



ASTI – FM 03-17
REV 2 / 31 January 2020

PURCHASE ORDER

Supplier:	Ace Electronic Technology, Inc.	PO No.:	22-01-030
Address:	12 Timog Avenue, Barangay Laging Handa, Quezon City	PO Date:	January 17, 2022
TIN:	005-423-495-000	Mode of Procurement:	Competitive Bidding

Gentleman:

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

Place of Delivery:	ASTI Bldg., C.P. Garcia Ave., U.P. Technology Park Complex, U.P. Campus, Diliman, Quezon City 1101	Delivery Term:	Sixty (60) calendar days upon issuance of NTP
Date of Delivery:		Payment Term:	Government Terms
		Warranty Term:	

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Piece	<p>WATER LEVEL SENSOR</p> <p>1. GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of forty-two (42) pcs of water level sensors that are capable of non-contact and precise measurement of liquid/water level particularly of rivers by using ultrasonic technology.</p> <p>1.1.1. The water level sensor must be compatible with the existing ASTI-designed WLMS or Water Level Monitoring Stations,</p> <p>1.1.2. Must be compatible with ASTI WLMS' arQ firmware 5.0 or later.</p> <p>1.1.3. Must be mechanically compatible with existing ASTI's WLMS Sensor housing design.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>1.4 The procurement of these sensors will be used in the continuous research and development and maintenance of ASTI WLMS.</p> <p>2. TECHNICAL SPECIFICATIONS:</p> <p>2.1. The specific model of the existing sensor is Senix Toughsonic TSPC-21S-232-ASTI</p> <p>2.2. Max Range: at least 15.2 meters (50 feet)</p> <p>2.3. Optimum Range: at least 30.5 cm - 10 meters. (12 in. - 33 ft.)</p> <p>2.4. Case Material: 316 stainless steel</p> <p>2.5. Operating Temperature: -40 to 70 C (-40 to 158 F)</p> <p>2.6. Humidity (Operating): 0 to 100%</p> <p>2.7. Transducer: Ruggedized piezoelectric</p> <p>2.8. Compensation: Temperature compensated</p> <p>2.9. Sensor Dimension:</p> <p>2.9.1. Length: 4.8 in (122 mm) ± 1mm</p> <p>2.9.2. Diameter: 2.312 in (59mm) ± 1mm</p> <p>2.10. Cable Specifications</p> <p>2.10.1. Cross-section: 4 x 0.34mm² (AWG#22)</p> <p>2.10.2. Length: at least 2.5 meters</p> <p>2.10.3. Jacket Material: Polyurethane (PUR)</p>	42	₱54,516.00	₱2,289,672.00

	<p>2.10.4. Tinned ends</p> <p>2.11. Weight: 29.9 oz (0.82 kg) ± 0.2kg</p> <p>2.12. Protection: NEMA-4X, NEMA-6P, IP68</p> <p>2.13. Resolution: Serial Data: 0.0135 in. (0.3438 mm)</p> <p>2.14. Repeatability: Nominal 0.2% of range @ constant temp.</p> <p>2.15. Update Rate: 200 ms, adjustable; affected by filter selections</p> <p>2.16. Communication Interface: RS-232</p> <p>2.17. Target Requirements:</p> <p>2.17.1. Objects: Detects flat or curved objects. Surface must reflect ultrasound back to sensor.</p> <p>2.17.2. Orientation: Flat surfaces should be oriented perpendicular to sensor output beam</p> <p>2.17.3. Optical: Unaffected by target color, transparency, or other optical characteristics</p> <p>3. ACCESSORIES:</p> <p>3.1. Waterproof M12 connector</p> <p>3.1.1. Connector Specification Part Number: Binder USA 99 1430 810 04</p> <p>3.1.2. Degree of Protection: IP67</p> <p>3.1.3. Connector locking system: Screw</p> <p>3.1.4. Termination: screw clamp</p> <p>3.1.5. Housing material: Zinc die-cast nickel-plated</p> <p>3.1.6. Must be compatible with existing arQ receptacle for Water Level sensor</p> <p>3.1.7. Supplier must assemble the cable wiring to the connector (the wiring diagram and pin assignment are available upon request)</p> <p>4. WARRANTY:</p> <p>4.1. The sensors must be shipped with 30-calendar day return for advanced replacement on DOA parts and components, and a one (1) year limited warranty that covers defects in materials and workmanship.</p> <p>4.2 Warranty obligation: Five percent (5%).</p> <p>4.3. Refer to the attached Service Level Agreement for the details of the expected technical support services.</p> <p>5. PAYMENT AND DELIVERY TERMS:</p> <p>5.1. The sensors must be delivered within 60 calendar days upon issuance of Notice to Proceed (NTP).</p> <p>5.2. The price of the bid must be inclusive of government taxes and other fees.</p> <p>5.3. Payment upon full delivery.</p> <p>5.4. Supplier must provide detailed mechanical drawing and data sheet of the connectors for approval by the end-user prior to delivery.</p> <p>5.5. The end-user may request a demonstration with the winning bidder before the actual delivery.</p> <p>5.6. The winning bidder must provide two (2) samples (out of total number of quantity) of actual unit for evaluation by the end-user prior to delivery. Samples will be returned to the supplier after the evaluation process with test report.</p> <p>5.7. Supplied with traceable manufacturer's calibration certificate or certificate of conformity.</p> <p><i>(Please see attached offer.)</i></p>			
			TOTAL:	₱2,289,672.00
(Total Amount in Words)	Two Million Two Hundred Eighty Nine Thousand Six Hundred Seventy Two Pesos Only			

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)

Fund Cluster:	<u>01</u>	ORS / BURS No.:	<u>011011012022-01-000040</u>
		ORS / BURS Date:	<u>January 18, 2022</u>
Funds Available:	<u>PHP 2,289,672.00</u>	Amount:	<u>₱ 2,289,672.00</u>
 GAY CONCEPCION S. BUGAGAO _____ Accountant III			