

द्वारा : स्पीडपोस्ट / हाथों–हाथ



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Dated: 21.02.2022

F. No. 32(3)/2021-2022/Admn.IV

То				
	M/s.	 	 	
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Sub: Inviting Quotations for Purchase of Pan Evaporimeter.

Dear Sir(s),

You are requested to kindly quote your lowest rates on the letter head of your firm with your all terms & condition keeping the following conditions in view, in respect of the articles as mentioned in the Schedule to Tender.

- 1. No advance payment will be made. However, the payment is normally made within 30 days from the date of receipt of material in good condition as per order.
- 2. Payment will be made by mode of e-payment to the supplier/firm after satisfactory supply of ordered material and receipt of pre-receipt.
- 3. The quantity proposed in the quotation may be increased or decreased at the discretion of the authority while placing the order.
- 4. Quotations not found according to specification will be rejected/not considered.
- 5. The firm should supply the printed literature, operational manual etc., if applicable. The firm should also supply a copy of the authorised dealership certificate of the item, if applicable.
- 6. Quotations should remain valid for 6 months from the date of quotation.
- 7. The rate should be on F.O.R. ICAR-CAZRI, Jodhpur basis for indigenous items.
- 8. The firm should indicate PAN/TIN/GST as per Govt. Rules.
- 9. The Rates quoted should **be clearly be indicated in figure as well as in words**. While quoting the rates, it may be clearly indicated whether the items are inclusive or exclusive of GST, Excise Duty, Custom Duty, Octroi etc. either in terms of percentage or in absolute term.
- 10. Delivery will have to be made normally within 30 days from the date of issue of our order or as mentioned in the supply order unless such extension is allowed by the Institute <u>failing which suitable penalty as indicated in the supply order will be imposed.</u>
- 11. The quotation may be sent to the office by courier/Regd. Post/Speed Post in sealed cover superscribed with "Quotation for purchase of Pan Evaporimeter" due date 02.03.2022 and the same must be reach to this Office on or before 02.03.2022 upto 3.00 PM failing which it will not be considered. The quotation should be dropped in the Tender Box placed in the Store Section (with A.A.O. IV). The Quotation will be opened on the very same i.e. on 02.03.2022 at 3.30 PM in presence of the representative of the firm if they desire to attend.
- 12. In case of any disputes, the decision of the Director, CAZRI, Jodhpur shall be binding on the part of the contractor/supplier.
- 13. Director, CAZRI, Jodhpur reserves the right to accept or reject any or all the quotation without assigning any reason.
- 14. All bids must be accompanied by a bid security/Earnest money deposit (EMD) @ 2% of the estimated value of the item, if the cost of the item is more than Rs. 1.00 lac in the form of a Demand Draft on a scheduled commercial bank in India, in favour of **ICAR Unit CAZRI**, **Jodhpur**. Without EMD as above, quotation will not be considered (Item less than Rs. 1.00 lac need not require EMD). If the firm is registered with National small Industries Corporation (NSIC) there is no need to submit EMD (Bid Security).
- 15. No part supply will be allowed.
- 16. The items required is for the ICAR-CAZRI, Jodhpur and therefore, supply will have to be made accordingly.

Asstt. Administrative Officer(s) for Director

## **Schedule to Tender**

S. No.	Particulars	Qty.	Place of supply
1.	Pan Evaporimeter		
	Pan Evaporimeter (2 units) shall have following components/features: Two open Pan Evaporimeter(PE) with independent automatic (digital) operation provided with below mentioned sensors&data logger (as per IS) for real-time monitoring and data storage, separately as two independent Sets/ Units.	02 Nos.	ICAR-CAZRI, Jodhpur
	Open Pan Evaporimeter:		
	<ul> <li>Pan material: rust proof GI (Dia. 1220±3mm; Depth 254 mm); Standard: IS 5973-1998</li> <li>Pan accuracy: ±0.5 % as FS;Resolution: 0.20mm</li> <li>Wooden stand and MS mesh cover for bird protection</li> <li>Sensing: shaft and pulley</li> <li>Sensor operating temperature: -40 to +60°C</li> <li>Measuring range: 0 to 200mm;Linearity: 0.25%</li> <li>With inbuilt water level sensor for real time pan water level monitoring/recording</li> <li>Water Temperature Sensor- Digital</li> <li>Temperaturemeasuring range: -10°C to 85°C (accuracy: ±0.5°C)</li> <li>Sensors compatible with data logger</li> </ul>		
	Airtemperature and Humiditysensors:		
	<ul> <li>Air Temp sensor's measuring range: -40° C to 123 °C (Accuracy: ± 0.3 °C)</li> <li>Resolution of Air Temp.: 0.01 °C Typical</li> <li>Operating condition:temp. 0 to +70 °C</li> <li>Measuring range of Relative humidity: 0 to 100 % (Accuracy: ± 2%)</li> <li>Supply voltage: 0 to 5 volts</li> <li>Weather shield: IP 65 provided</li> <li>Dew point: Calculated Provided</li> <li>Measuring range Air pressure: 300 hpa ~ 1100 hpa</li> </ul>		
	Soil Moisture & Soil Temperaturesensors:		
	<ul> <li>Soil Moisture sensor measuring range: 0 to 100% (m³/m³) (Accuracy of soil moisture: ±3% at 0 to 50%)</li> <li>Soil Temperature Sensor- measuring range: -30 to +70°C (Accuracy of soil temp.: ±0.3°C)</li> <li>Output signal: 4 to 20 mA, 0.5 V-2V, RS 485</li> <li>Response time: &lt;1 sec.</li> <li>Effective measurement area: 70 mm</li> <li>Protection: IP 68</li> </ul>		
	Solar Radiation Sensor:		
	<ul> <li>Measuring range:0 to 1800 W/m² (Absolute accuracy ±5% of full scale)</li> <li>Spectral Response Range:400 - 1100 nm</li> </ul>		

- Resolution: 1 W/m<sup>2</sup>
- Drift:up to  $\pm 2\%$  per year
- Operating Environment:upto 65°C; 0 to 100% RH
- Response:Less than 1 ms
- ISO 9060:2018- Class C

## Data logger:

- Display 16 characters x 2 Lines Alphanumeric display;
- Measure- Water Temperature (°C), Air Temperature (°C), RH (%), Solar radiation (watt/m), Soil Moisture & Temperature and Date & Time,
- Real time clock- stability long-term: ±1 ppm/yr; Stability (temp.): ±3.5 ppm or better upto 85°C
- Logging rate: 1 min. to 1 hour
- Data storage: Sufficient for at least for 2 years (at one min. logging rate)
- Power supply: 5 volts
- Battery life > 5 years in continuous operation; charging through 220 Volts or Solar panel
- IP rating: IP5
- Operating Temperature -40°C to 75°C & RH 0-95%
- Data retrieval- SD card. Export data in Excel format with SD card reader
- Watchdog time: System reset upon microprocessor failure
- Waterproof enclosure: IP 67 waterproof enclosure

## **Battery Case:**

- Output Voltage- 5 Volts DC
- Protection- Reverse Polarity.
- Battery over Charge/ Discharge Protection.
- Battery Charging- 220 volts AC supply with Inbuilt solar charging Circuit through solar panel (6 V, 6 watts)
- Battery Life- > 5 years
- Charging Indicator lights

**Warranty**: TWO years warranty on all components and automatic operation of both sets of Pan Evaporimeter.

**NOTE**: All sensors should be compatible with each Data logger and work in integration with two independent Pan Evaporimeter; all are TWO separate Sets or Units shall be placed at different places within CAZRI campus.

Asstt. Administrative Officer(s) for Director