



**KERALA AGRICULTURAL UNIVERSITY**  
**INTEGRATED FARMING SYSTEM RESEARCH STATION**  
**NEDUMCAUD, KARAMANA**  
Thiruvananthapuram-695 002, Kerala  
e-mail: [ifsrs@kau.in](mailto:ifsrs@kau.in), Phone No. 04712343586

No. IFSRS-766/2023

Dated: 14/02/2024

**TENDER NOTICE**

Sealed competitive tenders are invited for the supply and installation of the following laboratory equipment for Integrated Farming System Research Station, KAU, Nedumcaud, Karamana as per the technical specifications and the terms and conditions mentioned below.

Tender No. : IFSRS-2/766/2023  
Last Date & Time for receipt of Tender : 24/02/2024 2pm  
Date & Time for opening of Tender : 24/02/2024 2.30pm  
Designation and address of Purchasing Authority : The Professor & Head,  
Integrated Farming System  
Research Station, Nedumcaud,  
Karamana P.O.,  
Thiruvananthapuram Pin-695002  
Place of supply : Integrated Farming System Research  
Station, Nedumcaud, Karamana P.O.,  
Thiruvananthapuram Pin-695002

Sl. No.	Laboratory Equipments	Qty.
1	<b>CO2 Monitor</b> <ul style="list-style-type: none"><li>• Method: - Dual Beam Absorption Infrared</li><li>• Display: - LCD</li><li>• Independent CO<sub>2</sub> and Temperature readings.</li><li>• Calculates and Displays Ventilation Rates</li><li>• Sample Method:- Diffusion or flow through (50 - 100 ml/min)</li><li>• Performance: - CO<sub>2</sub> Channel</li><li>• Measurement Range:- 0-10,000 ppm display, 0-4,000 ppm voltage output</li><li>• Display Resolution:- ± 1 ppm</li><li>• Accuracy:- ±50 ppm or ±5% of reading up to 5,000 PPM</li><li>• Repeatability:- ±20 ppm</li><li>• Temperature dependence:- ±0.1% of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C</li><li>• Response time:- &lt;60 seconds for 90% of step change</li><li>• Warm-Up time:- &lt;60 seconds at 22°C</li><li>• Calibration interval:- 12 months, offset adjustment using single gas at 0-</li></ul>	1 No.



	<p>1000 ppm CO<sub>2</sub>.</p> <ul style="list-style-type: none"> <li>• Temperature Range:- Voltage output 32 to 104°F (0 to 40°C)</li> <li>• Display:- 32 to 122°F (0 to 50°C)</li> <li>• Display Resolution:- 0.1°F (0.1°C)</li> <li>• Display Options:- °F, °C, or Off. Set with panel button.</li> <li>• Accuracy:- ±2°F (±1°C)</li> <li>• Response Time:- 20-30 minutes (case must equilibrate with environment)</li> <li>• Outputs:- (Analog) CO<sub>2</sub></li> <li>• Range:- 0-4 VDC, 1mV/ppm (4000 ppm max)</li> <li>• Temperature:- 0-4 VDC linear, 32-104°F (0-40°C)</li> <li>• Output Impedance:- 100 Ohms</li> <li>• Digital:- RS232</li> <li>• Wiring Connection:- One RJ-45 Connector</li> <li>• Output:- Dual Analog output plus digital output</li> <li>• Power Supply:- Battery Type Four AA batteries</li> <li>• Battery Operation:- 80 hours (alkaline)</li> <li>• External Power:- 6 VDC from external AC/DC adapter, included</li> <li>• Power Requirements:- 100 mA Peak, 20 mA average from 6V</li> <li>• General Operating Conditions:- - 32-122°F (0-50°C), 0-95% RH, non-condensing</li> <li>• Storage Temperatures:- -4 to 140°F (-20 to 60°C)</li> <li>• Certifications: - FCC Class 15 Part B CE</li> </ul> <p><b>Warranty: Minimum one year on site</b></p>	
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## TERMS & CONDITIONS

### 1. **Tender form**

The Tender form may be downloaded from the following web link in the internet [www.kau.in](http://www.kau.in).

The cost of tender form is rupee 0.20 % of PAC (rounded to nearest multiple of 100/- minimum Rs.400/-) + 18% GST. A Demand Draft in favour of the Professor & Head, Integrated Farming System Research Station, Karamana P.O., Thiruvananthapuram– 695 002 payable at SBI Karamana, Thiruvananthapuram should be enclosed along with the tender submitted.

2. **Earnest Money deposit**: EMD @1% of the cost of item offered (subject to a minimum of Rs.1500), may be remitted as a separate Demand Draft drawn in favour of the Professor & Head, Integrated Farming System Research Station, Karamana P.O., Thiruvananthapuram– 695 002.
3. The sealed cover containing the tender document should be superscribed as “Tender for Supply of Laboratory Instruments” and addressed to the Professor & Head, Integrated Farming System Research Station, Karamana P.O., Thiruvananthapuram– 695 002. **The cover should also contain DD towards EMD and a preliminary agreement in Kerala Stamp paper worth Rs.200/- (Format attached).**
4. **Agreement and Security Deposit** : The successful bidder should have to execute an agreement in Kerala stamp paper worth Rs.200/- (Rupees Two Hundred only) and furnish a security deposit amounting to 5% of the order value in the form of DD drawn in favour of The Professor & Head, Integrated Farming System Research Station, Thiruvananthapuram Pin. 695 002, payable at the State Bank of India, Karamana (IFSC:SBIN0070031), when directed from this office. Form of Agreement can be downloaded from the website [www.kau.in](http://www.kau.in) under the Related documents section.
5. If the cost of the item offered is above Rs.2,50,000/-, TDS @ 2% will be deducted towards GST
6. The rate quoted, tax and other charges, if any, should be stated separately.

7. The rate quoted should be valid for 60days.
8. The Professor & Head reserves the right to accept or reject any or all of the offers without assigning any reason.
9. The successful bidder should complete the supply and installation of the item within 10 days from the date of receipt of supply order.
10. If any hartal/strike any unexpected holidays occurs on the date of opening of tender, the tender will be opened at the same time on the next working day.
11. All conditions, rules and regulations applicable to Government tender will be applicable to this tender also.

**Special Conditions**

- Tender insisting payment in advance either full or part for supply and execution of the work are liable for rejection.
- Leaflets/Brochures/catalogues containing technical features of the item quoted describing its features, applications should be attached with the tender
- Payment will be made after supply and satisfactory installation of the equipments.
- Operation manual and guarantee cards for the equipments should be provided during supply.
- The supplier should attach their client list along with tender.
- Details of warranty offered should be clearly stated in the tender.
- The decision of the undersigned shall be final and binding.

Further informations can be obtained from the university web site [www.kau.in](http://www.kau.in) or from the office of the undersigned (phone 0471-2343586) during office hours.

Sd/-  
**Professor & Head**