

क्रय अनुभाग वन अनुसंधान संस्थान देहाराद्न२४८००६-GSTIN 05AAAAI1708G2Z6 PAN NO. AAAAI1708G Purchase Section Forest Research Institute, Dehradun-248006, UTTARAKHAND Phone: 0135-2224205

http://fri.icfre.gov.in/tender/ Email: po_fri@icfre.org



Objection Invitation for Single Tender Enquiry

(Against Proprietary Article Certificate)

Tender Ref. No X-72/ECC/HS/AICRP/2019-20 Tender ID: 2020 ICFRE 567963 1

Date: 29/10/2020

Sub :- Purchase of "Automatic Weather Station Model AWS" (Advance Multifunction Data Logger) - reg.

The request has been received from the HOD. Ecology and Climate Change Division, FRI for "Automatic Weather Station Model AWS" (Advance Multifunction Data Logger) from M/s Spectra Agritec, B-1, B-2, Ashok Apartments, 3rd Floor, Ranjeet Nagar, Commercial Complex, New Delhi-110 008 authorized by ICT International Pty Ltd. 211 Mann St. Armidale NSW 2350 Australia, on proprietary basis. The proposal & PAC certifications submitted by above mentioned firm are attached herewith.

The above document are being uploaded on FRI website and CPPP portal for open information to prospective manufacturers to submit their objections/comments (if any) regarding proprietary nature of equipment/item within 14 days of giving above mentioned reference number. The comments should be received in the office of Purchase Officer, FRI, Dehradun-248006, through E-mail (po_fri@icfre.org) on or before 12.11.2020 at 3:00 P.M. failing which, it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Purchase Officer Forest Research Institute

Encl:-

1- PAC Certificate, Specification of equipment, and Proforma invoice

Critical Date Sheet

S. No.	Particulars	Date	Time	Location
1.	Published Date	29.10.2020	05:00 PM	FRI website and CPP portal: https://www.eprocure.gov.in/epublish/app
2.	Document Download Start Date	29.10.2020	06:00 PM	At CPPP Portal as above
3.	Objection/Comments Submission start date	29.10.2020	06:30 PM	through email (po_fri@icfre.org)
4.	Objection/Comments Submission End Date	12.11.2020	03:00 PM	through email (po_fri@icfre.org)

Copy to: I.T. & GIS Discipline, FRI, with request to upload it on FRI website



ICT International Pty Ltd

Enabling better global research outcomet in soil, plant & environment, because, et

15th June 2020

PROPRIETARY CERTIFICATE

TO WHOM IT MAY CONCERN:

This is to certify that the Automatic Weather Station Model AWS (Advance Multifunction Data Logger) is a Proprietary product of M/s ICT International Pty Ltd., Australia.

The Automatic Weather Station is specially configured with

- 1. Air Temperature: Range: -40°C to +120°C, Accuracy: ±0.3°C
- 2. Relative Humidity Sensor: Range: 0 to 100 %, Accuracy: ±2%
- 3. Solar Radiation: Range: 0-1750 W/m², Accuracy: 1 w/m²
- 4. Rain Fall Tipping Bucket Rain Gauge, Pulse Channel: Range: 0-500mm/hr, Accuracy: ±3% >
- 5. Wind Speed Sensor (Anemometer), 3cup, Digital / Pulse: Range: 0-58m/s(0-209km/hr), Accuracy: ±5%
- 6. Wind Direction Sensor, Digital: Range: 0 to 360°, Accuracy: 7°
- 7. FDR Soil Moisture Sensor: Range: 0-100%VWC, Accuracy: ±3%
- 8. Soil Temperature Sensor: Range: -20°C to 60°C, Accuracy: ± 0.10C
- 9. Soil Heat Flux plate-heat flux: Range: -2000 to +2000 W/m², Accuracy: ± 5% FSD
- 10. PAR-Quantum sensor: Range: 2000μmol/m²/sec, Accuracy: ±5% FSD
- 11. Virtual calculation of Vapour Pressure Deficit (VPD) & Automatic Evapotranspiration Calculation (ET)
- 12. Optional Sensor (SAP Flow, NET Radiation, Albedometer ...)can be connected to Data Logger

and is a Proprietary Item of M/s ICT International Pty Ltd., Australia.

To the best of our knowledge, there is no other manufacturer manufacturing any such instrument with the same specifications.

Yours Sincerely,

Peter Cull Director

ICT International Pty Ltd

www.ictinternational.com.au



ICT International Pty Ltd

Enabling better global research outcomes in soil, plant & environmental monitoring

Ref: ICTIND060120

Date: 6th January, 2020

AGENCY CERTIFICATE

TO WHOM IT MAY CONCERN

We ICT International Pty Ltd, Australia hereby certify that M/s Spectra Agritec located at B-1, B-2. Ashok Apartments (3rd Floor), Ranjit Nagar Commercial Complex, New Delhi -110 008, is our exclusive agent in India for our range of products and accessories.

M/s Spectra Agritec will provide you with assistance and after-sales service on ICT International Pty Ltd. Australia products. They are hereby authorized to submit offers, negotiate and finalise orders for all ICT International Pty Ltd, Australia products on our behalf.

This agreement is valid from this date and will remain in effect unless otherwise stipulated with written notice by us.

For ICT International Pty Ltd, Australia.

leter be full.

Yours sincerely.

Peter Cull

ICT International Pty Ltd

ABN: 75 002 372 554

PO Box 503 Armidale NSW 2350 Australia

Phone: +61 2 6772 6770 Email: sales@ictinternational.com www.ictinternational.com.au



ISO 9001:2015

Spectra Agritec B-1, B-2, Ashok Apartments (3rd Floor)

B-1, B-2, Ashok Apartments (3rd Floor)
Ranjit Nagar Commercial Complex
New Delhi-110 008
Tel.: 25704370, 25704497
Fax: +91-11-25703946

E-mail: info@spectragritec.com Website: www.spectragritec.com

PROFORMA INVOICE

Ref. : SA/IQ/067/RK/20Date : 20^{th} July 2020

The Purchase Officer Purchase Section Forest Research Institute

P. O. New Forest

DEHRADUN- 248 006 (Uttarakhand)

GST No.: 07AAAPB5521F2ZD

FINANCIAL BID

Sub.: Supply of Automatic Weather Station Model AWS

Ref.: X-72/ECC/HS/AICRP/2019-20 Dated 30.06.2020 Due on 27.07.2020 upto 3.00 PM

for Item Sr No. 1: Automatic Weather Station

S. No	Description	Qty	Price (In ₹)
1	AWS Automatic Weather Station comprising of :	1	9,80,000.00
	Advance Multifunction Data Logger		
	No. of Channel : Total 12 (10 Analog + 2 Digital Pulse) Voltage Input Range : 0-15 V Resolution : 24 Bit Response Time : 1 sec Sampling Frequency : 10 Hz Data Storage : Micro SD card Memory Capacity : 2GB expandable to 32 GB Power Management : Internal Lithium - Polymer Battery Power Input : Non Polarised, 12VDC Computer Interface : Windows, USB, Wireless RF 2.4GHz Data : RF, GPRS, GSM, 3G & CDMA Communication Operating : -40°C to 80°C: Temperature Range RH range : 0-100% Data Logger with USB, Boot Strap, Loading function, optical isolation		
	lighting protection, water proof IP65, power fail safe mode, free window utility configuration software.		
	### Air Temperature Unit : °C Range : -40°C to +120°C Resolution : 0.01°C Accuracy : ±0.3°C	1	
2	Relative Humidity Sensor		
	Unit : RH% Measuring Range : 0 to 100% Resolution : 0.05% Accuracy : ±2%		
3	Solar Radiation Unit : W/m2 Range : 0-1750 W/m2 Resolution : 1 w/m2 Accuracy : 1 w/m2	1	

4 Rain Fal	- Tipping Bucket Rain Gauge, Pulse Channel		
į.	. : Mm	1	
Range	. 0 500	İ	
Resolution	ⁱⁿ : 0.2mm		
Accuracy	. +30/		-
Rim Diar	neter: 203 mm		
Material	: Stainless steel, powder coated paint		
5 Wind Spe	ed Sensor (Anemometer),3cup,Digital / Pulse		
Unit	: m/s or km/hr	1	_
Range	: 0-58 m/s (0-300 km/h)		ļ
Resolutio	1) : 0.45 m/c (1.6 km/hm)		
Accuracy	: ±5%		
6 Wind Dire	ection Sensor, Digital		
Unit	: °C	1	7
Operating	Range · 0 to 2000	-	
Resolution	1° (0 to 355°)		
Accuracy	: 70		
Excitation	Voltage : None passive		
FDR - Soil	Maintenance : None passive		
	Moisture Sensor	1	-
The logger	has capacity to connect upto 3 FDR Soil Moisture Sensor	1	ļ
1 100 0	MOISTUIE Prope - Measures Volumetria Call		1
11466	ntent		
Range : (1-100% VWC		
Accuracy	+/- 3%; Conxall connector for use with SMD		
Difficile IIIC	Friduce dilu 4.5m cahle		; I
Soil Temp	erature Sensor (Therm-SS)	+	
The logger	nas capacity to connect upto 3 Therm-SS	1	
Unit	: 0C		
Range	: -20°C to - 60°C		'
Resolutio	: 0.1°C		
Accuracy	: +/- 0.10C		
Cable Len	makin.		
Soil Heat	lux plate-heat flux		
Unit		1	
Range	: W/m²	-	
Sensitivity	:-2000 to +2000 W/m ²		
Accuracy	20 Hay 44/11/		
Cable Len	: +/- 5% FSD		
PAR-Quant	: 1 m		
45 01 01 11 6	PAR-Quantum sensor Levelling Fixture with 5 meter cable		
Range:		1	
Resolution	2000m mol/m²/sec		
Accuracy	0.0111 III0I/M ² /Sec		
Excitation	± 5% FSD		1
Excitation	None passive		
Quantum I	AR Cosine Corrected (PAR: 400 to 700pm)		
Cable Leng	IN: 5 meter		
	th leveling Fixture		

11	Vapour Pressure Deficit (VPD) and Automatic Evapotranspiration Calculation logged as a Virtual Sensor	1	
1.0	Unit : Nil Equation : Penman Monteith Method Crop factor : To be provided by user / Supplier Calculation : Virtual	1	
12	MCC MINI- Wireless USB Radio Communication Device	1	
13	20dBi Antenna 2.4 GHz flat panel antenna	1	
14	Tripod	1	
15	Solar panel	1	
-	F.O.R. DESTINATION	₹ 9,80,000.00	

(Rupees Nine Lakh Eighty Thousand only)

OPTIONAL ITEM AT EXTRA COST:

S.	Description	Qty.	. Price (In ₹)
No 1.	ICT Telemetry Hub including	1	4,61,000.00
	Hub housed in IP67 rated, hard anodised aluminium enclosure, fitted with 3G Pentaband, GSM Modem and 2.4Ghz wireless, SDI12 Interface Module, additional chogori waterproof connector and cable, anodized aluminium white mounting frame with mast clamps, 20W solar panel, 4.2V 4.8Ah Lithiumion battery, 2 x 3m 400 series N male N male coax cables, 15dBi Omni directional antenna with mounting bracket, GSM Yagi antenna with mounting bracket, 16GB SD card. SIM card not included.		
2.		1	
	Access for 3 year User Supplies Prepaid SIM Card		

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