



Republic of the Philippines  
**DEPARTMENT OF SCIENCE AND TECHNOLOGY**  
**ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE**



**PURCHASE ORDER**

ASTI-FM 03-17  
 REV 3 / 10 October 2023

<b>Supplier:</b>	<b>EGM SYSTEMS GLOBAL TECHNOLOGIES, INC.</b>	<b>PO No.:</b>	<b>24-05-102</b>
<b>Address:</b>	<b>Unit 309 Armal Plaza Bldg., C. Raymundo Ave., Maybunga, Pasig City, Metro Manila</b>	<b>PO Date:</b>	<b>May 17, 2024</b>
<b>TIN:</b>	<b>008-855-293-000</b>	<b>Mode of Procurement:</b>	<b>Competitive Bidding</b>

Gentleman:

Please furnish this Office the following articles subject to the terms and conditions contained herein:

<b>Place of Delivery:</b>	<b>ASTI Bldg., C.P. Garcia Ave., U.P. Technology Park Complex, U.P. Campus, Dilliman, Quezon City 1101</b>	<b>Delivery Term:</b>	<b>Ninety (90) calendar days upon issuance of NTP</b>
<b>Date of Delivery:</b>	_____	<b>Payment Term:</b>	<b>Government Terms</b>
		<b>Warranty Term:</b>	_____

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Lot	<p><b>Supply, Delivery and Installation of New Uninterruptible Power Supply (UPS) as replacement UPS unit</b></p> <p>1.General Statement</p> <p>1.1.DOST-ASTI is seeking qualified and competent bidders for the Supply, Delivery, Installation, Commissioning, Testing, and Power Up of One (1) Lot 48kVA Modular Uninterruptible Power Supply (UPS) as Back-up/Redundancy Unit for Data Center Operations to protect critical loads from utility-supplied power problems such as spikes, power interruptions, fluctuations, etc. ultimately enhancing stability of its Data Center Operations</p> <p>1.2.The ABC is inclusive of all applicable government taxes and services charges (e.g., VAT, cancellation cost, duties, cost of delivery, etc.).</p> <p>2.Technical Specifications (Minimum requirements)</p> <p>2.1.Uninterruptible Power Supply</p> <p>2.1.1.Quantity: One (1) lot</p> <p>2.1.2.The maximum frame capacity shall be 48kVA/48kW</p> <p>2.1.3.The UPS Battery shall be sized for 48kW</p> <p>2.1.3.1. Power Module: 3 x 16 kW.</p> <p>2.1.4.Battery runtime shall not be less than four (4) minutes at full load</p> <p>2.1.5.UPS batteries must be hot swappable, modular, and VRLA</p> <p>2.1.6.UPS System must not exceed 800kgs.</p> <p>2.1.7.UPS Mains Input</p> <p>2.1.7.1.Grid system: 3 phases + neutral + ground</p> <p>2.1.7.2.Voltage range (full load): 340 – 477 V</p> <p>2.1.7.3.Erequency range: 40 – 70 Hz with 10 Hz/sec slew rate</p> <p>2.1.7.4.Power factor (PF): &gt;0.98 @ load &gt; 50%</p> <p>2.1.7.5.Current Distortion: &lt; 5%</p> <p>2.1.7.6.Maximum input short-circuit level: 30 kA</p> <p>2.1.7.7.Protection Backfeed contactor</p>	1	₱6,493,000.00	₱6,493,000.00

Postal Address : ASTI Bldg., U.P. Technology Park Complex,  
 CP Garcia Ave., Diliman, Quezon City 1101  
 Website : www.asti.dost.gov.ph  
 Email : info@asti.dost.gov.ph

Tel No. : +632 8249-8500  
 +632 8426-9755

2.1.8. UPS Bypass Input

2.1.8.1. Grid system: 3 phases + neutral + ground

2.1.8.2. Voltage (nominal): 380 V/400 V/415 V

2.1.8.3. Voltage (range): +/-10% (from selected voltage)

2.1.8.4. Frequency (nominal): 50/60 Hz

2.1.9. Frequency (range): +/-0.1 Hz, +/-3 Hz, +/-10 Hz (user selectable)

UPS Output

2.1.9.1. Grid system: 3 phases + neutral + ground

2.1.9.2. Voltage (nominal): 380 V/400 V/415 V L-L

2.1.9.3. Frequency regulation: 50/60 Hz bypass synchronized, 50/60 Hz +/-0.1% free running

2.1.9.4. Overload (normal and battery operation): 150% for 60 seconds, 125% for 10 min, 100% continuous

2.1.9.5. Voltage Distortion: < 2% from 0 to 100% linear load, < 6% full nonlinear load according to IEC/EN62040-3

2.1.10. Load PF: 0.5 leading to 0.5 lagging without any derating

2.1.11. Batteries

2.1.11.1. Nominal Battery voltage: +/-192 VDC (2x96 cells at 2 V)

2.1.11.2. Float voltage: +/-218 VDC (2x96 cells at 2.27 V)

2.1.11.3. End of discharge voltage (full load): +/-154 VDC (2x96 cells at 1.6 V)

2.1.11.4. End of discharge voltage (no load): +/-168 VDC (2x96 cells at 1.75 V)

2.1.11.5. Battery management system to continuously monitor the health of each removable battery module. This system shall notify the user in the event that a failed or weak battery module is found.

2.1.12. Efficiency

2.1.12.1. Normal operation: ≥ 95% at 35% – 100% load; ≥90% @ 15% – 34% load

2.1.12.2. Battery operation: ≥ 94% at 25% – 100% load; ≥90% @ 15% – 34% load

2.1.13. Operation

2.1.13.1. Normal operation: The input converter and output inverter shall operate in an on-line manner to continuously regulate power to the critical load. The input and output converters shall be capable of full battery recharge while simultaneously providing regulated power to the load for all line and load conditions within the range of the UPS specifications.

2.1.13.2. Battery: Upon failure of the AC input source, the critical load shall continue being supplied by the output inverter, which shall derive its power from the battery system. There shall be no interruption in power to the critical load during both transfers to battery operation and retransfers from battery to normal operation.

2.1.13.3. Recharge: Upon restoration of the AC input source, the input converter and output inverter shall simultaneously recharge the battery and provide regulated power to the critical load.

2.1.13.4. Soft-Start Operation: As a standard feature, the UPS shall contain soft-start functionality, capable of limiting the input current from 0-100%

2.1.14. Display, Controls, Software, and Connectivity

2.1.14.1. Control Logic: The UPS shall be controlled by two fully redundant, user-replaceable/swappable control modules.

2.1.14.2. Display Unit: The display shall consist of

an alphanumeric display with backlight, four LEDs for quick status overview, and a keypad consisting of pushbutton switches.

2.1.14.3.Event log: The display unit shall allow the user to display a time and date stamped log of the most recent status and alarm events.

2.1.14.4.Network Adaptor: The Network Management Card shall allow one or more network management systems (NMS) to monitor and manage the UPS in TCP/IP network environments.

2.1.15.Features

2.1.15.1.Must have six (6) 3x1 Pole 3 Wire 16A 3xIEC309 300cm, 360cm, 420cm

2.1.15.2.Must have automatic internal bypass

2.1.15.3.Must have self-diagnosing, field replaceable modules

2.1.15.4.Must have redundant intelligence module

2.1.15.5.Must have swappable static bypass

2.1.15.6.Must have intelligent battery management

2.1.15.7.Must have network management

2.1.15.8.Must have remote access over HTTP, HTTPs, Telnet, SSH, and SNMP v1 and v3

2.1.15.9.Must have dual mains input, top or bottom feed

2.1.15.10.Regulatory Compliance

2.1.15.11.CE, UL1778, EN/IEC 62040-1-1, EN/IEC/UL60950-1, EN50091-2/IEC 62040-2 (class A), FCC15A, EN/IEC 62040-3

2.1.16.With Power Distribution Unit

2.1.16.1.Six (6) units

2.1.16.2.Acceptable input voltage: 220-240 VAC +6%, -10%

2.1.16.3.Maximum input current (phase): 32 A

2.1.16.4.Input frequency: 50/60 Hz

2.1.16.5.Input connection: 32 A, 3-pin

2.1.16.6.Input power: 7.4 kVA

2.1.16.7.Output voltage: 220-240 VAC

2.1.16.8.Maximum output current (outlet): IEC-320-C13 (10 A), IEC-320-C19 (16 A)

2.1.16.9.Maximum output current (phase): 32 A

2.1.16.10.Maximum input current (bank): 16 A

2.1.16.11.Output connections: thirty-six (36) IEC-320-C13, six (6) IEC-320-C19

2.1.16.12.Overload protection (internal): two (2) 16 A, 1-pole hydraulic-magnetic circuit breakers

2.1.16.13.Dimensions (H x W x D): 179.1 x 5.6 x 4.4 cm (70.5 x 2.2 x 1.7 in) (depth does not include toolless pegs)

2.1.16.14.Power cord length: 3.0 m (10 ft)

2.1.16.15.EN 55032 & EN 55035, EN 61000-3-2 & EN 61000-3-3, AS/NZS CISPR 32, KN 32 & KN 35, UL-EU, CE, EAC

2.1.16.16.Must have two (2) toolless mounting pegs for Zero U mounting

2.1.16.17.Must have liquid crystal display (LCD)

2.1.16.18.Must have input buttons allows to monitor parameters and measurements

2.1.16.19.Must have serial port, USB ports and LAN ports

2.1.16.20.Must have remote communication through network port

2.1.16.21.Must have environmental sensor port allows for monitoring of temperature and humidity of room or enclosure

2.1.16.22.Must have network management (TELNET, SNMP)

2.1.17.Electrical

2.1.17.1.The winning supplier must include the

Supply, Delivery, and Installation of the following:

2.1.17.1.1.New Electrical THHN wires and Conduits for the new UPS

2.1.17.1.2.Enclosed Circuit Breaker (ECB) in NEMA 1 Enclosure with Neutral and Ground bus bar, 100AT, 400VAC, 3Phase, 3Pole, 60Hz

2.1.17.1.3.60KVA Stepdown Transformer

2.1.17.1.4.Other Consumable Materials

3.Qualification and Documentary Requirement

3.1.Bidder must be an Elite Partner (tier 1) of the offered UPS Manufacturer Certificate must be provided

3.2.Offer UPS must have Local 3-tier support.

3.2.1.1st level-Supplier

3.2.2.2nd Level-Distributor

3.2.3.3RD Level- Manufacturer

3.3.Certificate Stating the Contact Person, Numbers, and email must be submitted

3.4.Bidder must have at least three (3) technical personnel with a Minimum of Five (5) Years 'work experience in Installation and maintenance of UPS. Curriculum Vitae of each personnel and Certificate of Employment (COE) must be submitted

3.5.Bidder must have a following personnels engaged to oversee the Installation, commissioning, and testing of the New Modular UPS

3.5.1.Electrical Engineer

3.5.2.Safety Officer

3.5.3.Certified Datacenter Professional

3.6.Certificate of Employment, Curriculum Vitae, Valid PRC ID for Electrical Engineer, Safety

training certificate from DOLE

3.7.Bidder must have at least one (1) employed personnel fully certified by the manufacturer on the similar Modular UPS product/brand being offered

3.8.The Offered Modular UPS /Model AS/Product line should not be End-of-Life (EOL) for the next Five (5) years and must have a local representative office customer care center in the Philippines with local hotline number to ensure quality of support and same timezone.

3.9.Offered brand must have a manufacturing plant in the Philippines to ensure the readiness and availability of parts and maintain the Mean Time to Repair requirement.

3.10.The winning supplier shall conduct a UPS user/operation orientation.

4.Warranty and Support

4.1.The proposed UPS solution must have a warranty of three (3) years from turnover and acceptance

4.2.Must have 24x7 telephone, email, remote, and on-site support for three (3) years.

4.3.Support must always be available and accessible as part of the Support and Maintenance Agreement for three (3) years.

4.4.The winning Supplier must conduct Quarterly preventive Maintenance to ensure the operation efficiency of the UPS machine

4.5.For support and trouble call. winning bidder must provide a Service level agreement indicating the local hotline number, list of Engineer and the Local 3-tier support (1st level is the Supplier,2nd Level is the distributor, and the 3RD Level the

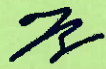
	<p>manufacturer)</p> <p>5.Training 5.1.The Winning Supplier shall provide administration training and knowledge transfer for a maximum of ten (10) DOST-ASTI personnel and enable the team to manage the day-to-day operations of the UPS installed. 5.2.Training shall be onsite for at least one (1) day and in batches, depending on the availability of both parties.</p> <p>6.Payment and Delivery Terms 6.1.Delivery and Installation of the item shall be made by the supplier within ninety (90) calendar days upon issuance of NTP. 6.2.Payment shall be processed only upon the issuance of certification of acceptance by the End-user that the items are delivered in accordance with the terms of this contract and have been duly inspected. No payment shall be made for items not yet delivered under this contract.</p> <p>(Please see attached offer.)</p>		
		<b>TOTAL:</b>	<b>₱6,493,000.00</b>
<b>(Total Amount in Words)</b>		<b>Six Million Four Hundred Ninety-Three Thousand Pesos Only</b>	

The contract price is inclusive of taxes and other fees or charges. In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, DOST-ASTI may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances and in accordance with the provisions of the latest implementing rules and regulations of RA 9184.

Conforme:

Very Truly Yours,

\_\_\_\_\_  
(Signature over Printed Name of Supplier)

  
**FRANZ A. DE LEON, Ph.D.**  
Director, DOST-ASTI

\_\_\_\_\_  
(Date)

<b>Fund Cluster:</b>	01	ORS / BURS No.: D1101012029-05-000376
		ORS / BURS Date: MAY 21, 2029
<b>Funds Available:</b>	₱ 6,493,000.00	Amount: ₱ 6,493,000.00
<p>_____ <b>GAY CONCEPCION S. BUGAGAO</b> Accountant III</p>		



17 May 2024

**NOTICE TO PROCEED**  
**PUBLIC BIDDING**

**Ms. LYCA A. LAYNESA**  
 Account Manager  
**EGM SYSTEMS GLOBAL TECHNOLOGIES, INC.**  
 Unit 309 Armal Plaza Bldg.  
 C. Raymundo Ave., Maybunga  
 Pasig City, Metro Manila

Dear Ms. Laynesa,

Notice is hereby given to **EGM SYSTEMS GLOBAL TECHNOLOGIES, INC.** that work/delivery may proceed for the following procurement details:

Contract Name	: <u>Supply, Delivery, and Installation of New Uninterruptible Power Supply (UPS) (Replacement UPS Unit)</u>
Purchase Request No.	: <u>GAA-24-02-18734</u>
Purchase / Work Order No.	: <u>24-05-102</u>
Total Contract Price	: <u>P6,493,000.00</u>
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words	: <u>Six Million Four Hundred Ninety-Three Thousand Pesos</u>

Upon signing receipt of this Notice, you are responsible for performing the services under the terms and conditions of the Agreement/Purchase Order/Work Order and in accordance with the schedule of requirements/delivery schedule.

You are also hereby required to file a Warranty Security for a minimum period of three (3) months, in the case of Expendable Supplies, or a minimum period of one (1) year, in the case of Non-Expendable Supplies, after acceptance by the Procuring Entity of the delivered supplies. It shall be covered by either retention money in an amount equivalent to at least five percent (5%) of every progress payment, or a special bank guarantee equivalent to at least five percent (5%) of the total contract price. The said amounts shall only be released after the lapse of the warranty period or, in the case of Expendable Supplies, after consumption thereof: Provided, however, That the supplies delivered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

Note that failure to comply with the above requirements and failure to perform the services under the terms and conditions of the Agreement/Purchase Order/Work Order may constitute grounds for its forfeiture.

Please acknowledge receipt and acceptance of this Notice by signing in the space provided below. There are two (2) copies of this document; you may keep one copy and return the other to the Bids and Awards Committee (BAC) Secretariat of the Advanced Science and Technology Institute. Should you have any questions or clarifications, you may reach us at bac-sec@asti.dost.gov.ph.

Respectfully,

**FRANZ A. DE LEON, Ph.D.**  
 Director

Digitally signed  
 by **Bayani Benjamin S. Lara**

<b>DATE OF ISSUANCE:</b> MAY 24 2024	<b>RECEIVED BY:</b>  _____ Signature over Printed Name  _____ Date and Time	<b>WARRANTY SECURITY</b>  Type of Warranty Security: _____ Amount of Warranty Security: ₱ _____ O.R. No.: _____
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