≤ 7.4 kg.</p> <p>Max Wind Speed Resistance: 12 m/s  Max Flight Time: 55 minutes</p> <p>Supported Gimbal Configurations  Single downward gimbal  Single upward gimbal  Dual downward gimbals  Single downward gimbal + single upward gimbal  Dual downward gimbals + single upward gimbal  Ingress Protection Rating: IP55</p>		
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		<p>Global Navigation Satellite System GPS + GLONASS + BeiDou + Galileo Operating Temperature -20° to 50° C (-4° to 122° F)</p> <p>Remote Controller Screen 7.02-inch LCD touchscreen; resolution: 1920×1200; max brightness: 1200 nits Weight Approx. 1.25 kg (without WB37 battery) Approx. 1.42 kg (with WB37 battery) Global Navigation Satellite System GPS + Galileo + BeiDou Built-in Battery Type: Li-ion (6500 mAh@7.2 V)</p> <p>Charging Type: Use the battery station or USB-C fast charger with a max power of 65 W (max voltage of 20 V). Charging Time: 2 hours Chemical System: LiNiCoAlO2 External Battery (WB37 Intelligent Battery) Capacity: 4920 mAh Voltage: 7.6 V Type: Li-ion Energy: 37.39 Wh Chemical System: LiCoO2 Ingress Protection Rating IP54 Operating Time Built-in Battery: approx. 3.3 hours Built-in Battery + External Battery: approx. 6 hours Operating Temperature -20° to 50° C (-4° to 122° F) Operating Frequency 2.4000-2.4835 GHz 5.725-5.850 GHz Transmitter Power (EIRP) 2.4000-2.4835 GHz: &lt; 33 dBm (FCC) &lt; 20 dBm (CE/SRRC/MIC)</p> <p>5.725-5.850 GHz: &lt; 33 dBm (FCC) &lt; 14 dBm (CE) &lt; 23 dBm (SRRC) Wi-Fi Protocol Wi-Fi 6 Wi-Fi Operating Frequency 2.4000-2.4835 GHz 5.150-5.250 GHz 5.725-5.850 GHz Bluetooth Protocol Bluetooth 5.1</p>		
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		<p>Bluetooth Operating Frequency 2.4000-2.4835 GHz</p> <p>Video Transmission Video Transmission System</p> <p>Antenna 4 video transmission antennas, 2T4R</p> <p>Max Transmission Distance (unobstructed, free of interference) 20 km (FCC) 8 km (CE/SRRC/MIC)</p> <p>Max Transmission Distance (with interference) Low Interference and Obstructed by Buildings: approx. 0-0.5 km Low Interference and Obstructed by Trees: approx. 0.5-3 km Strong Interference and Unobstructed: urban landscape, approx. 1.5-3 km Medium Interference and Unobstructed: suburban landscape, approx. 3-9 km Low Interference and Unobstructed: suburb/seaside, approx. 9-20 km</p> <p>Vision System Obstacle Sensing Range Forward/Backward/Left/Right: 0.7-40 m Upward/Downward: 0.6-30 m FOV Forward/Backward/Downward: 65° (horizontal), 50° (vertical) Left/Right/Upward: 75° (horizontal), 60° (vertical)</p> <p>Operating Environment Surfaces with discernible patterns and adequate lighting (lux &gt; 15)</p> <p>Infrared Sensing System Obstacle Sensing Range 0.1-8 m FOV 30° (±15°)</p> <p>Operating Environment Large, diffuse, and reflective obstacles (reflectivity &gt; 10%)</p> <p>LED Auxiliary Light Effective Illumination Distance: 5 m Illumination Type: 60 Hz, solid glow</p> <p>FPV Camera Resolution: 1080p FOV: 142° Frame Rate: 30fps</p> <p>Flight Battery Capacity: 5880 mAh Voltage: 44.76 V Type: Li-ion</p>		
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		<p>Energy: 263.2 Wh Weight Approx. 1.35 kg Operating Temperature -20° to 50° C (-4° to 122° F) Ideal Storage Temperature 22° to 30° C (71.6° to 86° F) Charging Temperature -20° to 40° C (-4° to 104° F)</p> <p>Intelligent Battery Station Dimensions: 580×358×254 mm (L×W×H) Net Weight: Approx. 8.98 kg Compatible Stored Items Eight TB65 Intelligent Flight Batteries Four WB37 Intelligent Batteries Input Voltage 100-120 VAC, 50-60 Hz 220-240 VAC, 50-60 Hz Max Input Power 1070 W Output Power 100-120 V: 750 W 220-240 V: 992 W Operating Temperature -20° to 40° C (-4° to 104° F)</p> <p><b>LIDAR + RGB Camera Module</b></p> <p>20MP 1-inch CMOS on a 3-axis stabilized gimbal Mechanical Shutter Integrates a Lidar module, an RGB camera, and a high-accuracy IMU High Efficiency - 2 km² covered in a single flight High Accuracy: Vertical Accuracy: 5 cm / Horizontal Accuracy: 10 cm Point Rate: 240,000 pts/s Supports 3 Returns Detection Range: 450 m (80% reflectivity, 0 klx) IP44 Ingress Protection Level Point Cloud LiveView</p> <p><b>Battery Station</b> Fully charge a battery in up to 70 minutes Built-in padlock holes for added security with optional padlocks Battery station securely closes via two built-in locking clasps Built-in carry handle Built-in pressure valve Air intake and air vent Status LEDs Firmware updates via USB Type-C</p>		
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		<b>Compatible Intelligent Flight Battery</b> Capacity: 5880 mAh Voltage: 44.76 V Type: Li-ion Energy: 263.2 Wh Weight: Approx. 1.35 kg  <b>1 Year Warranty on Parts and Support</b>		
5	Set	<b>Analog Speech Lab – with Multimedia (35seaters)</b>  1 unit master console with table Size 24'x44"x30 (w x h x L)  1 unit stage carpet Size:4.5ft x 5ft L x 6" elevation  2units speaker with amplifier 100watts  35 units student cubicle with front glass Size: 18" Depth x 24" L x 48"H  35 units student control  36 units headset with microphone	1	
6	Unit	<b>Laptop</b>  13th Gen Intel Core i7-13620H Processor 2.4 GHz (24M Cache, up to 5 GHz, 14 cores: 6 P-cores and 8 E-cores)   16GB DDR5-4800 SO-DIMM, Max Capacity: 32GB, Support dual channel memory   512GB PCIe 4.0 NVMe M.2 SSD   15.6-inch, FHD (1920 x 1080) 16:9, Value IPS-level, Anti-glare display, sRGB:100%, Adobe:75.35%, Refresh Rate:144Hz, G-Sync, MUX Switch + NVIDIA Advanced Optimus   NVIDIA GeForce RTX 4050 Laptop GPU, 2420MHz* at 140W (2370MHz Boost Clock+50MHz OC, 115W+25W Dynamic Boost), 6GB GDDR6   Wi-Fi 6(802.11ax) (Dual band) 2*2 + Bluetooth® 5.2 Wireless Card   Windows 11 Home	1	
7	Unit	<b>4k Gasoline Engine with Transmission and Stand</b>	1	
8	Unit	<b>SMART/ Android TV 65inches</b>  Resolution: 4K (3,840x2,160) Connectivity: 3 USB: 2 x USB-A Product type: QLED Display: Screen Size: 65"	11	

		<p>Refresh Rate: 60Hz</p> <p><b><u>Video:</u></b>  Picture Engine: Quantum Processor  Lite 4K  HDR: Quantum HDR  HDR 10+: Support  AI Upscale: 4K upscaling  Contrast: Dual LED  Micro Dimming: Supreme UHD  Dimming  Contrast Enhancer: Yes  Motion Technology: Motion  Xcelerator  Smart Calibration: Basic  Filmmaker Mode (FMM): Yes</p> <p><b><u>Audio:</u></b>  Object tracking Sound: OTS Lite  Q-Symphony: Yes  Sound Output (RMS): 20W  Speaker type: 2CH  Adaptive Sound: Yes</p> <p><b><u>Smart Service:</u></b>  Web browser: Yes  Smart Things Hub/Quick Remote:  Yes</p> <p><b><u>Smart Feature:</u></b>  Multi Device Experience: Mobile to  TV, TV initiate mirroring, Sound  mirroring, wireless TV ON, Tap View  Multi view: up to 2 videos  Ambient Mode: Ambient  NFT: Nifty Gateway  Apple Airplay: Yes  Daily+: Yes</p> <p><b><u>Game Feature:</u></b>  Auto Game Mode (ALLM): Yes  Game Motion Plus: Yes  Super Ultra Wide Game View: Yes  Mini Map Zoom: Yes  HGiG: Yes</p> <p><b><u>Tuner/Broadcasting:</u></b>  Digital Broadcasting: ISDB-T  Analog Tuner: Yes  TV Key Support: Yes</p> <p><b><u>Connectivity:</u></b>  HDMI: 3  USB: 2 x USB-A  HDMI (High Frame Rate): 4K 60Hz  (for HDMI 1/2/3)  Ethernet (LAN): 1  Digital Audio Out (Optical): 1  RF In (Terrestrial/Cable input): 1/1  (Common Use for  Terrestrial)/0  Wi-Fi: Yes (WiFi 5)  Bluetooth: Yes (BT5.2)  Anynet+(HDMI-CEC): Yes  HDMI Audio Return Channel:  eARC/ARC</p> <p>Design:</p>		
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		<p>AirSlim</p> <p><b><u>Accessibility:</u></b></p> <p>Accessibility-Voice Guide: UK English, Chinese, Korean, Indonesian, Vietnamese</p> <p>Low Vision Support: Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Color Inversion, Grayscale, Auto Picture Off</p> <p>Hearing Impaired Support: Closed Caption (subtitle), multi- output audio, sign language zoom</p> <p>Motor Impaired: Slow button, repeat, remote control app. For all.</p> <p><b><u>Power &amp; Eco Solution:</u></b></p> <p>Eco Sensor: Yes</p> <p>Power Supply: AC100-240V, 50/60Hz</p> <p>Power consumption 175W</p> <p>Auto Power off: Yes</p> <p>Auto Power Saving: Yes</p> <p>Package size (WxHxD): 1612x950x164 mm</p> <p><b><u>Accessory:</u></b></p> <p>Remote Controller Model: TM2360E</p> <p>Slim Fit Wall-mount support: Yes</p> <p>Optional stans support: Yes</p> <p>Mini Wall Mount support: Yes</p> <p>User Manual: Yes</p> <p>Full motion slim wall mount: Yes</p> <p>Webcam Support: Yes</p> <p>Zigbee/Thread Module: Built in</p> <p>Power cable: Yes</p> <p>Wall brackets included</p>		
9	Unit	<p><b>Engine Scanner</b></p> <p>Display/size: Color touchscreen/5inch</p> <p>Bluetooth/ handheld: No/Yes</p> <p>I/M Readiness Test: Yes</p> <p>Displays live data: Yes</p> <p>Number of Keys: 4</p> <p>Warranty: 2 years</p> <p>Size 9.1 x 4.9 x1.4 inches</p> <p>Weight: 1.6 pounds</p> <p>10.1in Touch Screen, Android 10.0, 6300mAh, 2.0GHz and 4 core, BT5.1 Bluetooth, Dual-wifi 2.4GHz/ 5GHz, 4GB RAM and 64GB ROM, 8.0MP camera</p> <p>OEM topology mapping + compatibility with 12V &amp; 24Vdiesel heavy trucks, J2534 Programming +ECU Online Coding, All System Diagnostics + Bi-directional control +Over 50+ maintenance features</p>	3	

		<p>+Auto Auth for FCA SGW  +CANFD &amp; DOIP, Power Balance Test  +Drive Test  +Adaptation  +Matching  +Flash Hidden Functions  + Setting &amp; Changeover  +Modification  +Offline Coding  + Initialization  + Adaptation  + Matching+ Customization + Personalization.</p> <p>Engine Scanner, Smartlink C, US/UK/EU Plug, HD15F to OBDII 16 Connector, Type-A to Type-B USB cable, Type-A to Type-C USB cable, PIN envelope, Quick start Guide, User Manual. 12 Connectors &amp; 4 Cables: BENZ-38, B-20, HONDA-3, TOYOTA-17, TOYOTA-22, GV-12, BZ-14, FORD 6+1, NISSAN14+16, CHRYSLER-6, Network Cable, KIA-20, CIGARETTEER, MH12+16, Power cable clips, Fuse.</p> <p>Warranty: 2 years</p>		
<b>10</b>	<b>Unit</b>	<p><b>Lab center table with end sink – 10 seaters (Dimension: 3.5M (L) x 1.0M (W) x 0.9M (H))</b></p> <ul style="list-style-type: none"> <li>• Countertop: 18mm solid core phenolic resin laboratory grade</li> <li>• Carcass: 18mm MOM sink base cabinet &amp; open shelves</li> <li>• Framing: Powder coated metal tubular w/ adjustable leveler</li> <li>• Sink: polypropylene laboratory sink</li> <li>• Faucet: Powder coated goose neck faucet solid brass w/ serrated nozzle</li> <li>• Gas: Powder coated dual outlet serrated nozzle</li> <li>• Drying rack: polypropylene laboratory pegboard 27-pegs</li> <li>• Reagent rack: powder coated metal tubular framing &amp; phenolic shelves with 8mm SS-304 rod</li> </ul> <p>Hardware:</p>	<b>2</b>	

		<ul style="list-style-type: none"> <li>Adjustable plinth foot</li> <li>Electrical outlet – 2 units</li> <li>Powder coated outlet pedestal box</li> <li>Aluminum Grab Handle</li> <li>Concealed hinges</li> </ul> <p>Inclusion: 10 laboratory stools Installation included</p>		
<b>11</b>	<b>Unit</b>	<b>Benchtop Furnace</b>  Specifications: Max Temp.: 1400°C Capacity: 4.5L Continuous working temp: ≤ 1300°C Heating element: SiC heating rod Thermal couple: S type Chamber material: Alumina ceramic fiber Heating rate: 0~30°C/mm, suggest to be 10°C/min Thermal control accuracy: ±1°C temperature uniformity: ±5°C max power: 4kW Other features: * safety interlock with automatic power off when furnace door is opened * PID automatic control via current limiting phase angle fired resistor * Power control with 30 segments programmable * English labels (switches, buttons, etc.) * Standard product certification * Standard warranty	<b>1</b>	
<b>12</b>	<b>Unit</b>	<b>Pressure Canner</b>  Specifications: Capacity: 41L Other features: * Extra heavy duty cast aluminum construction * Stay-cool bake lite top handle * Geared steam gauge * Automatic venting for safety (safety control valve & over pressure plug) * Pressure regulator weight settings of 5, 10, 15 psi * Smooth, easy to clean satin finish * Double thickness edges for additional protection on points of heaviest wear * with English User's Manual * Standard product certification * Standard warranty	<b>3</b>	
<b>13</b>	<b>Unit</b>	<b>Mechanical Can Sealer</b>  Specifications: Power supply: 220V (50/60Hz) Tank diameter: 45 ~ 110mm Other features: * Rust and corrosion resistant treated surface * Manual operation * Suitable for can height range of 39-200mm * Simple operation with an on/off switch and foot switch to start sealing * with English User's Manual * Standard	<b>1</b>	



		product certification* Standard warranty		
<b>14</b>	<b>Unit</b>	<b>Pasteurizer</b>  Specifications: Capacity 75L Material: SUS 304 stainless steel Power supply: 220V (50/60Hz) Power consumption: 2-9kW Temperature: 0 ~ 100°C Operation: Automatic control, with LED control panel Warranty: 3 years (core components) Other features: * motorized stirrer* Adjustable speed and temperature* Three layered tank: beverage-hot water-insulation* English labels (switches, buttons, etc.)* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>15</b>	<b>Unit</b>	<b>Benchtop Water Activity Meter</b>  Specifications: Working temp: -10 ~ 50°C Water activity: 0 ~ 1.000 aw Working humidity: 0 ~ 95% Display: LCD Measurement time: 5 ~ 40 mins Measurement Point: 1 ~ 4 Temp. coefficient: ≤ 0.0005/°C Activity Repeat ability: ≤ 0.008 Correction mode: multi-point calibration, single-point calibration Print function: Print at the end of measurement; real-time print Interface: USB Power supply: 220V (50/60Hz) Other features: * English labels (switches, buttons, etc.)* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>16</b>	<b>Unit</b>	<b>Anaerobic System/Vacuum Glove Box</b>  Specifications: Dimension (WxDxH): 420mm x 440mm x 450mm Main body: Transparent reinforced acrylic, sealed lid Valve: 2, Φ8mm / Φ14mm (for intake and exhaust) Pressure resistance: approx. 133 Pa Other features: * Includes 1 pair of gloves* English labels* English User's manual* Standard product certification* Standard warranty	<b>1</b>	
<b>17</b>	<b>Unit</b>	<b>Benchtop Vacuum Pump</b>  Specifications: Pump head: 1 Speed of Evacuation: 30 L/Min Ultimate Vacuum: 200 mbar Pressure: ≥ 30 Positive, Positive or negative pressure Inlet: φ6 mm Outlet: φ6 mm Working Temp: 7 ~ 40°C Noise Level: <60 dB Motor Power: 160W Power supply: 220V/50/60Hz Diaphragm: Imported Rubber Other features: *	<b>1</b>	

		English labels* English User's manual* Standard product certification* Standard warranty		
<b>18</b>	<b>Unit</b>	<b>Differential Scanning Calorimeter</b>  Specifications: DSC range: 0 ~ ±600mW Temperature range: -170 ~ 650 °C Heating rate: 0.1 ~ 80 °C / min Temperature resolution: 0.001 °C Temperature fluctuations: ±0.01°C Temperature repeatability: ±0.1°C DSC range: 0 ~ ±600mW DSC resolution: 0.001mW DSC sensitivity: 0.001 mW Display: 7 inches LCD touch screen display Data interface: standard USB connector Product standard: ISO/TR10837:1991, ASTM D3895-1998, ASTM E 967, ASTM E 968, ASTM E 793, ASTM D 3895, ASTM D 3417, ASTM D 3418, ISO 11357-6 Other features:* English labels* Standard product certification* Standard warranty	<b>1</b>	
<b>19</b>	<b>Unit</b>	<b>Forced Air Drying Oven</b>  Capacity: 43L Circulation: Forced air and Natural convection Dimensions: Internal (W*D*H): 350mm * 359mm * 350mm Dimensions: External (W*D*H): 640mm * 500mm * 600mm Temp range: RT+10-300 °C Temp fluctuation: ±1 Temp resolution: ±0.1 Uniformity: ≤Max. Temp. ±3.5°C Sensor: Shelves: 2 pcs./adjustable Display: LCD , real-time display of parameters Running function: fixed Value running, timing running Interior finish: High-quality corrosion-resistant stainless steel Exterior finish: Galvanized with antimicrobial powder coating Safety device: Leakage protector; Over-temperature alarm Power supply: 220V (50/60Hz) Other features:* With observation window* Anti-scalding door handle* With limited temperature control sound and light alarm system* Microprocessor controller* English labels* Standard product certification* Standard warranty	<b>1</b>	
<b>20</b>	<b>Unit</b>	<b>UV-Vis Spectrophotometer</b>  Specifications: Optical system: Single-beam Wavelength range: 190 ~ 1000nm Bandwidth: 2nm Wavelength repeatability: <0.3nm	<b>1</b>	

		Wavelength accuracy: $\pm 1\text{nm}$ Wavelength setting: Auto Photometric accuracy: $\pm 0.5\%$ T Photometric repeatability: $0.2\%$ T photometric range: $-0.3 \sim 3\text{A} / 0 \sim 200\%$ T Stray light: $\leq 0.05\%$ T stability: $\pm 0.001\text{A/h}$ @ $500\text{nm}$ Display: $128 \times 64$ LCD Detector: Silicon photodiode Light source: Tungsten lamp & D2 lamp Output: USB Port & parallel port Power supply: $220\text{V AC}$ Inclusions: 4 pcs. 1cm Glass cuvette 2 pcs. 1cm quartz cuvette Dust cover Other features: * English labels * English User's Manual * Standard product certification * Standard warranty		
<b>21</b>	<b>Unit</b>	<b>Vacuum Oven</b>  Capacity: 25L temp. Range: $1 \sim 200^\circ\text{C}$ ambient temp: $5 \sim 40^\circ\text{C}$ Temp. fluctuation: $\pm 1^\circ\text{C}$ shelves: at least 2 Vacuum degree: $< 133\text{ Pa}$ Power supply: $220\text{V}$ $\text{AC}$ ( $50/60\text{Hz}$ ) Other features: * PID microprocessor temp control with LCD display * Polished stainless steel inner chamber * Silicone rubber seal	<b>1</b>	
<b>22</b>	<b>Unit</b>	<b>Colorimeter</b>  Specifications: Type: Economical (small aperture) Color: Green Geometry: D/8 (Diffused illumination, $8^\circ$ viewing) SCI (specular component included), SCE (specular component excluded) Repeatability: Chromaticity Value: Standard deviation $\Delta E^*_{ab} \leq 0.04$ Average: $dE^*_{ab} \leq 0.05$ Max.: $dE^*_{ab} \leq 0.08$ (When a white tile is measured 30 times at 5 seconds interval) Inter-instrument agreement: $\Delta E^*_{ab} \leq 0.4$ Light source: LED Sensor: CMOS Spectroscopic method: Integrated optics Wavelength range: $400\text{-}700\text{nm}$ Wavelength interval: $10\text{nm}$ Reflectance Range: $0\text{-}200\%$ Reflectance Resolution: $0.01\%$ Measurement time: About 1 sec. Storage capacity: 100 pieces of data Language: English Battery: Rechargeable, 8,000 times continuous tests, $3.7\text{V}/3000\text{mAh}$ Color Space and Indices: Reflectance, CIE-Lab, CIE-LCh, Hunter Lab, CIE-Luv, XYZ, Yxy,	<b>1</b>	

		<p>RGB, Color Difference (<math>\Delta E^*ab</math>, <math>\Delta E^*cmc</math>, <math>\Delta E^*94</math>, <math>\Delta E^*00</math>), Whiteness Index (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), Yellowness Index (ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness Index (My,dM), Staining Fastness, Color Fastness, Tint (ASTM E313-00), Color Density CMYK (A,T,E,M), Metamerism Index Milm, Munsell, Opacity, Color Strength</p> <p>Software: Color analysis software (Windows)* Display: IPS full color screen ,2.4 inches English User's manual* Flour measuring device* Liquid measuring device* Microprinter Other features:* English labels* Standard product certification* Standard warranty</p> <p>English labels* Standard product certification* Standard warranty</p>		
23	Unit	<p><b>Munsell Book of Color</b></p> <p>Specifications:* Glossy "master atlas" of Munsell color* Complete range of colors creating a physical model of the Munsell Color Space* <math>\geq 1,600</math> removable high-gloss color sample* Language: English</p>	2	
24	Unit	<p><b>Water Bath</b></p> <p>Specifications: Temperature range: -5 ~ 100°C Capacity: 6L Tank material: SUS 304 Stainless steel Temp. accuracy: <math>\pm 0.1^\circ\text{C}</math> Time range: 1 ~ 9999 mins Power supply: 220V AC (50/60Hz) Other features:* With heating and cooling* PID controller* Over-temperature alarm* Protection device from overheating and overcurrent* English labels* English User's manual* Standard product certification* Standard warranty</p>	1	
25	Unit	<p><b>Fume Hood</b></p> <p>External size (WxDxH): 1220mm * 850mm * 2150mm Internal size (WxDxH): 1100mm * 730mm * 745mm Max opening: 520mm Work surface height: 750mm Blower: Built-in centrifugal blowers, adjustable speed Air velocity: 0.3 ~ 0.8 m/s Noise: <math>\leq 68\text{dB}</math> LED Lamp: Intensity <math>\geq 900\text{Lx}</math> UV Lamp: emission of 253nm for decontamination Front window: tempered glass, anti-UV</p>	2	

		Exterior body: Electro-galvanized steel with anti-bacteria powder coating Work table: chemical resistant, solid physicochemical board Power supply: 220V AC (50/60Hz) Other features: * Water tap* Gas tap* Sink* Base stand, 4 casters.		
<b>26</b>	<b>Unit</b>	<b>Analytical Balance, 210g Capacity</b>  Weighing capacity 210g Resolution: 0.0001g Stable time: ≤3s Repeatability: ±0.0002g Liner: ±0.0003g Display: LCD (white back light with black font) Cal. Weight: External Calibration	<b>1</b>	
<b>27</b>	<b>Unit</b>	<b>Air Oven</b>  Cycle Mode: Dual Convection: Force Air and Natural convection Capacity: 43liters Temp Range: RT+10~300 °C Temp Resolution: 0.1 °C Temp. Fluctuation: ±1 °C Temp. Uniformity: ≤Max. Temp. ±3.5°C Shelves: 2pcs/adjustable Consumption: 1300W	<b>1</b>	
<b>28</b>	<b>Unit</b>	<b>Laboratory Autoclave</b>  Working Chamber Size (Ø x D )/Capacity: 400 x 600 mm/53 L Carrier (Ø x D): 1 of 350 x 550 mm Gross Dimension/Weight: 970 x 720 x 1290 mm/97 kg	<b>1</b>	
<b>29</b>	<b>Unit</b>	<b>Can Sealing Machine</b>  Automatic; Electric 220V; 220V-SOHZ	<b>1</b>	
<b>30</b>	<b>Unit</b>	<b>Universal Drying Oven</b>  digital-based, Temperature range up to +300 °C; Capacity up to 32 to 1060 litres volume; Temperature display, timer set up, high-quality, corrosion-resistant and easily cleanable stainless steel for the working chamber and housing	<b>1</b>	
<b>31</b>	<b>Unit</b>	<b>Spectrophotometer</b>  Wavelength Range: 190- 1100nm; Spectral Bandwidth: 2.0nm Wavelength Accuracy: ±2nm ; Photometric Accuracy. ±0.5%T	<b>1</b>	

32	Unit	<b>Water Activity Meter</b>  Operating temp.: 0° C to 50°C; with case Range 0-1.0aw Resolution ±0.01aw Accuracy ±0.02aw Sampling time: 5 mins.	1	
33	Unit	<b>Laboratory Table</b>  <b>Dimension: 3.5M (L) x 1.0M (W) x 0.9M (H)</b> <ul style="list-style-type: none"> <li>Countertop: 18mm solid core phenolic resin laboratory grade</li> <li>Carcass: 18mm MOM sink base cabinet &amp; open shelves</li> <li>Framing: Powder coated metal tubular w/ adjustable leveler</li> <li>Sink: polypropylene laboratory sink</li> <li>Faucet: Powder coated goose neck faucet solid brass w/ serrated nozzle</li> <li>Gas: Powder coated dual outlet serrated nozzle</li> <li>Drying rack: polypropylene laboratory pegboard 27-pegs</li> <li>Reagent rack: powder coated metal tubular framing &amp; phenolic shelves with 8mm SS-304 rod</li> </ul> Hardware: <ul style="list-style-type: none"> <li>Adjustable plinth foot</li> <li>Electrical outlet – 2 units</li> <li>Powder coated outlet pedestal box</li> <li>Aluminum Grab Handle</li> <li>Concealed hinges</li> </ul>	1	
34	Unit	<b>Incubator</b>  Feature Digital PID Control Tempered safety glass window Dust-free gravity- flow convection Safety and convenience Specification Dimensions inner: 400 x 400 500 Outer: 550 x 610 x 850 Capacity: 80 Temperature range: ambient+15°c to 250c° Set accuracy: +1.0°c Uniformity: +5.0°c at 120°c Heater: 1.5kw Display: LED 4 Digits display Controller: PID Multi-Function	1	

		<p>Controller Alarm, Auto Tunning  Timer: 99 min 59 sec/ 99hr  59min/99days 23ours /Continuous  selectable Material exterior: stainless  steel Exterior: Epoxy powder coated  steel Shelves: 2EA Door: tempered  glass window with silicone Packing  (model without glass door available)  Insulation: ceramic and glass wool  Safety: over heat protector over  current &amp; leakage breaker  Electric supply: 110v, 60Hz or 220V  50/60Hz</p>		
<b>35</b>	<b>Unit</b>	<p><b>Drying Oven</b></p> <p>digital-based, Temperature ranges up  to +300 °C; Capacity up to 32 to  1,060 litres volume; Temperature  display, timer set up, high-quality,  corrosion-resistant and easily  cleanable stainless steel for the  working chamber and housing</p>	<b>1</b>	

## Lot 2 – MEDICAL/DENTAL EQUIPMENT

<b>1</b>	<b>Set</b>	<p><b>Sam Skeleton with Muscles and  Ligaments on Hanging Stand</b></p> <ul style="list-style-type: none"> <li>• Hand-painted muscle origins and  insertions</li> <li>• Flexible spine and ligaments</li> <li>• Slipped disc between the 3rd and  4th lumbar vertebrae</li> <li>• Protruding spinal nerves and  vertebral arteries</li> <li>• 3-part assembled skull with  individually inserted teeth</li> <li>• Made from a durable,  unbreakable synthetic material</li> <li>• Top quality, life size natural  casting</li> <li>• Close to the realistic weight of  around 200 bones  Final assembly carried out by  hand</li> <li>• On a stable metal stand with 5  casters (painted white)</li> <li>• Can be removed from stand</li> <li>• Full flexibility of limbs on left side,  right side has full flexibility of  knee and hip with limited flexibility  of elbow and shoulder</li> </ul> <p>Easy to remove limbs</p> <p>Provided with metal stand and  transparent dust cover. 3-year parts  warranty. Compatible with Anatomy  App.</p>	<b>2</b>	
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2	Set	<p><b>Complete Nursing Skills Manikin - Light</b></p> <p>Complete lifelike range of motion, realistic patient positioning, and non-pinching joints - moves like a person.</p> <ul style="list-style-type: none"> <li>• Lightweight - approximately 28 lbs.</li> <li>• Full-size adult manikin - measures 58 in.</li> <li>• Overall female appearance</li> <li>• Converts to male with removal of wig and attachment of male genitals</li> </ul> <p><b>Visual Inspection:</b></p> <ul style="list-style-type: none"> <li>• Normal and Cancerous Mole</li> <li>• Stage 1 Sacral Ulcer</li> <li>• Dilated and Constricted pupils</li> <li>• Reddened Skin Folds</li> </ul> <p><b>Patient Care Simulation:</b></p> <ul style="list-style-type: none"> <li>• Bandaging and Wound Dressing</li> <li>• Bed Baths</li> <li>• Clothing Changes</li> <li>• Denture Placement and Removal, Upper and Lower</li> <li>• Ear Canal Irrigation, Otic Drops, and Hearing Aid Placement</li> <li>• Eye Irrigation</li> <li>• Finger and Toe Manipulation with Bandaging - Flexible and Individually Molded</li> <li>• Hair Care Washing and Combing</li> <li>• Intramuscular Injection Sites: Arm, Thigh, Buttock</li> <li>• Oral and Nasal Hygiene: Lavage, Gavage, and Suctioning</li> <li>• Ostomy Care: Ileostomy and Colostomy Tissue</li> <li>• Maintenance and Appliance Application, Lavage, and Suctioning</li> <li>• Patient Positioning</li> <li>• Patient Transfer Techniques</li> <li>• Pericare</li> <li>• Tracheostomy Care, Lavage and Suctioning</li> </ul> <p><b>also includes:</b></p> <ul style="list-style-type: none"> <li>• Gastrostomy Procedures, Lavage and Gavage</li> <li>• Enema Administration, Female Only</li> <li>• Urinary Catheterization, Female and Uncircumcised Male</li> <li>• Pap Smears and Douching</li> <li>• Prostate Exam, Stage B</li> <li>• Nasogastric Tube Placement</li> </ul>	2	
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		<ul style="list-style-type: none"> <li>Internal Fluid Reservoirs</li> </ul> <p>Five-Year Warranty. Ship Weight: 32 lbs. Dimensions. (inches): 11 x 37 x 24</p>		
3	Set	<p><b>CPR Mannequin/ Manikin Model (Half Body)</b></p> <p>Kit Includes:</p> <ul style="list-style-type: none"> <li>- (1) Adult Manikin</li> <li>- (1) Child Manikin</li> <li>- (1) Infant Manikin</li> <li>- (1) Nylon Carrying case</li> <li>- (10) Adult face-shield/ lung bags</li> <li>- (10) Child face-shield/ lung bags</li> <li>- (10) Infant face-shield/ lung bags</li> </ul> <p>Adult, pedia, infant and family pack CPR Manikins Weight: 8.1pounds Color: Medium Tone and Dark Tone with LED Indicator</p>	2	
4	Set	<p><b>ECG Machine 3-Channel</b></p> <ul style="list-style-type: none"> <li>• Ultra-compact and lightweight design</li> <li>• High resolution color touch screen</li> <li>• Comprehensive filters &amp; amp; anti-noise technology</li> <li>• Enhanced powerful technical specifications provides reliable signal quality</li> <li>• 12-lead simultaneous acquisition and display</li> <li>• Support linear / 2D barcoded scanner</li> <li>• Signal quality identification</li> <li>• Long time sampling</li> <li>• Large storage capacity</li> <li>• Support USB flask and micro SD to extend memory</li> <li>• Built-in rechargeable Li-Ion battery</li> <li>• Bi-directional communication with SE-1515 Data Management System</li> <li>• LAN/build-in Wi-Fi (optional) connections</li> <li>• Multi-formates reports export (optional)</li> <li>• Support external printer via USB port</li> </ul>	1	
5	Set	<p><b>Birthing Simulator</b></p> <p>Includes: Birthing Simulator</p>	2	

		Detachable, padded stomach cover with advanced insert for caesarian section Inflatable uterus insert for Leopold Maneuver including cover that can be cut for caesarian section Birth canal (portio, cervix, vulva) Fastening belt Lubricant Amniotic fluid and (100) inserts Assembly kit Fully articulating fetal baby Fully articulating fetal baby (19.29"/49cm;2.3lb./1.06kg) Umbilical cord Placenta		
<b>6</b>	<b>Unit</b>	<b>Biosafety cabinet level II (Class II A2)</b>  Internal size: 1300mmW x 520D x 640mm H External size: 1465mm W x 760mm D x 2200mm Tested Opening Maximum opening 470mm:inflow velocity: <0.5m/s; down flow velocity: 0.25~0.40m/s Cleanliness level: ISO level 4 Filters: ULPA *2pcs Filtration efficiency: ≥99.9995%,@0.12µm	<b>1</b>	
<b>7</b>	<b>Unit</b>	<b>Chemical/ solvent cabinet with ducting and exhaust system</b>  1200mm W x 500mm D x 2100mm H	<b>1</b>	
<b>8</b>	<b>Unit</b>	<b>Colony Counter</b>  Specifications: Digital display: 3- or 4-digit LED Display Power Supply: AC 120-240 V (50/60Hz) Lamp: 50W Counter capacity: 0 – 9999 Counting plate diameter: φ155mm Magnification: 3x-9xOther features:* With sound indicator for correct counting* Special pen* Magnifier flexible arm* Standard product certification* Standard warranty	<b>1</b>	
<b>9</b>	<b>Unit</b>	<b>Soxhlet Fat Extractor with Recirculating Chiller</b>  No. of extracted sample per batch: 6 Controller: 4.3-inch LCD touch screen Electric heating power: 1000W temp control range: RT +5 ~ 280°C Temp. accuracy: ±1°C Mode of heating: aluminum module heating Extraction sample volume: generally 2 ~ 5g, depending on sample Solvent cup volume: 80mL	<b>1</b>	

		<p>Warming up time: Approx.. 10 min  Measuring range: 0.-100%  Solvent recovery: &gt;80%  Other features:* shortened extraction time 20~80% *with temperature sensor, high temperature control precision and good uniformity* Built-in circulating water pipeline*</p>		
10	Unit	<p><b>Kjeldahl Protein Analyzer</b></p> <p>Sample tube type: diameter around <math>\phi 42\text{mm}</math>  Measure range: 0.1mg ~ 240mg N  Analysis time: 5 ~ 10mins/sample  Recovery: <math>\geq 99.5\%</math>  Sampling: Solid <math>\leq 5\text{g}</math>; Liquid <math>\leq 20\text{ml}</math>  Burette accuracy: <math>2\mu\text{L/step}</math>  Reproducibility: Average value relative error <math>\pm 0.5\%</math>  Steam generator temp monitor: Yes  Condenser material: anticorrosion metal Acid, alkali, and dilute water adding quantified: Yes Automatic Titration cup discharge and clean: Yes Auto receiver solution adding: Yes Safety door: Yes Data storage capacity: 1000Power supply: 220V AC (50/60Hz)Other features:* Automatic distillation and titration functions designed based on classic Kheldahl nitrogen determination method* English labels* English User's manual* Standard product certification* Standard warranty</p>	1	
11	Unit	<p><b>Refrigerated Centrifuge</b></p> <p>Max. Speed: 15,000rpm (200-15,000rpm) in 100rpm increments  Max. RCF: <math>21,380\times g</math>, step: <math>10\times g</math>  Capacity: <math>1.5/2\text{mL}\times 24</math>, <math>0.5\text{mL}\times 36</math>, <math>\text{PCR}8\times 4</math>, <math>5\text{mL}\times 12</math>, <math>5\text{mL}\times 18</math>  Temperature setting: <math>-20^{\circ}\text{C}</math>- <math>40^{\circ}\text{C}</math>  Acceleration and deceleration time: <math>25\text{s}\uparrow 25\text{s}\downarrow</math>  Motor Type: DC brushless motor  Safety Performance: Dual door lock, over-speed detection, over-temperature detection with Internal diagnosis system  Power Requirements: 220V, 60Hz  Noise: <math>\leq 56\text{dB}</math>  Dimensions(mm): <math>332(\text{Width}) \times 553(\text{depth}) \times 283(\text{height})</math>  Weight: 30kg</p>	1	
12	Unit	<p><b>Semi-micro Kjeldahl Nitrogen Equipment</b></p> <p>Heater Capacity: (VV):200 6 stepless variable type Width: 600mm; Depth: 220mm; Height: 560mm Exhaust tube Included;</p>	1	

		Accessories: Kjeldahl flask: capacity 150mL with 6 bottles		
<b>13</b>	<b>Unit</b>	<b>Crude Fat Analyzer</b>  emp. Range: RI +5 ° C-250 ° C; Measuring Range: Grain, feed, grease and various fat products with oil content in the range of 0.5%-60% Temperature Control Mode: Independent temperature control Capacity 6pcs/batch; Solvent Recovery: Automatic solvent recovery with valve Power Supply: AC 220V + 10%, 50HZ; External Size(W*D"H):	<b>1</b>	
<b>14</b>	<b>Unit</b>	<b>Microbiological incubator</b>  45 L capacity, Temperature range: RT+5~70 °C Circulation Mode: Natural Convection	<b>1</b>	
<b>15</b>	<b>Unit</b>	<b>Ultrasonic Scaler</b>  Optic with light Power supply-AC 100V-240V AC 50/60Hz Frequency-50Hz Capacity-60L/20Layers Disinfection time-15min With 1 year warranty	<b>1</b>	
<b>16</b>	<b>Unit</b>	<b>Dental Chair</b>  LED Lamp with sensor: Fitted with 6 light sources and sensor  <ul style="list-style-type: none"> <li>• Ceramic cuspidor: rotatable 180° and removable</li> <li>• Multi-functional foot pedal</li> <li>• Big Main tray: Big size with 6-slotted tool holder &amp; built-in film viewer</li> <li>• Elegant side box</li> <li>• Aluminum suction heads: assistant tray fitted strong &amp; weak suction heads made of aluminum</li> <li>• USA Air &amp; Water tubes</li> <li>• Microfiber leather upholstery</li> <li>• Flash &amp; adjustable light arm</li> <li>• Double arm rest</li> <li>• Stool chair with metal legs</li> <li>• Folding assistant tray</li> <li>• Built-in LED viewer</li> <li>• Accessories include: Built-in scaler + lightcure + intraoral camera _ monitor</li> </ul>	<b>1</b>	

<b>17</b>	<b>Unit</b>	<b>Dental Training Mannequin/ Dental Simulator</b>  LED operating light. Mannequin covered with silicone mask. Double articulating head neck. Jaw- lateral and protrusive movement. Magnet or screw type of jaw. Fits any type of typodont. Can be reclined with lateral movement for the head and the jaw. Has a base unit support. Material used are plastic, aluminum and stainless steel. Safety positioning lock for stability and balance. Stainless swing metal tray Working tray in addition to the main working table. Main control panel system for 1 high speed attachment, 1 low speed attachment and 1 three-way syringe. Assistant panel control system for 1 syringe, 1 saliva ejector, 2 extra empty holder . Foot control in all sides function. Water flow system with 2 clear plastic tempered bottle. Pressure gauge for safety control reading. Base with option of castor wheels or fixed on the floor. Dentist's stool with metal foot. 220V / 60 Hz.	<b>2</b>	
<b>18</b>	<b>Unit</b>	<b>Peri-Apical X-Ray machine (Wall Mounted)</b>  Rating voltage: ac 230v Frequency: 50/60hz Maximum power. 900va Focal spot: 0.7mm Tube voltage: 70kv 10% Radiation leakage: 1meter 0.14mg/h Exposure time range: 0.06-2.0s Anode current: 7ma 2096 With 1 year warranty on parts and service	<b>1</b>	
<b>19</b>	<b>Unit</b>	<b>Wireless Endo Motor</b>  <ul style="list-style-type: none"> <li>- Cordless endodontic handpiece</li> <li>- with torque and auto-reverse</li> <li>- power supply: AC 230V 50/60Hz and battery pack</li> <li>- Max torque: 4Ncm</li> <li>- Charge/ continues use 90 min/1.2h</li> <li>- speed range 100-2,500min</li> <li>- slim head and neck</li> <li>- 90 minutes quick charge with non-contact type charger</li> <li>- Large LCD panel</li> </ul>	<b>1</b>	

		- Lightweight Smart auto-reverse and alarm function -At least 5 programs for different file systems With 1 year warranty		
<b>20</b>	<b>Unit</b>	<b>Fabricated Stainless Steel Necropsy Table</b>  Technical Specifications 48" wide x 96" long (122cm x 244cm) • Stainless steel top with raised edge • Stainless steel base construction • One drain hole • 2-way tilt • 6" swivel casters • Self-contained power unit (available 110V/60 cycle or other power configurations for international use) • Lowered height 15" (38cm) • Raised height 48" (122cm) • Rated for 2,500 lbs. (1,134 kg)	<b>2</b>	
<b>21</b>	<b>Unit</b>	<b>Analytical Balance, 120g Capacity</b>  Capacity (g): 120 • Capacity (kg): 0.12 • Draft Shield Size: 240mm*190mm*265mm** • Dimensions W", H", D": Display: LCD • Readability (g): 0.0001 • Linearity (g): ±0.0003 • Repeatability (g): ±0.0002 • Weighing units: g, mg, ct, oz, lb. • Stabilization time: ≤ seconds • Power (VAC): 110/220 VAC • Cal. Weight: Internal Calibration Warranty • One (1) year on parts and services under normal use Delivery • 30-60 days upon Receipt of PO, Notice of Award or Notice to Proceed Installation, • On-Site by a Certified and Trained Service Engineer Training • On-Site by a Certified and Trained Applications Specialist	<b>1</b>	

**I hereby certify to comply and deliver all the above requirements.**

\_\_\_\_\_  
*[signature]*

\_\_\_\_\_  
*[in the capacity of]*

Duly authorized to sign Bid for and on behalf of \_\_\_\_\_

## ***Section VIII. Checklist of Technical and Financial Documents***

### **Notes on the Checklist of Technical and Financial Documents**

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

- ☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) **in accordance with Section 8.5.2 of the IRR;**

#### Technical Documents

- ☐ (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- ☐ (c) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; **and**
- ☐ (d) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** Original copy of Notarized Bid Securing Declaration; **and**
- ☐ (e) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- ☐ (f) Original duly signed Omnibus Sworn Statement (OSS) **and** if applicable, Original Notarized Secretary’s Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

#### Financial Documents

- ☐ (g) The prospective bidder’s computation of Net Financial Contracting Capacity (NFCC) **or** A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

### *Class “B” Documents*

- ☐ (h) If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

## II. FINANCIAL COMPONENT ENVELOPE

- ☐ (i) Original of duly signed and accomplished Financial Bid Form; **and**
- ☐ (j) Original of duly signed and accomplished Price Schedule(s).

#### Other documentary requirements under RA No. 9184 (as applicable)

- ☐ (k) [For foreign bidders claiming by reason of their country’s extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to participate in



- government procurement activities for the same item or product.
- ☐ (l) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

### ***Bid Form***

---

Date : \_\_\_\_\_  
Project Identification No. : \_\_\_\_\_

To: **BICOL UNIVERSITY, LEGAZPI CITY**

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to ***Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*** conformity with the said PBDs for the sum of *[total Bid amount in words and figures]* or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein or in the Price Schedules,

If our Bid is accepted, we undertake:

- a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);
- b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;
- c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of *[name of the bidder]* as evidenced by the attached *[state the written authority]*.

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

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

Legal capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of:

Date: \_\_\_\_\_

**For Goods Offered From Within the Philippines**  
***Procurement of Various Equipment for Use of the Different/Programs as Required by  
their Respective CMO's in Accreditation and COPC Visits***

Name of Bidder \_\_\_\_\_

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXWpe r item	Transportation and Insurance and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

\_\_\_\_\_  
*[signature]*      \_\_\_\_\_  
*[in the capacity of]*

Duly authorized to sign Bid for and on behalf of \_\_\_\_\_

**NET FINANCIAL CONTRACTING CAPACITY (NFCC)**  
***Procurement of Various Equipment for Use of the Different/Programs as Required  
 by their Respective CMO's in Accreditation and COPC Visits***

- A. Summary of the Applicant Supplier's/Distributor's/Manufacturer's assets and liabilities on the basis of the attached income tax return and audited financial statement, stamped "RECEIVED" by the Bureau of Internal Revenue or BIR authorized collecting agent, for the immediately preceding year.

		Year 20__
1	Total Assets	
.		
2	Current Assets	
.		
3	Total Liabilities	
.		
4	Current Liabilities	
.		
5	Net Worth (1-3)	
.		
6	Net Working Capital (2-4)	
.		

- B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = K (current asset – current liabilities) minus value of all outstanding works under ongoing contracts including awarded contracts yet to be started

NFCC = P \_\_\_\_\_

K = 15 for a contract duration of one year or less

Herewith attached are certified true copies of the income tax return and audited financial statement: stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding year.

Submitted by:

---

Name of Supplier / Distributor / Manufacturer

---

Signature of Authorized Representative

Date : \_\_\_\_\_

NOTE:

1. If Partnership or Joint Venture, each Partner or Member Firm of Joint Venture shall submit the above requirements.

## COMMITTED LINE OF CREDIT CERTIFICATE

Date: \_\_\_\_\_

**Dr. BABY BOY BENJAMIN D. NEBRES, III**  
President, Bicol University  
Legazpi City

CONTRACT/PROJECT : *Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*

COMPANY/FIRM : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

BANK/FINANCING : \_\_\_\_\_

INSTITUTION : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

AMOUNT : \_\_\_\_\_

This is to certify that the above Bank/Financing Institution with business address indicated above, commits to provide the <Supplier/Distributor/Manufacturer/Contractor>, if awarded the above-mentioned Contract, a credit line in the amount specified above which shall be exclusively used to finance the performance of the above-mentioned contract subject to our terms, conditions and requirements.

The credit line shall be available within fifteen (15) calendar days after receipt by the <Supplier/Distributor/Manufacturer/Contractor> of the Notice of Award and such line of credit shall be maintained until the project is completed by the <Supplier/Distributor/Manufacturer/Contractor>.

This Certification is being issued in favor of said <Supplier/Distributor/Manufacturer/Contractor> in connection with the bidding requirement of Bicol University for the above-mentioned Contract. We are aware that any false statements issued by us make us liable for perjury.

Name and Signature of Authorized  
Financing Institution Officer : \_\_\_\_\_  
Official Designation : \_\_\_\_\_

Concurred By:

Name & Signature of <Supplier/Distributor/Manufacturer/Contractor>'s  
Authorized Representative : \_\_\_\_\_  
Official Designation : \_\_\_\_\_

*Note:*

*The amount committed should be machine validated.*

### ACKNOWLEDGMENT

SUBSCRIBED AND SWORN to before me this \_\_\_\_ day of \_\_\_\_\_, 2025, affiant exhibited to me his/her Community Tax Certificate No. \_\_\_\_\_ issued on \_\_\_\_\_ at \_\_\_\_\_, Philippines.

NOTARY PUBLIC

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Book No. \_\_\_\_\_  
Series of 2025

## Omnibus Sworn Statement (Revised)

*[shall be submitted with the Bid]*

REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

### AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

*[If a sole proprietorship:]* I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

*[If a partnership, corporation, cooperative, or joint venture:]* I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

*[If a sole proprietorship:]* As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

*[If a partnership, corporation, cooperative, or joint venture:]* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

*[If a sole proprietorship:]* The owner or sole proprietor is not related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*[If a partnership or cooperative:]* None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*[If a corporation or joint venture:]* None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_ day of \_\_\_, 20\_\_\_ at \_\_\_\_\_, Philippines.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED  
REPRESENTATIVE]*

*[Insert signatory's legal capacity]*  
Affiant

**[Jurat]**

*[Format shall be based on the latest Rules on Notarial Practice]*



REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_) S.S.

X-----X

**BID SECURING DECLARATION**  
**Invitation to Bid:** *[project reference number]*

To: *BICOL UNIVERSITY, LEGAZPI CITY*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
  - (a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
  - (b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
  - (c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this \_\_\_\_ day of  
*[month]* *[year]* at *[place of execution]*.

*[Insert NAME OF BIDDER'S AUTHORIZED  
REPRESENTATIVE]  
[Insert Signatory's Legal Capacity]  
Affiant*

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_ and his/her Community Tax Certificate No. \_\_\_\_\_ issued on \_\_\_\_ at \_\_\_\_\_.

Witness my hand and seal this \_\_\_\_ day of *[month]* *[year]*.

**NAME OF NOTARY PUBLIC**

Serial No. of Commission \_\_\_\_\_

Notary Public for \_\_\_\_\_ until \_\_\_\_\_

Roll of Attorneys No. \_\_\_\_\_

PTR No. \_\_\_\_\_ *[date issued]*, *[place issued]*

IBP No. \_\_\_\_\_ *[date issued]*, *[place issued]*

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Book No. \_\_\_\_\_

Series of \_\_\_\_\_

**List of all Ongoing Government & Private Contracts including contracts awarded but not yet started**

***Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits***

Business Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

Name of Contract/ Project Cost	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work	Bidder's Role		a. Date Awarded b. Date Started c. Date of Completion	% of Accomplishment		Value of Outstanding Works / Undelivered Portion
			Description	%		Planned	Actual	
<b>Government</b>								
<b>Private</b>								

Note: This statement shall be supported with:

1. Notice of Award and/or Contract
2. Notice to Proceed issued by the client or its Equivalent

Submitted by: \_\_\_\_\_  
(Printed Name & Signature)

Designation: \_\_\_\_\_  
Date: \_\_\_\_\_

## Statement of Single Largest Completed Contract (SLCC)

### *Procurement of Various Equipment for Use of the Different/Programs as Required by their Respective CMO's in Accreditation and COPC Visits*

Business Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

Contract Details	Nature of Work	Bidder's Role		Contract Cost & Duration	Start of Contract & Completion
		Description	%		
Name:				Amount at Award:	Date Awarded:
Owner:				Amount at Completion:	Date Started:
Address/Contract Information:				Contract Duration:	Date Completed

Note: This statement shall be supported with:

1. Contract or Purchase Order
2. Certificate of Completion or Certificate of Acceptance or its Equivalent

Submitted by: \_\_\_\_\_  
(Printed Name & Signature)

Designation: \_\_\_\_\_  
Date: \_\_\_\_\_

# SEALING AND MARKING OF PROPOSALS



