

Annexure - I
Technical Specifications of AWS after Pre-bid Conference

GSM/GPRS/CDMA based Automatic Weather Stations		Quantity
		02 sets
	Sensors	
1	Wind Velocity	02
	Range: 0.5 – 50 m/s or higher, Accuracy: 0.5 m/s or better	
2	Wind Direction	02
	Range: 0 – 355° or better Accuracy: ± 5° maximum	
3	Temperature Sensor	02
	Range: -5°C to 55°C or higher Accuracy: ±0.5°C or better	
4	RH Sensor	02
	Range: 1-100% RH Accuracy: ± 5%	
5	Rain Gauge	02
	Tipping bucket Resolution: 0.5 mm	
6	Barometric Pressure	02
	Range: 700 to 1100 mbar (hPa) Accuracy± 1.0 mbar or (hPa)	
7	Four Component Net Radiometer (Incoming LW & SW and outgoing LW & SW)	01
	Sensitivity: < 10 $\mu\text{V W}^{-1} \text{m}^2$ LW and < 20 $\mu\text{V W}^{-1} \text{m}^2$ SW	
8	Quantum PAR Sensor	02
	Spectral Range: 400 – 700 nm	
9	Data Logger <ul style="list-style-type: none"> • Sensor Interface: Analog Channels 20 or more Sensor Channels (expandable in future, if required) • Measurement Interval: Programmable • Internal Data Memory: ≥ 1 MB * • Data retrieval through GSM/GPRS/CDMA and alternatively USB/SD Memory Card/RS232 port to Data Retrieval System • Real time clock: The system should have battery backed real time clock so that the time is updated even during power failure 	02
10	Versatile software that supports data logger programming, diagnosis,	02

	manual data collection, and data display is required. It must represent wind direction with wind rose diagram for 16- directions / divisions and frequency by vector diagram.	
11	Tower: 10 -15 m	01
12	Tripod (portable): 2-3 m	01
13	Warranty: Comprehensive for three years with maintenance of tower and AMC for further two years	02
14	Power System	
	Solar Panel of appropriate capacity with 12 volt output	
	Solar charger	
	12 V 26 AH SMF VRLA battery	
15	Accessories	
1.	Data Retrieval System with output device covering following or latest configuration:	
	Processor: i7 quad core, LED Back-Lit Display (1600x900 or higher resolution), 12 GB DDR3 Memory 1333 MHz, 500 GB HDD (7200 rpm), Blu- ray R/RE DVD+/-RW SuperMulti DL, Graphics with 1 GB dedicated memory, Bluetooth, Mobile broadband, Wireless & WWAN, Multimedia with 3 MP camera, 8- in-one card reader, WPA, WPA2, VPN, 9 cell or long life battery, wireless mouse, leather carry case, standard warranty, Licensed OS compatible to Equipment software, MS Office licensed , antivirus, external hard disc	01
2.	MFP data output device :	01
	Print : up to 25 ppm, Processor Speed: 500 MHz, Maximum memory: 128 MB	
16	OPTIONAL	
1.	Sonic Anemometer	01
2.	Indoor Display Unit	01
3.	Outdoor Display Unit *- provision to display four parameters at a time and has to be installed approximately 1000 meters away from the base station.	01
4.	UV Sensor (A & B)	01
17	Essential Condition: Commitment should directly be given by the manufacturer and must be addressed to the Director CIMFR, Dhanbad for post installation warranty services and supply of spares.	
18	Other Terms & Conditions:	
	Payment will be made as per existing Purchase Rule	
	Responsibility of Supplier:	
	Installation, demonstration and on-site training to the CIMFR persons	
	Original Brochure should be provided with the quotation.	

* changed as per PBC