

## KERALA AGRICULTURAL UNIVERSITY

College of Climate Change and Environmental Science, Vellanikkara, Thrissur Dist. Pin: 680656

Phone: Dean: 0487-2438691, Office: 0487-2438692, E-mail:ccces@kau.in

No. CCCES/1242/2024-A2 (8)

Dtd.25.02.2025

### **TENDER NOTICE**

Sealed tenders are invited from competent firms for the supply and installation of "Automatic Weather Station" at College of Climate Change and Environmental Science with specifications as detailed below. The tender will be accepted up to 2 PM on 7.03.2025. The tenders received after the stipulated time will not be considered at any circumstances. The received tenders will be opened at 2.30 PM on the same day.

#### **Important Information**

Bid Inviting Authority	Dean, CCCES
	Kerala Agricultural University
Contact Person	Dean, CCCES
	Vellanikkara, KAU Main Campus, Thrissur – 680656
	E-mail: <u>ccces@kau.in</u> Ph: 04872438692
Mode of Tender Submission	Direct / by Post
Nonrefundable Tender	Tender Fee: 0.2% of the quoted amount rounded to the
document fee	nearest multiple of 100, subject to a minimum of Rs.400/-
	and maximum of Rs. 1500 + GST 18%
Earnest Money Deposit	1% of quoted amount
(EMD) payable *	(to be remitted as separate DD drawn in favor of The Dean,
	College of Climate Change and Environmental Science,
	Vellanikkara, KAU payable at SBI, Vellanikkara)
GST Rate Applicable	As per GST rules
Last Date of Submitting the	2:00 PM on 07.03.2025
Tender Documents	
Opening of Tenders	2:30 PM on 07.03.2025

<sup>\*</sup> Exemption is allowed to MSME companies as per Govt. rules.

#### Annexure 1

Sl. No	Item	Quantity
1.	AUTOMATIC WEATHER	1
	STATION	

<sup>\*\*</sup>In the case of Courier, ensure the company has delivery at this office

# SPECIFICATIONS AUTOMATIC WEATHER STATION

Hardware	Features
DATALOGGER	<ul> <li>Minimum Scan Rate of 10Hz</li> <li>Analog Inputs: 6, Pulse Inputs: 2, SDI Inputs: 2</li> <li>4 to 20 mA Signal Input: 1</li> <li>Switched Excitation Voltage Channels: 2</li> <li>Communication Ports: RS232, USB</li> <li>10/100 Ethernet RJ45 for LAN connection</li> <li>Input Voltage Range: -100 mV to +2500 mV</li> <li>Analog / Digital Bits: 24 Bit</li> <li>Analog Resolution: 23 Micro Voltage</li> <li>Power Consumption @ 12 Vdc: 1.5 mA (sleep) and 5 mA (1 Hz scan with one analogue measurement)</li> <li>Inbuilt Data storage for Two year with 10 Minute duration</li> <li>Temperature Range: -40 to 70 Deg C</li> <li>Power Requirements: 10 to 18 Vdc</li> <li>Real-Time Clock Accuracy: ±1 min. per month</li> <li>Integral surge and ESD protection at inputs</li> <li>Inbuilt Charge Regulator For Charging the battery from Solar Panel</li> <li>Provision for adding Soil Moisture and Temperature Profiler of 1 Meter in future</li> </ul>
AIR TEMPERATURE & RELATIVE HUMIDITY SENSOR	<ul> <li>Air Temperature Range: -50°C to + 100°C</li> <li>Air Temperature Accuracy: +/- 0.1°C or better</li> <li>Air Temperature Output: Compatible with data logger</li> <li>Relative Humidity Range: 0 to 100% RH</li> <li>Relative Humidity Accuracy: +/- 1% or better</li> <li>Relative Humidity Output Compatible with data logger</li> <li>A naturally aspirated radiation shield should be provided with the sensor.</li> </ul>
WIND SPEED & DIRECTION SENSOR	<ul> <li>Wind Speed Type: Cup Anemometer</li> <li>Wind Speed Range: 0 to 50 m/s</li> <li>Wind Speed Accuracy: ±0.5 m/s</li> <li>Wind Speed Threshold: 0.5 m/s</li> </ul>

DAIN FALL CENCOD	<ul> <li>Wind Speed Output: Compatible with data logger</li> <li>Wind Direction Type: Potentiometer Balanced vane</li> <li>Wind Direction Range Mechanical: 360° Electrical: 352° (8° open)</li> <li>Wind Direction Accuracy: ±5°</li> <li>Wind Direction Output: Compatible with data logger</li> </ul>
RAIN FALL SENSOR	<ul> <li>Sensor type : Tipping bucket/ magnetic reed switch</li> <li>Material : Anodized aluminum</li> </ul>
	• Temperature: 0° to +50°C
	• Rainfall per tip: 0.254 mm
	• Volume per Tip: 4.73 ml/tip
COLAD DADIATION CENCOD	• Accuracy: 1.0% up to 2 in/hour
SOLAR RADIATION SENSOR	• Spectral Range: 400 to 1100 nm
	<ul> <li>Measurement Range: 0 to 2000W/ m²</li> <li>Sensitivity: 0.2 mV/W/m2</li> </ul>
	Calibration Factor: 5 W/m²/mV
	Accuracy: +/- 55 for daily total radiation
	• Long-Term Stability: < 2% per year
	• Operating Temperature Range: -40° to +70°C
	Relative Humidity Range: 0 to 100%
	Output: Compatible to Datalogger
BAROMETRIC PRESSURE	• Range: 500 to 1100 mBar
SENSOR	• Resolution ±0.1mBar
	• Accuracy : ± 0.5 mBar
	Output: Compatible to Datalogger
POWERSUPPLY	• SMF Battery 12V, 18 AH and Solar Panel of 20 Watts
MOUNTING HARDWARE	
	<ul> <li>2 Meter Mounting Stand for fixing all the above instruments in outdoor and provision to fold for easy transportation</li> </ul>
	Weather-Resistant Enclosure. Includes suitable for datalogger with a power supply and one or more peripherals. Have reflects solar radiation, reducing temperature gradients inside the enclosure.

<u>Cost of Tender Forms:</u> - 0.2% of the quoted amount rounded to the nearest multiple of 100, subject to a minimum of Rs.400/- and maximum of Rs. 1500 + GST 18%

Last date of receipt of tender	7.03.2025 - 2.00PM
Date and time of opening tender	7.03.2025 - 02.30PM

#### Annexure 3

#### **Terms and Conditions: -**

- 1. Tender should be submitted in the prescribed forms which can be downloaded from the website www.kau.edu/tenders. The cost of the tender forms will not be refunded under any circumstances.
- 2. The sealed cover containing the tender should be superscribed supply of "Automatic Weather Station" (along with the notification number) and addressed to the Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU.
- 3. Tender should be accompanied by EMD of Rs.2000/- and Tender fee @ 0.2% +GST 18% of quoted amount by way of three crossed Demand Drafts separately (1. Tender fee 2.GST on tender fee 3.EMD) drawn in favour of The Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU, payable at the State Bank of India, KAU branch, Vellanikkara
- 4. Late and incomplete tenders and tenders without EMD, tender fee and agreement will not be accepted. Firms which are exempted from payment of EMD should furnish copy of the current valid certificate from the Store Purchase Department, Government of Kerala.
- 5. The tender should be accompanied by an agreement in Kerala Stamp Paper worth Rs. 200/- (Rupees Two Hundred only) and format can be downloaded from the above website. The successful tenderer should execute an agreement in Kerala Stamp Paper worth Rs. 200/- (Rupees Two Hundred only) and should furnish a security deposit of 5% of the cost of the items quoted in the form of demand draft term deposit/ bank guarantee/demand draft drawn in favour of the Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU at State Bank of India, KAU branch, Vellanikkara. The format of the agreement can be downloaded from the above website.
- 6. The price must include all taxes and transportation charges and other charges, if any.
- 7. The cost of the item, tax and other charges should be stated separately
- 8. The exact specification, details of make, model, name of manufacturer, warranty details etc., of the item must be clearly specified.
- 9. If any Bandh/strike/ any unexpected holidays occur on the date of opening of tender, the tender will be opened at the same time on the next working day. The decision of the undersigned in accepting the tenders shall be final and binding.

- 10. Withdrawal of tenders after its acceptance of failure to supply the equipment or not according to the specification will entail cancellation of the tender.
- 11. The supply order will be issued upon the acceptance of the tender, and the invoice should be addressed to the Dean, College of Climate Change and Environmental Science, Vellanikkara. Payment will be effected only after the item is supplied satisfactorily.
- 12. The successful tenderer should supply and install the item to the College of Climate Change and Environmental Science, Vellanikkara, within one week from the date of the receipt of the supply order.
- 13. The Dean, College of Climate Change and Environmental Science, Vellanikkara, reserves the right to permanently remove the name of the defaulted suppliers from the list of suppliers or for a specific period.
- 14. The Dean, College of Climate Change and Environmental Science, Vellanikkara, has the right to accept or reject any or all of the offers without assigning any reason.
- 15. All the rules and regulations applicable to Government quotations will be applicable to this also.

To: Website

Notice board

Signed by

DEAN CCCES, KAU