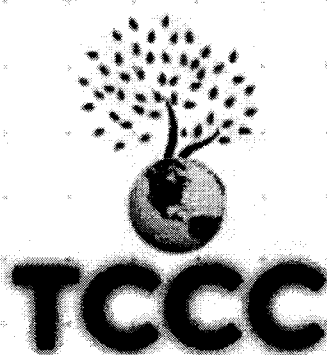


TENDER DOCUMENT
FOR
SUPPLY OF
WEATHER MONITORING STATION
FOR
TRIPURA CLIMATE CHANGE CELL (TCCC)



TRIPURA CLIMATE CHANGE CELL (TCCC)

DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT

GOVERNMENT OF TRIPURA

VIGYAN, PRAJUKTI O PARIVESH BHAWAN
GORKHABASTI, AGARTALA, TRIPURA-799006

Phone No.: (0381)2325228

Email: dste-tr@gov.in

Website: <http://dstetripura.nic.in/>

WORLD CLIMATE CHANGE CELL
FOR
WEATHER MONITORING SYSTEM
SUPPLY OF
FOR
TRANSFER DOCUMENT

SECRET

WORLD CLIMATE CHANGE CELL

INTERNATIONAL CLIMATE CHANGE MONITORING SYSTEM

GOVERNMENT OF CANADA

INTERNATIONAL CLIMATE CHANGE MONITORING SYSTEM

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Government of Tripura**Tripura Climate Change Cell (TCCC)**

Department of Science, Technology & Environment (DSTE)

Vigyan Prajukti O Paribesh Bhawan

P.N. Complex, Gorkhabasti, Agartala -799006

Website: <http://dstetripura.nic.in/>

No.8(42)/DSTE/TCCC/Pt-I/D/ 8289

Date: 30/12/2016

NOTICE INVITING TENDER

Sealed Tenders are invited from bona fide and resourceful suppliers/manufacturer for supply of the Telemetry based Weather Monitoring Station for the **Tripura Climate Change Cell (TCCC)**, Department of Science, Technology & Environment as per the specification mentioned in **Annexure-I**.

2. The Tender Paper/Document is available and can be downloaded from the Department's Website <http://dstetripura.nic.in/> and the same may be obtained from office of the Tripura Climate Change Cell, Department of Science, Technology & Environment, Gorkhabasti, Agartala, Tripura, PIN-799006 during working hours.

3. Tenders should be sent by "Registered Post or by courier service". Tenders received after the due date of submission shall liable to be rejected.

4. Tenders will be received in this office up to 5 pm on **20/01/2017** and will be opened on **21/01/2017** at 12 noon unless any unavoidable circumstances arise. Bidders or their authorised representatives may remain present if they want to during the opening of the tenders.

5. The tender should consist of 2 (two) parts as follows and shall be opened sequentially **i) Technical Bid. ii) Financial Bid.**

i) **Technical Bid:** In the technical bid the bidder should mention the detailed technical specifications in the format as **Annexure-II**. The bidder who's Technical Bid is found to be acceptable, shall be considered for opening of respective Financial Bid.

ii) **Financial Bid:** The Financial Bid shall be indicating total cost of the instruments/equipment. However price break up of individual items including installation and Annual Maintenance Contract (AMC), if any, shall be indicated clearly in the format as **Annexure-III**. The warrantee, CST, Excise Duty, cost of Transportation, Packing, dispatching and insurance, taxes & duties etc. shall be covered within the overall quoted price. No additional payment will be admissible for any taxes or on any other reasons. The total price shall be written both in figures and words. All pages of the offer will be duly stamped and signed by the bidders. Financial Bid will be opened after



scrutiny and acceptance of Technical Bid. The date of opening of Financial Bid may be intimated on the same day when Technical bid is opened if possible or may be intimated subsequently.

6. The Earnest Money Deposit (EMD) of Rs. 5,000.00 (Rupees five thousand) only in the form of Banker Cheque or Draft in favour of "Tripura Climate Change Cell" payable at Agartala. This EMD is refundable at the end of the process.

7. The bidder should submit tax clearance certificate along with tender (i.e. VAT/Sales Tax clearance).

8. One (1) sealed envelope for the Technical Bid separately will have to be submitted. The Technical Bid should consist of the entire bid document except the page for bid price, duly signed and stamped on each page/The Bidder's Response columns have to be filled up by the bidder with supplements in favour of his/her claim. Non submission of this may lead to cancellation of the bid. The duly filled up Bidder's Response column will be understood as the technical offer of the bidder so far as compliance to the specification is concerned.

9. One (1) sealed envelope for the Financial Bid separately will have to be submitted. The Financial Bid should consist of the page for bid price in the Bid Document, duly signed and stamped, along with other explanatory price break up pages.

10. The TCCC may not accept offer only on the basis of lowest price.


11. The TCCC reserves the right to cancel the entire bidding process at its discretion without assigning any reason.

12. If the Vendor fails to submit any document asked for or furnish incomplete document the TCCC may reject the quotation.

13. The undersigned reserves the right to accept or reject any tender including the lowest one without assigning any reason.

14. Please put Bidder's information & Check list as per **Annexure-IV** at the top of the tender document.

Director


**Tripura Climate Change Cell
Department of Science,
Technology & Environment
Government of Tripura**

TERMS AND CONDITIONS FOR BIDDING**1. Scope of work:**

The scope of the present work lies in supply, installation, commissioning and providing warranty support for the following instrument for Tripura Climate Change Cell, Department of Science, Technology & Environment, Government of Tripura.

Sl No.	Name of Instrument	Required Number
1	Weather Monitoring Station	01
2	Computer	02
3	Printer	02
4	External Hard Disk	02
5	UPS	02

2. Price:

The Prices quoted shall be firm and valid for a period of 120 days from the date of submission of the quotation.

3. Payment:

40% payment will be made on receipt of machines on site and 55% payment will be made after installation, commissioning and performance evaluation by the **Technical Committee at Tripura Climate Change Cell** and remaining 5% payment may be made after successfully completion of warranty period by account payee cheque or Draft/online Transfer using RTGS to the Supplier normally within forty five (45) days.

4. Currency:

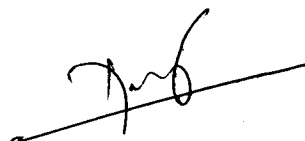
QUOTATIONS ARE TO BE IN INDIAN RUPEES ONLY.

5. Taxes and Duties:

The Supplier shall be entirely responsible for all taxes, license fees, etc., incurred on the equipment supplied from India until the handing over of such equipment to the Cell.

6. Notification of Award and Signing of Contract:

The notification of award will be made to the selected supplier in writing within the period of validity of the quotation.



7. Performance Security:

The Supplier within thirty (30) days from the date of notification of award shall furnish a Bank Guarantee from any Nationalized Bank to the Cell in line with the enclosed form towards performance guarantee for an amount equal to ten (10) percent of the total Price of award. The performance security will be discharged by the TCCC and returned to the Supplier not later than forty five (45) days after expiry of warranty period.

8. Warranty:

This warranty includes all spare parts and services to keep the instruments and equipment in operating condition. The Supplier shall warrant to the Cell that the Equipment complies strictly with the Specifications and has no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Equipment in the conditions prevailing to the final Sites.

9. Period of Warranty

This warranty shall remain valid for the period of **(2) two** years from the date of taking over of the equipment by the Tripura Climate Change Cell.

10. In Case of Faulty Equipment

If any part of the Equipment breakdowns or fails due to faulty of improper design, materials, workmanship, manufacture, fabrications or installation, or fails to meet the requirements of the Specifications, then the Cell shall promptly notify the Supplier in writing of any claims arising under this warranty.

Upon receipt of such notice, the Supplier shall within the period specified in the notice and with all reasonable speed, shall replace the defective Equipment or improper parts thereof at the Supplier's expenses within 15 (fifteen) days.

If the Supplier, having been notified, fails to remedy the defect(s) within the period specified, the Cell may proceed to take such remedial action as may be necessary at the Supplier's risk and expense and without prejudice to any other rights which the Cell may have against the Supplier under the Contract.

11. Installation

All the Equipment shall be installed and brought into suitable conditions for operation by the Supplier at the Sites designated by the Cell. All the installing



equipment, tools, materials, labour logistics and all the other requirements for installation shall be provided by the Supplier.

12. Taking Over:

Upon successful completion of delivery, installation and commissioning of the Equipment at the designated Sites, the Supplier shall notify the Cell in writing that all the Works under the Contract except the obligation of the warranty have been completed. Within fifteen (15) days after such notice from the supplier the TCCC will issue certificate of taking over after successful commissioning of equipment.

13. Completion of work:


The Supplier shall complete the entire work of supply, installation, commissioning and handing over within a period of ninety (90) days of award of the contract by the Cell.

14. Delay in completion of work:

The Supplier shall pay to the Cell as liquidated damage a sum equivalent to half (0.5) percent of the unit price in the Contract Price for Equipment undelivered / works not completed, per week of delay, subject to a maximum delay of 10 weeks. Thereafter the Supply contract is liable to be cancelled.

15. Applicable Law and Arbitration:

Any disputes arising out of this enquiry shall be dealt in the Tripura jurisdiction only.

16. Decision of the competent authority will be final.**Director**

**Tripura Climate Change Cell
Department of Science
Technology & Environment
Government of Tripura**



Technical Specification of Weather Monitoring Station

Automatic Weather Station should be included of the following:

Sl. No.	Functions	Specifications
1	TEMPERATURE	Measurement Range: -40° to +60°C Output signal range: 0 to 1.0 V (typical) Accuracy: ± 0.2°C Data output should be compatible to the dedicated data logger.
2	RELATIVE HUMIDITY	Measurement Range: 0 to 100% RH Accuracy: ±2% RH (0-100% RH) Data output should be compatible to the dedicated data logger.
3	ATMOSPHERIC PRESSURE SENSOR	Pressure Range 600 to 1100 hPa (mbar) Absolute Pressure: 0-20 Psia Accuracy :±0.25 FS Data output should be compatible to the dedicated data logger.
4	SOLAR RADIATION SENSOR	Sensitivity: 50 $\mu\text{V}/\text{W}/\text{m}^2$ Accuracy: ±0.2% Range: 0-2000 W/m^2 Data output should be compatible to the dedicated data logger.
5	RAINFALL	Sensor type tipping bucket with magnetic reed switch Range: 0 mm to 999.8 mm Accuracy is ±4%,±1 rainfall count between 0.2 mm and 50.0 mm/hr; ±5% Output: - Momentary switch closure activated by tipping bucket mechanism. Environmental Limits: Temperature: 0° to +50°C and Humidity: 0 to 100% The bucket should have leveling arrangement for horizontal mounting Mounting Hardware provided for the sensor Data output should be compatible with the supplied data logger.
6	DEW POINT	Range: -40°C to +70°C, Resolution: 0.1, Accuracy: ±0.3 °C at 20 °C, Sampling Rate: 1 Hz

7	WIND SPEED AND DIRECTION SENSOR (PROPELLER TYPE)	The sensor for wind direction measuring (Gonio-anemometer) and wind speed, is made of metal with high reliability & durability, that maintain for long time the characteristics of sensitivity and precision. The mechanical body shape allows to resist at high wind speed or squalls (up to 300km/hr). Using a special high precision potentiometer, it provides excellent resolution, high sensitivity and a long mechanical duration in an operative angle of 360°.
8	WIND SPEED	Range: 0-100 m/s Accuracy: ±0.1 m/s Starting threshold: 0.3 m/s
9	WIND DIRECTION	Range: 0-360° Accuracy: ±1° Starting threshold: 0.1 m/s Mounting Hardware provided for the sensor Data output should be compatible to the dedicated data logger.
10	Dedicated data Acquisition System for AWS	The data logger should have battery-backed SRAM for CPU usage, program storage, and data storage for up to at least one million data values with upgradeable the memory size at a later date without any hardware replacements and with inherent noise reducing facility. It should be compatible with 12VDC power supply and should have programming and math functions capability for deriving calculated parameters with high program execution rate of up to 100 Hz for making fast measurements. It should have ability to implement conditional statements in the data logger programming. The Histogram instruction is required to process input data as either a standard histogram (frequency distribution) or a weighted value histogram. It should be possible to calculate the standard deviation of the Source over the output interval and store the results in a Data Table.
11	Resolution	On the most sensitive range better than 0.5 microvolt.
12	Switched voltage excitations:	The system should have switched outputs provided for precision excitation voltages.
13	Digital I/O ports	Input ports- 2 digital, 4 analog voltage, 1 analog current, 1 RS-485 for upto 8 sensors. Output ports - 1 RS-485, 2 5V switches, 1 current source. Operating Temperature Range: -40° to +65°C; 50Hz noise rejection inbuilt feature.
14	Software	Online report will support following features:

		<ul style="list-style-type: none"> • Data calendar and filters. • Plots for data quality checks. • Connection log. • PDF reports. • Data export • Data security. • Wind speed and direction in Wind Rose diagram
15	POWER SUPPLY	Suitable for the supplied data logger and the sensors that will be integrated with the data logger.
16	Warranty	2 years minimum
17	Computer	PC with generalized specification for the Computer: Windows- Desktop having Intel i3 processor; Intel Chipset or equivalent chipset; 4GB DDR-III 1600MHz or higher expandable up to 8 GB; Integrated sound and graphics controller, Gigabit Ethernet controller; 500GB or higher SATA III HDD 7200 rpm internal HDD; Dual layer DVD writer; 104 Keys OEM Keyboard and OEM Optical Scroll Mouse; SFF chassis with suitable power supply; 21" or higher TFT LCD Monitor with TCO 06 Certified; Preloaded with OEM Pack Windows 7 Professional(64 bit) or equivalent, all necessary Plug-ins/utilities and driver software, bundled in CO/DVD Media.
18	Printer (colour)	Laser Technology Based or Liquid Ink Based
19	External Hard Disk	(2 TB) for data storing and continuous back-up of the recorded data for future reference. (Make of reputed company)
20	UPS	Online 2 KVA (Make of reputed company)



Annexure II

TECHNICAL SPECIFICATION OF INSTRUMENT/EQUIPMENT FOR LABORATORY OF TRIPURA CLIMATE CHANGE CELL		
Code Number		
Equipment Name		
Quantity		
1. MAKER MODEL AND CONDITION	TCCC'S SPECIFICATION	BIDDER'S RESPONSE
Manufacture		
Model		
Electricity		
Other necessary utility		
Dimension/Weight		
Specification		

