



**BID BULLETIN 01**

**Date:** October 16, 2023

**Project Title:** *Supply and Delivery of Technical and Scientific Equipment (VSU-GOODS-24-01)*

**Location:** VSU Main, Visca, Baybay City, Leyte

Bidders are hereby informed/reminded of the following addendums/amendments/clarifications:

**I. LIST OF REQUIREMENTS**

<b>(1st Envelope) TECHNICAL COMPONENT ENVELOPE</b>	
<i>Legal Documents</i>	
1	PhilGEPS Certificate of Registration (Platinum)
<i>Technical Documents</i>	
2	Statement of All On-Going Government & Private Contracts
3	Statement of Bidder's Single Largest Completed Contract (at least 50% of the ABC or Php <b>4,130,000.00</b> )
	Or
	Statement of at least two (2) similar completed contracts w/ total amount of at least Php 4,130,000.00 and the largest of which should be at least PhP <b>2,065,000.00</b> .
4	Bid Security
5	Technical Specifications
6	SCHEDULE of Requirements/Production and delivery schedule
7	Manpower Requirements
8	After Sales service/parts from acceptance of delivered goods (at least 1 year for equipment)
9	Original Duly Signed Omnibus Sworn Statement
<i>Financial Documents</i>	
10	The Supplier's Audited Financial Statements
11	Net Financial Contracting Capacity (at least Php 8,260,000.00)
	Or
	Committed Line of Credit (at least Php 826,000.00)
<b>(2<sup>nd</sup> Envelope) FINANCIAL COMPONENT ENVELOPE</b>	
12	Original of duly signed and accomplished Financial Bid Form
13	Original of duly signed and accomplished Price Schedule(s)



**Please take note:**

1. In the **Technical Specifications**, bidders must state either “Comply” or “Not Comply” **against each of the individual parameters of the specifications** per item stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in the **Bidders Bid** and cross-referenced to that evidence. Evidence shall be in the form of **manufacturer’s un-amended sales literature (Data Sheets), unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data, and Brand and Model** 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 Bidders 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 provisions of **ITB** Clause 3.1(a)(ii) and/or **GCC** Clause 2.1 (a)(ii).

2. Bidders are advised to use the latest GPPB forms for the following documents:

- a) Omnibus Sworn Statement
- b) Performance Securing Declaration (if applicable)
- c) Price Schedule for Goods Offered
- d) Bid Form
- e) Bid Securing Declaration

These forms can be accessed from the GPPB website: <https://www.gppb.gov.ph/downloadables.php>. Documents that are not in its updated/latest format shall be a ground for disqualification of the bidder.

**II. Preparation of Electronic Bid (for bidders who prefer electronic bid submission)**

- 1. **Scan per document** into Portable Document Format (PDF) and should be printable.
- 2. Properly label all scanned documents for prompt identification. Filename of documents, whichever are applicable to the bidder, should be as follows:

Document	Filename (in PDF form)
1. PhilGEPS Certificate of Registration (Platinum)	PhilGEPS
2. Statement of On-Going Government & Private Contracts	Statement of On-Going Contracts
3. Statement of Bidder's Single Largest Completed Contract	SLCC
4. Statement of at least two (2) similar completed contracts	Statement of Completed Contracts
5. Bid Security	Bid Security
6. Technical Specifications	Technical Specifications
7. SCHEDULE of Requirements/ 8. Production and delivery schedule	Schedule of Requirements
9. Manpower Requirements	Manpower Requirements
10. After Sales service/parts	After Sales
11. Omnibus Sworn Statement	Omnibus Sworn Statement
12. Audited Financial Statements	Audited Financial Statements
13. Net Financial Contracting Capacity	NFCC
14. Committed Line of Credit	CLC
15. Bid Form	Bid Form
16. Price Schedule	Price Schedule



3. Create two (2) folders that are password-protected. The first folder should contain all requirements under Technical Component checklist as presented under Section VIII.

The second folder should contain all requirements under Financial Component checklist.

4. Compress the two (2) folders and name as follows: a) first folder: **Technical Documents**, b) second folder: **Financial Documents**.
5. Email the 2 compressed folders to Ms. Jessamine C. Ecleo at [jessamine.ecleo@vsu.edu.ph](mailto:jessamine.ecleo@vsu.edu.ph) before the deadline.

### III. Changes in the Bidding Documents

Original	
<p><b>Section I. Invitation to Bid</b></p> <p>5. A complete set of Bidding Documents may be acquired by interested Bidders on <i>02 October – 23 October 2023 8:30 AM</i> 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 Ten Thousand Pesos (PhP 10,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.</p>	<p><i>(Amendment)</i></p> <p>5. A complete set of Bidding Documents may be acquired by interested Bidders on <i>02 October – 23 October 2023 AM until 8:30 AM</i> 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 Ten Thousand Pesos (PhP 10,000.00).The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.</p> <p>The Bidders may deposit the payment for the bidding documents to the Visayas State University Landbank Account with the following details:</p> <p>Account Name: Visayas State University Fund 164 Account Number: <u>3572-1000-13</u></p> <p>Then send the deposit slip to <a href="mailto:leopoldo.escala@vsu.edu.ph">leopoldo.escala@vsu.edu.ph</a></p>
<p><b>Section III. Bid Data Sheet</b></p> <p>5.3 For this purpose, contracts similar to the Project shall be:</p> <p>a. <i>Technical, Scientific Equipment</i></p> <p>b. completed within two (2) years prior to the deadline for the submission and receipt of bids</p>	<p><i>(Amendment)</i></p> <p>5.3 For this purpose, contracts similar to the Project shall be:</p> <p>a. <i>Technical, Scientific, Industrial, Electro-Mechanical Equipment</i></p> <p>b. completed within two (2) years prior to the deadline for the submission and receipt of bids</p>



<p><b>Section II. Instructions to Bidders</b></p> <p>15. Sealing and Marking of Bids</p>	<p><i>(Additional Instructions)</i></p> <p>Bidders are requested to submit three (3) copies of its bid – 1 Original, Copy 1, and Copy 2.</p> <p>For filing purposes, the bidders are urged to use <b>Red</b> envelopes for its Technical and Financial Component envelopes, including the Mother (outer) Envelope.</p>
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**IV. Revised List of Goods and Technical Specifications**

- Some Specifications were added (in red font) and/or deleted (in blue font)
- Some Quantities and Unit Prices (ABC) were changed

Item #	Description	Unit	Qty	Unit Price	Total Price
1	<b>Industrial and Heavy-Duty Earth Ground Tester Kit</b>	set	1	400,000.00	400,000.00
	<b>Specification:</b>				
	<i>Memory: Internal memory storage up to 1500 records accessible via USB port</i>				
	<i>Measuring Function: Interference voltage and frequency, earthing resistance 3- and 4-pole with/without clip-on current transformer, resistance 2-pole with AC, 2-and 4-pole with DC</i>				
	<i>Display: 4-digit (2999 Digit) - 7 segment liquid crystal display, with improved Visibility.</i>				
	<i>Operation: Central rotary switch and function keys.</i>				
	<i>Operating Temperature: -10°C to 50°C (14°F to 122°F)</i>				
	<i>Storage Temperature: -30°C to 60°C (-22°F to 140°F)</i>				
	<i>Temperature Coefficient: ±0.1% of reading/°C &lt; 18°C &gt; 28°C</i>				
	<i>Protection: Complied with EN60529 (IP56 for case, IP40 for battery door)</i>				
	<i>Max Voltage: Warning-socket clamp E, ES, S or H</i>				
	<i>Max Urms = 250V (pertains to misuse)</i>				
	<i>Safety: Protection by double and/or reinforced insulation. Max. 50 V to earth per IEC61010-1. Pollution degree 2</i>				
	<i>Quality Standard: DIN ISO 9001 compliance in development, designed and manufacturing</i>				
	<i>External field influence: Complies with DIN 43780 (8/76)</i>				
	<i>Measure of Interference Voltage DC + AC: Full wave rectification of measuring limits of error &amp; method, Measuring range (1V – 50V), Display range (0.0V – 50V), Frequency range (DC/AC 45hz – 400Hz), Accuracy (±5% of rdg + 5 digit), Internal resistance (Approx. 1.5 MΩ)</i>				
	<i>Measure of Interference Frequency: Measurement of oscillation period of the interference voltage, Measuring Range (6.0 Hz to 400 Hz), Display range (16.0 Hz to 299.9 Hz to 999 Hz), Accuracy (±1% of rdg + 2 digit)</i>				



	Earthing Resistance: Current and voltage measurement with probe as IEC61557-5, Open circuit voltage (20/48 V, AC), Short circuit current (250 mA AC), Noise rejection (120 dB)				
	Electrical Measurement: Position (Reference position $\pm 90^\circ$ ), Temperature ( $0^\circ\text{C}$ and $35^\circ\text{C}$ ), Resistance of the probes & auxiliary earth electrodes ( $0$ to $100 \times R_A \leq 50 \text{ k}\Omega$ ), System frequency (99% to 101% of the nominal frequency), System voltage (85% to 110% of the nominal voltage), Operating error ( $B[\%] = \pm B/\text{fiducial value} \times 100\%$ , $A = \text{intrinsic error}$ , $E_n = \text{variations}$ , $R = \text{routine test}$ , $T = \text{type test}$ ), Accuracy ( $\pm 2\%$ of rdg + 2 digit), Measuring time (Typical 8 seconds with a fixed frequency 30 sec. max. with AFC & complete cycle of all measuring frequencies) Measuring error of RH & RS (Typ. 10% of RE + RS + RH), Max. probe resistance & auxiliary earth electrode resistance ( $\leq 1 \text{ M}\Omega$ )				
	Automatic Switchover of Measuring Resolution in Dependence to Auxiliary Earth Electrode Resistance RH				
	Selective Measurement of the Earthing Resistance (RE Clamp): (Current and voltage measurement with probe as per EN61557-5 & current measurement in the individual branch with additional current transformer.				
	Resistance Measurement (R AC/DC): (Current and voltage measuring method as per IEC61557-4 possible)				
	Compensation of Lead Resistance (RK)				
	Stakeless Ground Loop Measurement (Two Clamp Stakeless)				
	GEO Earth Ground Tester				
	User's Manual & Quick Reference Guide				
	USB Cable				
	Professional Carrying Case				
	2 Clamps, 4 Earth Ground Stakes & 3 Cable Reels				
	<b>General Requirement:</b>				
	At least one-year warranty				
	Provide technical assistance and training on product usage and service center within the <b>Visayas or Luzon</b> .				
	Product Manufacturer at least 15 years in the Electro-mechanical maintenance industry.				
<b>2</b>	<b>Industrial and Heavy-Duty Earth Ground Loop and Leakage Clamp</b>	<b>set</b>	<b>1</b>	<b>182,000.00</b>	<b>182,000.00</b>
	<b>Specification:</b>				
	Test the grounding components of equipment in hard-to-reach spaces, including areas that are indoors or fully paved and do not permit driving auxiliary test stakes.				
	AC Leakage Current Measurement: Identify AC leakage without disconnecting your earth ground stake from the grounding system.				
	Heavy-duty clamp jaw stays in alignment and in calibration even in every day, on-the-job industrial environments				
	User-defined high/low alarm limits, for rapid measurement evaluation				
	Selectable band-pass filter function removes unwanted noise from the AC leakage current measurement.				





	Electrical specification: Maximum voltage to earth ground (1000V), Battery type (AA alkaline IEC/EN LR6 (x4)), Frequency range (40 Hz to 1 kHz), Ingress Protection (IEC/EN 60529: IP30 with jaw closed), LCD (Digital reading, 999 counts; Refresh rate, 4 per second), Operating temperature (-10 °C to + 50 °C), Storing temperature (-20 °C to + 60 °C), Operating humidity (Non-condensing), Operating altitude (2000 m or 6561 feet), Storing altitude (12 000 m or 39,370 feet), Reference Temperature (23 °C ±5 °C or 73 °F ±9 °F), Measurement (IEC/EN 61010-2-032: CAT IV 600 V / CAT III 1000 V), Current clamp for leakage current measurements (IEC/EN 61557-13: Class 2, ≤30 A/m), Resistance to earth (IEC/EN 61557-5), Effectiveness of the Protective Measures (IEC/EN 61557-16), Electromagnetic compatibility (EMC) (IEC/EN 61326-1: Portable Electromagnetic Environment, CISPR 11: Group 1, Class B, IEC/EN 61326-2-2, KCC Class A equipment, FCC 47 CFR 15 subpart B)				
	Earth Ground Clamp				
	Loop resistance standard				
	Safety information guide & Quick reference guide				
	Hard case & (4) AA batteries				
	<b>General Requirement:</b>				
	At least one-year warranty				
	Provide technical assistance and training on product usage and service center within the <b>Visayas or Luzon</b> .				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry.				
<b>3</b>	<b>Industrial and Heavy-Duty Precision Acoustic Imager</b>	<b>unit</b>	<b>1</b>	<b>2,062,000.00</b>	<b>2,062,000.00</b>
	<b>Specification:</b>				
	Quick and easy partial discharge detection & PD testing				
	Sensors: Frequency band (2 kHz to 100 kHz), Detection range (0.5 to > 120 meters -1.6 to > 393 feet), Field view (63 ° ± 5 °), Nominal frame rate (25FPS)				
	Built-in digital camera (visible light): (FOV63 ° ± 5 ° and fixed lens)				
	Display: 7" LCD with backlight, under-sunlight readable, Capacitive Touch screen, SoundMap image acoustic image, 1280 x 800 (1,024,000 pixels) resolution				
	Image storage: Storage capacity at least 999 picture files and 20 video files, blended and soundmap jpg, png and mp4 format, 5 minutes video length and USB-C for data transfer				
	Acoustic measurement: Measurement range (12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz, 4.4 dB SPL to 101.2 dB SPL ±2 dB SPL 19 kHz, 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz, 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kHz, 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz, 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz)				
	Software: Intuitive user interface, Trend graphs (Frequency and dB scale), Spot markers (dB level reading at center point of the image)				
	Battery: Batteries (field-replaceable, Rechargeable, 2 x Li-ion battery), Battery life (6 hours/battery includes spare battery),				



	Battery charging (External dual-bay, 3-hour charging time)				
	Standard palettes: 3: Grayscale, Ironbow, Blue-Red				
	Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)				
	Storage temperature: -20 °C to 70 °C (-4 °F to 158 °F) Without batteries				
	Relative humidity: 10 % to 95 % non-condensing				
	Ingress Protection (IP): IP40 protection				
	Self-diagnostic notification: Array-health test to identify when microphone array needs attention				
	Supported languages: Dutch, English, Finish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese				
	Safety Compliant: IEC 61010-1 & RoHS compliant				
	Electromagnetic Compatibility (EMC): IEC 61326-1: CISPR 11: Group 1, Class A, (KCC) Class A Equipment, (FCC) 47 CFR 15 subpart B.				
	AC power supply and battery pack charger (including universal AC adapters)				
	Two rugged lithium ion smart battery packs & USB cable				
	Rugged, hard carrying case & adjustable hand strap and neck strap				
	<b>General Requirement:</b>				
	Warranty: <b>at least</b> 2 year				
	Provide technical assistance and training on product usage and service center within the <b>Visayas or Luzon</b> .				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry.				
<b>4</b>	<b>Industrial and Heavy-Duty Three-Phase Power Quality Analyzer</b>	unit	<b>1</b>	<b>900,000.00</b>	<b>900,000.00</b>
	<b>Specification:</b>				
	Voltage inputs: Number of inputs (4 inputs, 3 phases and neutral referenced to PE 5 connectors), Measurement category (1000 V CAT III / 600 V CAT IV), Maximum input voltage (1000 V rms / 1000 V dc (1700 Vpk)), Nominal voltage range (Wye and single phase: variable 50V – 1000V) (Delta: Variable 100V – 1000V) IEC 61000-4-30 Class A compliance, Input impedance (10 MΩ between P-P & P-N, 5 MΩ between P-PE & N-PE), Bandwidth (DC to 30 kHz for PQ measurements), Resolution (24-bit synchronous sampling), Sampling frequency (80 kS/s at 50/60 Hz), Scaling (1:1, variable for use of potential transformers)				
	Standard compliance: Power (IEEE 1459), Harmonics (IEC 61000-4-7: Class 1), IEEE 519 (short time and very short time harmonics), Flicker (IEC 61000-4-15 Class F1) Power quality (IEC 61000-4-30 Class A, IEC 62586 PQI-A-PI), Power quality compliance (EN 50160 + GOST + NEQUAL + NETCODE + FOL)				
	Environmental specifications: Operating temperature range –(10 °C to 50 °C), Storage temperature range (-20°C to 60°C)				
	IP Rating (IEC 60529: IP50)				
	Vibration (IEC 60721-3-3 / 3M2)				
	Power supply: Voltage range (100V – 600V -15 % / +10%),				



	Power consumption (Max. 40VA), Mains frequency 50/60 Hz				
	UPS: Li-Ion battery BP1770 with extended temperature range, On-battery runtime: 1.5 hours				
	Safety: IEC 61010-1: Pollution Degree 2				
	Power supply: Overvoltage Category IV 600 V with Mains Adapter MA-C8: Overvoltage Category II 300 V				
	<b>General Requirement:</b>				
	Warranty Analyzer: <i>at least</i> 2 years (battery not included)				
	Accessories: <i>at least</i> 1 year (including battery)				
	Calibration cycle 2 years				
	Provide technical assistance and training on product usage and service center within the <i>Visayas or Luzon</i> .				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry				
<b>5</b>	<b>Industrial and Heavy-Duty Thermal Camera</b>	<b>unit</b>	<b>1</b>	<b>310,000.00</b>	<b>310,000.00</b>
	<b>Specification:</b>				
	<ul style="list-style-type: none"> <li>• Infrared Resolution: 320 x 240 (76,800 pixels)</li> <li>• Field of View: 34.1 °H x 25.6 °V</li> <li>• Minimum Focus Distance: 46 cm (18 in)</li> <li>• Focus System: Fixed</li> <li>• Frame rate: &lt; 9 Hz or 30 Hz</li> <li>• Color alarms High temperature, low temperature, isotherms (within range)</li> <li>• Infrared spectral band :7.5 µm to 14 µm</li> <li>• Operating temperature: -10 °C to +50 °C (14 °F to 122 °F)</li> <li>• Storage temperature: -20 °C to +50 °C (-4 °F to 122 °F) without batteries</li> <li>• Relative humidity: 10 % to 95 %, non-condensing</li> <li>• Center-point temperature measurement</li> <li>• Spot temperature Hot and cold spot markers</li> <li>• Standard palettes: 8: Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted</li> <li>• Ultra-contrast palettes: 8: Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra</li> <li>• Safety standards &amp; Compliance IEC 61010-1: Overvoltage category II, Pollution Degree 2 &amp; RoHS</li> <li>• Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A, RCM IEC 61326-1, FCC EN61326-1; FCC Part 5, EN 55011: Class A, EN61000-4-2, EN61000-4-3</li> <li>• Vibration: 2G, IEC 68-2-6</li> <li>• Shock: 25G, IEC 68-2-29</li> <li>• Drop: Engineered to withstand 2-meter (6.5 ft) drop</li> </ul> Enclosure rating: IP54				
	<b>General Requirement:</b>				
	Warranty: <i>at least</i> 2 years				
	<b>Recommended</b> Calibration cycle: Every 2 years				
	Provide technical assistance and training on product usage and				





	service center within the <i>Visayas or Luzon</i> .				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry				
<b>6</b>	<b>Industrial and Heavy-Duty Cable Locator Set</b>	<b>set</b>	<b>1</b>	<b>90,000.00</b>	<b>90,000.00</b>
	<b>Specification:</b>				
	Professional cable locator				
	Voltage measurement range for Transmitter: 12 V, 50 V, 120 V, 230 V, 400 V				
	Frequency range for Transmitter: 0 - 60 Hz				
	Output signal for Transmitter: 125 kHz				
	Voltage for Transmitter: Up to 400 V AC/DC				
	Tracing depth cable location for Receiver: 0 - 2.5 m wall/underground cables				
	Main voltage detection for Receiver: 0 - 0.4 m				
	Operating temperature: Transmitter & Receiver (0 to 40°C)				
	Storage temperature: Transmitter & Receiver (-20°C to +60°C)				
	Humidity (without condensation): Transmitter & Receiver (Max. 80% relative)				
	Operating altitude: Transmitter & Receiver: (Up to 2000 m)				
	Electrical safety EN 61010-1				
	Overvoltage category Cat. III 300 V				
	<b>General Requirement:</b>				
	Warranty <i>at least</i> 2 years				
	Provide technical assistance and training on product usage and service center within the <i>Visayas or Manila</i> .				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry				
<b>7</b>	<b>Industrial and Heavy-Duty Infrared Camera</b>	<b>unit</b>	<b>1</b>	<b>916,000.00</b>	<b>916,000.00</b>
	<b>Specification:</b>				
	Detector resolution: 640 x 480				
	Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image				
	Infrared Resolution: 307,200 pixels				
	Laser distance meter				
	Advanced manual focus				
	Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD				
	Rugged, ergonomic design for one-handed use Yes				
	Digital zoom 2x and 4x				
	Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)				
	Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)				
	Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)				
	Wireless connectivity and compatibility with IOS, Android and LAN				



	Lenses: Standard lens IFOV (spatial resolution) 0.93 mRad, D:S 1065:1, Field of view 34 °H x 24 °V, Minimum focus distance 15 cm (approx. 6 in), IR-Fusion® technology Picture-In-Picture and full screen 2x telephoto smart lens IFOV (spatial resolution) 0.46 mRad, D:S 1529:1, Field of view 17 °H x 12 °V, Minimum focus distance 45 cm (approx. 18 in), IR-Fusion® technology Picture-In-Picture and full screen				
	4x telephoto smart lens IFOV (spatial resolution) 0.23 mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V, Minimum focus distance 1.5 cm (approx. 60 in),				
	Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1, Field of view 48 °H x 34 °V, Minimum focus distance 15 cm (approx. 6 in), IR-Fusion® technology Full screen				
	Battery: Batteries (field-replaceable, rechargeable), Two lithium ion smart battery packs with five-segment LED display to show charge level, Battery life 2-3 hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or in-imager charging.				
	Infrared spectral band: 7.5 μm to 14 μm (long wave)				
	Operating temperature -10 °C to +50 °C (14 °F to 122 °F)				
	Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)				
	Relative humidity 10% to 95% non-condensing				
	Safety IEC 61010-1: Overvoltage category II, Pollution Degree 2				
	Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A				
	<b>General Requirement:</b>				
	Warranty: <b>at least</b> 2 years				
	Calibration cycle: Every 2 years				
	Provide technical assistance and training on product usage and service center within the <b>Visayas or Luzon</b>				
	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry				
<b>8</b>	<b>Industrial and Heavy-Duty Battery Operated Self-Propelled Articulating Boom Lift</b>	<b>unit</b>	<b>1</b>	<b>3,400,000.00</b>	<b>3,400,000.00</b>
	<b>Specification:</b>				
	Max. Working Height: at least 22m				
	Max. Platform Height: at least 20m				
	Max. up and over clearance: at least 9.4m				
	Max. Working Radius: at least 12.23m				
	Platform Width: at least 0.76m				
	Platform Length: at least 1.8m				
	Height: Stowed at least 2.38m				
	Length: Stowed at least 8.99m				
	Width: at least 2.49m				
	Wheelbase: at least 2.5m				
	Ground Clearance: Center at least 0.3m				
	Max. Lift Capacity: 256kg/350kg				



Number of platform occupants: 2-3				
Platform rotation: $\pm 80^\circ$				
Turntable rotation: 355°				
Vertical jib rotation (up/down): $\pm 70^\circ$				
Drive speed: Stowed at least 4.5km/h				
Gradeability: Stowed at least 40%				
Max. Working angle (Tilt sensor activation): 3°				
Turning radius (outside): 5.0m				
Drive and steer: 4x2				
Weight: at least 10000kg				
Battery: 48V/420Ah				
Control voltage: at least 24V				
Pump power: at least 12kw				
Drive motor: at least 3.3kw				
Standard compliance: GB25849-2010, BS EN 280:2013+A1:2015				
<b>General Requirement:</b>				
Warranty: <i>at least</i> 2 years				
Life-long technical support and assistance				
			<b>TOTAL:</b>	<b>8,260,000.00</b>

**DILBERTO O. FERRAREN**  
BAC Chairman