



TAMIL NADU AGRICULTURAL UNIVERSITY
Anbil Dharmalingam Agricultural College & Research
Institute
Tiruchirappalli - 620027

Dr. P.Masilamani
Dean

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No.Dean/ADAC&RI/TRY/SSAC/AICRP/Capital/LAM/2021 Dt.12.02.2021

LETTER CALLING FOR LIMITED SEALED TENDERS

It is proposed to purchase the item specified below and you are therefore requested to send your Tenders.

1.	Items to be purchased	:	Leaf Area Meter (IR Thermal Imager based Image capture)
2.	Due date and time for receipt	:	26.02.2021, 02.30 PM
3.	Date & Time of Opening	:	26.02.2021, 03.30 PM
4.	Mode of sending	:	Sealed cover addressed to the The Dean, A.D.Agricultural College & Research Institute, Navalurkuttapattu, Trichy - 620 027 Superscribed as " Tender for LAM (Thermal Imager) - ICAR-AICRP - due on 26.02.2021 "
5.	Tender Document fee	1.	Rs.750/- + 5% Tax = Rs.787.50/- (or) 788/- Limited tender scheduled can downloaded at TNAU website: https://tnau.ac.in/tenders/ (or) Obtained from this office on payment basis
		2.	To be furnished in the form of Demand Draft drawn in favour of Dean, ADAC&RI, Tiruchirappalli payable at Tiruchirappalli
		3.	Demand draft to be obtained on after the date 12.02.2021
6.	E.M.D.	1.	Rs. 3000/- (Rupees three thousand only)
		2.	To be furnished in the form of Demand Draft drawn in favour of Dean, ADAC&RI, Tiruchirappalli payable at Tiruchirappalli
		3.	Demand draft to be obtained on or after the date 12.02.2021
7.	Validity of the tender	:	Tender should be valid up to a minimum of <u>90 days</u> from the due date.

Conditions:

- i. The rate and the taxes thereon if any should be furnished separately either in FC / INR.
- ii. The amount should be shown both in figures and in words. Corrections if any should be attested properly. Tenders with corrections not attested will be rejected.
- iii. a) Tenders without furnishing the required Tender Document fee and EMD will be rejected.
b) Tenderers claiming exemption from paying the EMD should produce necessary evidence / documents in support of their request.

- c) EMD in respect of unsuccessful tenderer will be refunded after the supply of material by L1 bidder. EMD in respect of successful tender will be refunded after the expiry of the warranty period;
 - d) No interest is payable on EMD
- iv. Tender should be furnished for the exact specifications as given in this letter. Tenders not in accordance with the specification will be rejected. **In the case of equipments, the relevant brochure / pamphlet of the equipment containing the features and specifications should necessarily be attached with the Tender / Quotation.**
- v. The supply should be effected within 30 days from the date of purchase order.
 - vi. Warranty period should be indicated. Warranty of 2 years is essential.
 - vii. After warranty condition for AMC should be indicated.
8. If the successful tender fails to supply the item within the stipulated time, the EMD will be forfeited apart from initiating further action for consequential loss if any to the Tamil Nadu Agricultural University.
9. Tender shall be furnished in the prescribed format enclosed in the tender document duly signed by the tenderer accepting the condition and the tender format shall be sent. Tender not furnished in the prescribed format itself will be rejected.
10. Tenderer may be present or send their representative on the date of opening. The undersigned have the right to accept (or) reject any tender without assigning any reason thereof.

Dean

TAMIL NADU AGRICULTURAL UNIVERSITY
Anbil Dharmalingam Agricultural College and Research Institute
Navalur Kuttapattu, Tiruchirappalli -620 027
Tamil Nadu State

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E mail: deanagrity@tnau.ac.in

TENDER SCHEDULE

Tender schedule for the supply of **Leaf Area Meter (IR Thermal Imager based Image capture)** to the Anbil Dharmalingam Agricultural College and Research Institute Navalur Kuttapattu, Tiruchirappalli -620 027, Tamil Nadu State.

S. No	Particulars and Specifications	Quantity required	Unit Price FC/ INR	Total Cost FC/ INR
1.	Items particulars and Specifications			
i)	<p>Leaf Area Meter (IR Thermal Imager based Image capture) Specifications: IR Spectral range: 7.5 to14 μm, Infrared resolution: 240 x 180 pixels, extended to 480 x 360 pixels via integrated Super Resolution Technology, Thermal sensitivity (NETD) : 90 mK, Temperature Measuring range 1: -30 to +100 °C / 2: 0 to +650 °C, Accuracy : ±2 °C, ±2 % of measured value, Emissivity / reflected temperature compensation : 0.01 to 1 / manual. Automatic recognition of emissivity and determination of reflected temperature (RTC). Field of view; minimum focusing distance: 35° x 26° / < 0.5 m, Geometric resolution(IFOV):2.6 mrad, SuperResolution (Pixel/IFOV) : 480 x 360 pixels/ 1.6 mrad. Image refresh rate: 9 Hz; Focus: Auto focus, Visual image output: Image size / min. focusing distance : at least 3.1 MP / 0.5 m, Image display : 8.9 cm (3.5") TFT, QVGA (320 x 240 pixels), Display options : IR image / real image, Colour palettes : iron, rainbow HC, cold-hot, grey, Data interfaces: WLAN Connectivity: Communication with the wireless module WLAN and Should have USB 2.0 Micro B. Measurement and analysis functions: Mean point measurement, hot/cold-spot recognition, Delta T, area measurement (min-max on area), Should have Scale Assist and IFOV warner, Humidity mode –manual and Humidity measurement with humidity measuring instrument, Should Have Solar mode – manual, Digital camera, Lens :35° x 26°; Video streaming: via USB, via wireless LAN, should have Storage as JPG; Should have Full screen mode , Image storage: File format : .bmt and .jpg; export options in .bmp, .jpg, .png, .csv, .xls; Memory: Internal memory (2.8 GB). Automatic measurement value transfer from thermohygrometer via blue tooth. Saving/exporting the infrared image : Anlaysis and reporting software; Copying the infrared image to the clipboard, Export an image with detector resolution from a Super Resolution image (standard imager resolution), Rotating the infrared , Specifying the readings for one pixel in</p>	One		

	an infrared image, Temperature correction in an infrared image area (adjust emissivity and reflected temperature for the area), Specifying a hotspot/coldspot for an infrared image area, Creating a histogram of an infrared image area, Determine the average temperature of an IR image area, Creating a temperature profile for a line , Moving/deleting measuring points/range, image overlay. Battery type: Li-ion battery can be changed on-site ; Operating time: minimum 4 hours, In instrument charging			
ii).	Thermohygrometer : Specification: Measurement of air humidity & Temperature, able to transfer measurement value to thermal imager main unit via Bluetooth:	Two		
iii).	External Battery Charger for Handheld Thermal Imager	One		
iv).	Spare Battery for Handheld Thermal Imager	Two		
2.	Origin (Indian/Imported)			
3.	Make & Model (Brand name to be specified)			
4.	VAT a) VAT if any b) VAT Number			
5.	CST a) CST if any b) CST Number			
	GST a) (CGST/SGST) if any, b) GST Number:			
6.	Customs & Central Exercise duty (imported items)			
7.	Customs Clearance Charges			
8.	Insurance			
9.	Transport and Delivery			
10.	Installation			
11.	Training			
12.	Discount if any.			
13.	Total cost of the instruments after discount if any (both in figures and in words)			
14.	Validity of the quotation/ tender			
15.	Comprehensive warranty			
16.	AMC			
17.	Delivery Period			
18.	Mode of Payment (INR or LC)			
	Signature of the Tenderer with seal			