
	NATIONAL INSTITUTE OF OCEAN TECHNOLOGY	NOTICE INVITING TENDER (NIT)		
		Form No.	NIOT/S&P/NIT	
Tender No.		NIOT/S&P/OA/5888/2025-26		
Issued To		Precipitation Weather Sensor Suite (PWSS)		
Tender Mode		GeM (Custom Bid) – Single Bid		
Tender Issue date		07.05.2025		
Tender Closing Date and Time		29.05.2025 at 3.00 PM		
Tender Opening Date and Time		29.05.2025 at 3.30 PM		
Send your queries to the email IDs	Up to Tender finalizations	gopalakrishnaa.niot@gov.in vaidehi.niot@gov.in purchase@niot.res.in		
<p align="center"> NATIONAL INSITUTE OF OCEAN TECHNOLOGY VELACHERY TAMBARAM MAIN ROAD NARAYANAPURAM, CHENNAI 600100 NIOT WEBSITE: http://www.niot.res.in/tenders </p>				

Commercial Terms Compliance sheet (format should not be altered)

Sl. No	Particulars	Yes	No	offer Page Ref
1	Whether every page of the tender document is signed for acceptance of tender and uploaded along with the offer?			
2	Whether Taxes and duties are included in the quote.			
3	Whether accepted to submit the order acceptance within 7 days from the date of order?			
4	Whether Quote is valid for 90 days from the due date of tender or time specified in the tender document whichever is later?			
5	Whether payment terms of the tender is complied with?			
6	Whether the bidder satisfies the Pre- qualification criteria			
	a. a copy of your GST Registration certificates and PAN details are attached (Mandatory qualifying condition)			
	b. Supplier should have previous experience in supply of similar items to recognized institutions (Mandatory qualifying condition)			
7.	a. The Goods / items quoted are manufactured in India and not imported from any country.			
	b. Make in India Clause: If the item/goods are partially imported, specify your category:			
	1. CLASS I Category: Supplier or service provider, whose goods, services or works offered for procurement, has local content greater than or equal to 50%.			
	2. CLASS II Category: Supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%.			
	Only Class I and II categories of vendors are eligible to quote.			
8	Whether self certification form is enclosed (For Class I & Class II supplier only)?			
9	Whether price is FOR NIOT, Chennai?			
10	Whether the freight cost is included, if not included whether the freight cost is indicated separately?			
11	Whether the authorization letter exclusively for this tender, from the original manufacturer is enclosed?			
12	a) Whether warranty period accepted as per tender?			
	b) Whether submission of warranty certificate in the prescribed format is acceptable?			
13	Whether the delivery period is clearly indicated, and is as per tender?			
14	Whether the cost of installation / inspection / testing explicitly mentioned in the quote?			
15	Whether Past track record of quality and service is enclosed?			
16	Whether submission of PS is acceptable if the value exceeds Rs. 25,00,000/-			
17	Whether submission of PBG is acceptable if the value exceeds Rs. 25,00,000/-			
18	Whether list of deliverables attached and comply as per tender?			

19	Whether liquidated damage clause is acceptable in case of delayed supply?			
20	Whether the tender is fully complying with tender specification/Adjustment if no, list out deviations very clearly along with the appropriate reason for the deviation?			
21	Whether item-wise price is quoted as per price bid and quoted price is realistic?			
22	Whether technical specification has been duly filled in and submitted with the tender document is uploaded along with the quotation.			
23	Whether HSN code of the product has been indicated?			
24	Whether your firm is registered under MSME/ NSIC/DIC/UAM? If yes enclose copy of registration			

ANNEXURE-M

**Format for Self Certification under Preference to
"MAKE IN INDIA" Policy**

(Refer Clause No. 2.8 & 3.4.4 of ITT)

CERTIFICATE

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, as amended from time to time and as applicable on the date of submission of tender, we hereby certify that we M/s _____
(supplier name) are local supplier meeting the requirement of minimum **Local Content** _____% as defined in above orders for the material against Tender No _____

Details of location at which local value addition will be made is as follows:

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rule for which for which a bidder or its successors can be debarred for up two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Seal and Signature of Authorized Signatory

PRICE BID FORMAT:**Precipitation Weather Sensor Suite (PWSS):**

S.No.	Description	Qty	Unit	Unit rate	Amount
1.	Disdrometer / Precipitation Monitor	1	Number		
2.	Rainfall Sensor	3	Numbers		
3.	Wind Sensor	3	Numbers		
4.	Data Logger	3	Numbers		
5.	Power Management System	1	Number		
Total Amount					
(Amount in words. _____)					

The above price is inclusive of GST and F.O.R. NIOT Chennai.

Note:

The goods items quoted are manufactured in India and not imported from any country.

For Supply and Service

NIOT has enrolled under GST in the category "Tax Deductor". The bidders are requested to update their database regarding NIOT's Registration under GST-Tax Deductor.

TDS @ 2% on the order value towards GST will be deducted on payments made to the supplier in respect of goods and/or services, supplied/provided if the value exceeds Rs. 2.5 lakhs

1. The copy of the GST registration certificate to be attached.
2. The duly filled technical and commercial compliance sheets and detailed data sheet for the quoted model should be submitted along with quotation/offer.
3. The above item to be delivered within **8-10 weeks** from the date of order.
4. 100% payment shall be made after supply and acceptance of the materials.
5. Part Supply: Not allowed. All the items should be delivered in single lot within the stipulated time.
6. **Delivery Site:** National Institute of Ocean Technology, Pallikaranai, Chennai – 600100, India.
7. Warranty certificate should be provided for **12 months** from the date of supply and acceptance. Warranty certificate should be provided as per the prescribed format of NIOT.

8. **Liquidated damage:** If the Contractor shall fail to deliver the systems/components within the time specified in the Contract, NIOT shall recover from the Contractor as liquidated damages a sum of 0.5% (1/2 percent) of the contract price of the undelivered systems /components for each week of delay (or) part thereof. The total liquidated damages shall not exceed 5% (5 percent) of the contract price of the unit or units so delayed. Systems / components will be deemed to have been delivered only when all essential components parts are also delivered. If any essential components are not delivered in time, the entire system / components will be considered as delayed until such time the missing parts are delivered.

We agree to all applicable terms and conditions listed in the tender document

Company's Signature with Seal

Technical Specification compliance sheets for “Precepitation Weather Sensor Suite (PWSS)”

The PWSS system should includes Disdrometer, Rainfall sensor, Ultrasonic wind sensor with logging capability, required power supply and necessary assembling support.

DISDROMETER should be capable of real-time and accurate measurement of precipitation along with the following parameters Precipitation rate, Drop size distribution, Particle speed (Falling speed) and Type of precipitation.

Line of items: Disdrometer, Rainfall sensor, Wind sensor, Data logger, Power supply

Pre-Qualification Criteria: Should possess experience in supplying similar meteorological equipment to institutes/firms in India or abroad in the last three years. Copy of documentary evidence / purchase order in the last 3 Years prior to date of tender opening need to be furnished.

S No	Description of the item	NIOT requirement	Yes/No	Bidder's Remarks
1	Disdrometer	<ul style="list-style-type: none"> Quantity: 1 No. Precipitation drop size: 0.2-8 mm Accuracy: +/- 5% Resolution<=0.25 mm Particle speed: 0.2-20 m/s Accuracy: +/- 5 % Resolution <=0.5 m/s Precipitation rate: 0.01-250 mm/h Accuracy: +/- 5 % Resolution<=0.1 mm Principle: LASER scattering Class of precipitation identification: Drizzle/rain/Snow/Hail etc, based on international standards SYNOP/ METAR/ WMO. Highest time resolution: 15 s Sensor Dimension: Height <= 0.7 m, Width<=0.6 m, Depth<=0.3 m, Weight <= 7 kg Housing Material: aluminium die cast/Powder coated Aluminium / Stainless steel Ambient temperature : -10 to +45 °C Power supply: 12-24 V and alternatively to 230 V, SOLAR panel Protection>= IP65, resistant to salt supply Integrable with rain gauge and wind sensor Data interface/output: RS 485/422/SD1-12 Mounting arrangement: MAST CLAMP Cable length >= 5m SOFTWARE Operating manual 		
2	Rain fall sensor	<ul style="list-style-type: none"> Quantity: 3 No. Accuracy<= +/- 1 mm 		

		<ul style="list-style-type: none"> Resolution ≤ 0.2 mm Type of sensor: Tipping bucket/Cumulative with self siphoning Measuring range: 0 - 10 mm/minute Highest time resolution: 15 s Dimension: Height ≤ 0.75 m, Dia./Width: 12-20 cm, Weight ≤ 4 kg Material : Sea water resistant Capable to fix on any mounting pole arrangement. International standard of measurement Operating temperature : 0 to $+45$ °C Power supply: 9-24 V DC Data/signal output: volume-pulse-mm/volume-voltage-mm Cable length ≥ 5 m Operating manual 		
3	Wind sensor	<ul style="list-style-type: none"> Quantity: 3 No. Principle : Ultra sonic based Wind speed Range of measurement: 0-60 m/s Accuracy $\leq \pm 3\%$ Resolution: 0.1 m/s Wind direction: Range of measurement: 0 - $\sim 360^\circ$ Accuracy $\leq \pm 2^\circ$ Resolution $\leq 1^\circ$ Highest time resolution: 15 s Dimension: Height ≤ 0.2 m, width ≤ 0.2 m, Weight ≤ 2.5 kg Material : Sea water resistant Capable to fix on any mounting pole arrangement. Protection \geq IP65, resistant to salt supply Power supply: 9-24 V DC Data interface output: RS 485/422/232 Cable length ≥ 5 m International standard of measurement Operating temperature : -10 to $+45$ °C Operating manual 		
4	Data logger	<ul style="list-style-type: none"> Quantity: 3 Should be capable to store the all output of Disdrometer, Rain gauge and Wind sensor POWER SUPPLY Capable to operate in AC and DC power supply Display Type: LCD color with touch display, Remote control: via COM1, COM2, Ethernet or USB ANALOGUE MEASUREMENT ADC resolution: 16 bit with Differential 		

input.

No. of analog channel:

- 3 x analog input (0 - 10 V or 0 - 20 mA).
- 1 x supply voltage / battery voltage (0 -15V).
- 1 x battery power (± 4 A).
- 1 x temperature PT100 (-40- 70 °C).
- 1 x relative humidity (0 -1 V correspond to 0 -100 % relative humidity).

Accuracy: $\pm 0.1\%$ of measuring span of sensors, without long-term drift ± 0.1 °C

- **DIGITAL MEASUREMENT (IN- / OUTPUT)**

- **Channels:**

- 2 x pulse inputs.
 - 2 x serial synchronisation for sensors

- **Commutation Port:**

Com1 & Com2: Potential-free interface RS485.

Half / full-duplex mode, switchable via SW.

Connection of serial sensors

Command interpreter.

baud rates 1200- 230400 baud.

- Framing should be settable
- **Measuring Cycle:** Measurement duration/Cycle to be configurable by the user in the order of minutes and seconds.
- **Storing cycle:** Storing cycle to be configurable by the user in the order of minutes and seconds.
- **RTC accuracy:** Provision for synchronisation with GPS is required to avoid time drift
- **Storage Details and capacity:**
Firmware ≥ 1 MB, (flash, update via USB- or SD-card), data ≥ 64 MB (flash), configuration: 64 \geq KB (flash).
Storage Time: More than 180 days
Depending upon user setting (Ex. 14 channels with cycle of 1 minute)
- **Data output details:** USB 2.0 full speed device, COM1 RS485 half- or full duplex (potential-free), COM2 RS485 half- or full duplex, Ethernet Telnet / TP/HTTP, Memory card SD card formatted by FAT16/ FAT32/ExFAT, compatible to

		<p>Microsoft®Windows® and MS-DOS®</p> <ul style="list-style-type: none"> • Mechanical/mounting details: Mounting Snap-in mounting 35 mm standard track, DIN Rail, Terminals Connection: 32 no's with cable size of 2.5 mm², Housing Synthetic material with Protection IP 20. • Dimension: Approx. <=200X100X75 mm 		
5	Power-Battery supply	<ul style="list-style-type: none"> • PWSS power supply compatible with DC, AC options and SOLAR panel. <ul style="list-style-type: none"> ➤ For DC- 12V, 7 AH batteries and Maximum 20 V Solar panels. ➤ For AC: 230 V adaptors should be provided. • Battery should be rechargeable • Charger/Adaptor: Charger/Adapter need to be provided for power charging • Solar powered power supply with rechargeable battery and minimum backup of 12 hours during direct power (230 V) failure for PWSS 		
6	Additional	<ul style="list-style-type: none"> • Software/Firmware update (if any) during warranty should be provided • Minimum 1 Year warranty should be provided for all Sensors, Battery and Logger • The integration of system needs to be conducted • Required mounting support, poles, supporting accessories with suitable enclosure need to be provided. • Each sensor should be capable to integrate and disintegrate for measurements. • Maintenance and repair support are required in the future to ensure the continued accuracy and effectiveness of system measurements. 		

We agree to all terms and conditions as per tender document.

Date:

Signature of supplier

Place:

Stamp

+MANDATORY DOCUMENTS:

1. GST Registration Certification
2. PAN details
3. Cancelled cheque Leaf / Bank details
4. Copy of NIT documents affixing company seal and signed in all the pages.
5. Duly filled commercial compliance sheet and Technical Compliance sheets
6. Any other documents sought in the NIT
7. Valid Authorisation Letter from OEM
8. MSME Certificate, if any
9. Self Certification under Preference to "MAKE IN INDIA" Policy (format attached)

We agree to all applicable terms and conditions listed in the tender document

Company's Signature with Seal