

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENTS

Sl No.	Description of items	Quantity
File No.	PUR/283/CFMTTE/RM/E/2023-24/RET	
1	SUPPLY, INSTALLATION AND COMMISSIONING OF DATA ACQUISITION SYSTEM. (DETAILED SPECIFICATIONS AS PER ANNEXURE – I)	1 No.

1. DELIVERY, INSTALLATION & COMMISSIONING:

The delivery, installation and commissioning are to be completed within 120 days from the date of issue of purchase order. The installation and commissioning shall be carried out by your expert- engineers of supplier/Manufacture. During fabrication & installation necessary training on operation and maintenance of the goods/system shall be imparted to relevant Scientist/Engineer/Technicians.

2. INSTALLATION AND COMMISSIONING:

The Installation and Commissioning to be done by the Supplier at CSIR-CMERI, Durgapur-09, (W.B.)

3. PAYMENT TERMS:

100% payment shall be paid within 30 days after delivery, installation and commissioning of Data Acquisition System and acceptance of the material upon submission of claim supported by the acceptance certificate issued by the purchaser.

4. BID SECURING DECLARATION FORM:

Bid Securing Declaration is to be submitted by the Bidder as per the format prescribed in the tender document.

5. WARRANTY:

01-year warranty to be provided by the supplier from the date of satisfactory installation of ordered goods.

6. MANUFACTURER AUTHORITY FORM:

Manufacturer Authorisation Form to be provided by the supplier.

7. PLACE OF DELIVERY:

CSIR-CMERI, M.G. Avenue, Durgapur- 713209, West Bengal.

8. MAKE IN INDIA CERTIFICATE FOR LOCAL CONTENT

Certificate for local content to be provided by the supplier in form 14 (Format attached along with Tender Document). Percentage of value addition & Name and address of the factory where the value addition was made should be mentioned clearly in the Form 14.

Specification of Data Acquisition System

- [1] Measurement inputs channel: minimum 12
 - a. Current and voltage card (4 channels),
 - b. Carrier frequency amplifier (4 channels),
 - c. Frequency amplifier to measure frequency, torque or speed (4 channels)
 - d. Equipped in a basic device with Ethernet interface.
 - e. Feature to upgrade the system to 16 channels in future
 - f. Features to connect tri-axial accelerometer (1 no. sensor)
- [2] Power supply: 12 V battery and AC/DC Adapter with cables and connectors
- [3] 24-bit A/D converter
- [4] Sample rate per channel: 19,000 Hz or more
- [5] Automatic synchronization of multiple devices
- [6] Channels having provision of peak values, limit values and mathematical functions.
- [7] Digital inputs/outputs, analog outputs
- [8] Data connection: Ethernet
- [9] Mounting provision: DIN rail
- [10] User interface: Integrated, password-protected 3-level user interface, Operation via integrated web server with user navigation on three levels (Operator, Maintenance, Administrator)
- [11] Accuracy class of 0.05 or better with an integrated calibration certificate as per ISO 10012
- [12] Continuous digital signal conditioning for force, pressure, displacement, and temperature transducers, as well as torque sensors, angle of rotation, encoder, and standard signals
- [13] Should support Zero wire TEDS
- [14] High bandwidth and sample rate for industrial Ethernet interfaces.
- [15] Equipped individually according to the measured variables and interfaces
- [16] When using several DAQ modules: automatic synchronization, simple connection per cable
- [17] LabVIEW driver and API required
- [18] Environmental condition for operation
 - a. Operating Temperature: 0 to 60 °C
 - b. Relative Humidity: 5 to 95%
 - c. Outdoor application
- [19] Accuracy class: 0.1
- [20] Should be compliable with our existing CATMAN Software