



ASTI-FM 03-10
REV 3/13 January 2020

**DOST-ASTI Bids and Awards Committee
REQUEST FOR QUOTATION**

Kind of Procurement Activity:	Negotiated Procurement: Small-value Procurement		
Deadline of Submission of Bids:	Oct-09-2020, 2:00 PM		
RFQ No.:	20-10-3221	Date:	October-05-2020
PR No.:	GRASPED-20-07-10139	Date:	September-07-2020

The Department of Science and Technology (DOST) - Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), intends to procure the item/s listed below. As such, suppliers, contractors, or distributors are invited to submit their quotation/s duly signed by authorized representative. Prospective bidder/s who will submit a proposal with the single/lowest calculated and responsive quotation shall be selected. Guidelines on the format and eligibility documents are listed at the box below the item/s to be procured.

Quotations may be sent via **a)** electronic mail at bac-sec@asti.dost.gov.ph, **b)** fax message, or **c)** delivering documents to the BAC Secretariat. For further inquiries, you may contact +63 2 249-8500 local 1206/1212 or +63 2 426-7423.

Thank you.

Respectfully,

REYNALDO JOSEPH A. CALLAO JR.
BAC Chairman

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	<p>Automated Rain Gauge Station I. TIPPING BUCKET WITH CABLE A. General Specifications - Sensor Type: Self-emptying tipping bucket, patented single spoon - Spoon Material: Polyoxymethylene (POM) engineering thermoplastic - Housing Material: STYROSUN, UV radiation, heat and frost resistant, moulded modified high-impact polystyrene - Dimensions: Orifice: 31 in² (200 cm²), Inside Diameter: 6.3" (159.6 mm), Outside Diameter: 6.5" (165mm) - Splash room height including bottom: 6.7 inch (170mm) - Weight: 342g to 418g B. Output Interface - Normally Closed and Normally Open magnetic switches - 4 connections / 2 outlets - 2 reed switches - Resolution per tip: 0.5 mm - designed to meet the guidelines of the World Meteorological</p>	1	lot	85000.00	85,000.00

Organization

- with single adjustment screw for easy calibration

C. Accessories

1. One(1) unit customized cabling

- customized 0.6 meter round cable pre-wired to rain collector with waterproof 2/3-pin M8/M10 connector termination

2. One(1) unit mating connector assembly for the cable above

with the ff. specs:

- panel mount, rear entry (to be placed on panel with 3-4mm wall thickness)

- with soldered 8cm hook-up wires(#22AWG), multi-colored, stripped and tinned

- waterproof, IP67

3. One(1) pc bull's-eye bubble level (preferably built-in)

D. Miscellaneous

- At least 2 years warranty for parts and services
- Must be compatible with ASTI-ARQ datalogger

Notes:

- Charged to GRASPED

- End-user may request for a demonstration with the winning bidder before the actual delivery

- Winning bidder must provide two (2) samples of connectors of actual unit for approval by the end-user prior to delivery. If

approved by end-user, one (1) sample will be retained as

reference for the units to be delivered.

- At least 2 years warranty for parts and services
- Must be delivered to ASTI
- Must be compatible to ASTI-ARQ datalogger
- Delivery: Forty-five (45) calendar days upon issuance of NTP
- Price is inclusive of government duties and taxes and other fees.

II. CONTROL BOX ASSEMBLY

I. Enclosure

- Body color: Gray
- Overall dimensions: H 14.13", W 12.26", D 6.13"
- Complies with NEMA Type 1,2,3,4,4X,12 and 13, IEC 529,IP66
- Molded fiberglass polyester enclosure with matching cover
- Stainless steel draw type "snap latch" door fastener
- Door fasteners include a provision for padlocking
- Door is supported with a continuous stainless steel hinge
- Captive oil resistant gasket
- Threaded brass inserts for mounting feet to the rear of the enclosure
- Stainless steel mounting brackets and hardware for mounting to

the rear enclosure

- Operating temperatures between 130C and -40C
- End-user will provide a technical drawing for the customized

hole upon request

- Threaded brass inserts for mounting feet to the rear of the enclosure

- Stainless steel mounting brackets and hardware for mounting to

the rear enclosure

- Operating temperatures between 130C and -40C

Note: End user will provide a technical drawing for the customized

hole.

II. Back Plate for Controller Box

- Material: Aluminum Sheet, 2.5 mm
- Refer to attached drawing for full specifications
- Complete with stainless fasteners (Hex bolts, washers, screws, nuts)

III. Lead Acid Battery

- Valve Regulated Lead-Acid Battery (Heavy Duty)
- Voltage: 12V
- Capacity: 17 AH
- Dimension 180x77x168 (LxWxH)
- Excellent cycling capability
- Very high energy density
- High rate discharge capability
- Lowest self discharge rate
- Approved for shipping as non-hazardous, non-spillable
- Operates in any position
- Low internal resistance
- With at least 6 months warranty
- Manufacturer of the battery must have the ISO / TS16949 certification

IV. Solar Charge Controller Regulator

- Wire size #16 AWG
- ABS plastic case: Epoxy encapsulated
- Weight: 3 oz (0.09 kg)
- Dimensions: 2.5" x 2.0" x 1.4"/63.5 x 50.8 x 35.56 mm
- Rated Solar Input: 4.5 Amps
- Max. Input (5min.): 5.5 Amps
- System Voltage: 12V
- Max. Solar Voltage: 30V
- Regulation Voltage: 14.1V
- Accuracy: 60 mV
- Self-consumption: 6 mA
- Temp. Compensation: -28 mV/ degree Celsius
- Reverse Current Leakage: <10 micro Amps
- Operating Temperature: -40 to 85 degree Celsius

V. Electronic PCB Assembly

- ASTI designed Interconnect board
- The end user will provide the bill of material, a gerber file for the

PCB design, and instruction assembly.

- Supplier should provide samples of at least three (3) units before production

V.1. ASTI Designed Trigger Switch Board (for Warning

Stations)

- includes board fabrication and component assembly
- includes component sourcing based on Bill of Materials (BOM)
- gerber and BOM files are available upon request

PCB:

- Dimension: 145mm x 90mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Green
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2 (Top Electrical and Bottom Electrical layer)

V.2. ASTI Designed HYDROMET Interconnect Board (for ARG, WLMS and Tandem)

- includes board fabrication and component assembly
- includes component sourcing based on BOM
- gerber and BOM files are available upon request
- must pass based on testing procedure submitted

PCB:

- Dimension: 70mm x 40mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Blue
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2

VI. Protective Vent/Gore

- Screw-in Type
- M12x1.5 with nut
- Water entry pressure: > 0.3 bar / 30 sec
- Typical airflow(dp = 70 mbar): 2500 ml / min
- Membrane characteristic: Hydrophobic
- Backing material: ePTFE / Polyester (PET)
- Housing material: Polyamide (PA6)
- Color of housing material: Pale Gray
- ORing material: Silicone 60 Shore A
- Wrench size: 16mm
- Overall Length: 15.55mm

VII. Cable Assemblies

- A. one(1) pc arQ Data Interface
- B. one(1) pc arQ Power Interface
- C. one(1) set Alarm Stages Interface(For Warning Stations)
- D. one(1) pc Solar Panel Interface
- E. one(1) set Battery Connectors
- F. one(1) set Grounding Kit (For Warning Stations)
- G. one(1) set of sensor data interface (for ARG,WLMS, TANDEM)

Note: End user will provide a technical drawing and specifications on sub-items A to F.

VIII. Datalogger Clip Holders

- Must be ASTI-designed complete with screws and nuts

IX. Sticker

- glossy finished
- fade proof and weather proof
- design to be provided upon request

X. ASTI-designed Data Logger

- A. Overall design will be provided by ASTI (available

upon signing
of Non-Disclosure Agreement)

B. Circuit boards

1. GDAT Main Board (Qty: 1 pc)

- includes board fabrication and component assembly
- includes component sourcing based on BOM
- gerber and BOM files are available upon request
- must pass based on testing procedure submitted

1.1. PCB

- Dimension: 82.22mm x 64.2mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Black
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2

2. GSM Module (Qty: 1 pc)

- includes board fabrication and component assembly
- includes component sourcing based on BOM
- gerber and BOM files are available upon request
- quantity:
- must pass based on testing procedure submitted

2.1. PCB

- Dimension: 37mm x 50mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Blue
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2

3. Power Board 1 and 2 (Qty: 1 pair)

- includes board fabrication and component assembly
- includes component sourcing based on BOM
- gerber and BOM files are available upon request
- must pass based on testing procedure submitted

3.1. PCB

- Dimension: 24.4mm x 64.2mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Green
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2

Qty breakdown:

- 1 pair = 1 pc of Power Board 1 and 2

4. Pressure Module Board

Specs :

- includes board fabrication and component assembly
- includes component sourcing based on BOM
- gerber and BOM files are available upon request
- must pass based on testing procedure submitted

PCB:

- Dimension: 20.32mm x 20.32mm
- Material: FR-4
- Silkscreen: White (Top and bottom)
- Solder Mask: Double
- LPI color: Blue
- PCB Thickness : 1.64 mm
- Number of Electrical Layers : 2

C. Enclosure (Qty: 1 pc)

- fabrication of customized casing for the datalogger

based on drawing design

- includes fabrication of saddle clamps and lock bars based on drawing design
- includes industrial design for the tooling
- materials: weatherproof and UV-resistant
- ingress protection: IP67

D. Assembly and Testing

- includes all assembly and integration of boards, enclosure/mechanical fixtures, solar panels and sensors
- includes functional testing and must pass based on end-user's testing procedure (generate individual test report from test

XII. 30 W Solar Panel

- Type: Mono-crystalline Solar Module

A. Electrical Specs.

- Peak Power : at least 25 W
- Cell Efficiency : 14.02 % (min)
- Max. power voltage (Vmp) : 17.56 V (min)
- Max. power current (Imp) : 1.42 A (min)
- V (open circuit) : 21.16 V
- I (short circuit) : 1.64 A
- Max system voltage: 600 V

B. Mechanical system specs.

- Dimensions: 450x541x25 mm
- Weight: 2.9 kg (6.19 lbs.)
- No. of cells: 36 in series (4x9)
- Construction: High transmission low-iron tempered glass,EVA,TPT
- Frame: Anodized Aluminium

C. Module warranty:

- 25-yr limited warranty of 80% power output
- 10-yr limited warranty of 90% power output
- 5-yr limited warranty of materials and workmanship
- Manufacturer of the module must have the necessary ISO certification

XIII. Configuration

- 1 unit with ARG Configuration

Notes:

- Charged to GRASPED
- Item will be assembled according to the end user's drawing.
- At least 1 year warranty for parts and services
- Assembled units shall be delivered to ASTI
- End-user shall request for a demonstration of one working unit with the winning bidder before actual delivery/production of the remaining items
- Items must be compatible with ASTI-arQ Datalogger
- Price inclusive of government fees, taxes and duties
- Delivery: Forty-five (45) calendar days upon issuance of NTP

TOTAL APPROVED BUDGET FOR THE CONTRACT:

Php 85,000.00

GUIDELINES

A. Submission of Quotations

1. Quotation/s shall include the Request for Quotation and/or the Purchase Request Number as state above;
2. Pictures or brand/model names or numbers, if applicable, should be specified in the quotation/s; and
3. Quotation/s must be signed by the company's duly authorized representative.

B. Eligibility Requirements

Pursuant to Annex "H" or Consolidated Guidelines for the Alternative Methods of Procurement of the 2016 Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, as amended by Government Procurement Policy Board Resolution No. 21-2017 dated 30 May 2017, the following documents shall be submitted except for Repeat Order, Shopping under Section 52.1(a), and Negotiated Procurement under Sections 53.1 (Two-Failed Biddings), and 53.5 (Agency-to-Agency):

For Procurement of Goods

1. Upon submission of quotation
 - ✓ PhilGEPS Platinum Membership Certificate including Annex "A". If not available, the following alternate documents may be submitted:
 - PhilGEPS Registration Number
 - Mayor's Permit
 - For individuals/professionals engaged under Section 53.6, 53.7 and 53.9 of the 2016 IRR of RA No. 9184, only the Bureau of Internal Revenue (BIR) Certificate of Registration shall be submitted in lieu of the Mayor's Permit.
2. Upon issuance of Notice of Award (NOA)
 - ✓ Omnibus Sworn Statement
 - Applicable only for bidders who have submitted their quotation on item/s with a total Approved Budget for the Contract (ABC) of above Php50,000.00.
 - ✓ Income/Business Tax Return
 - Applicable only for: **a)** bidders who have submitted their quotation on item/s with a total ABC of above Php500,000.00; and **b)** bidders for Lease of Real Property and Venue (except for government agencies as lessors).

For Procurement of Infrastructure

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Philippine Contractors Accreditation Board License.

For Procurement of Consulting Services

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Professional Regulation Commission License or Curriculum Vitae.

NOTE: For new suppliers, submit a BIR Certificate of Registration for accounting purposes.

C. Terms and Conditions

1. Additional requirements, if necessary, may be requested by the BAC depending on the item to be bid;
2. For all kinds of procurement, the bidder who passed the bid evaluation, shall submit a duly notarized Omnibus Sworn Statement upon issuance of NOA, unless otherwise provided;
3. All transactions are subject to creditable withholding tax and final Value Added Tax or percentage tax per revenue regulation/s of the BIR;
4. A penalty of one-tenth of one percent (0.001) of the total value of the undelivered goods/services shall be charged as liquidated damages for every day of delay of the delivery; and
5. The DOST-ASTI reserves the right to accept or reject any proposal, to annul the bidding process, and to reject all proposals at any time prior to contract award, without thereby incurring any liability to the affected proponent or proponents.