



National Technology Centre for Ports, Waterways & Coasts.

(NTPWC)

No.606, 6th floor New academic complex

IIT Madras -Chennai -600036- PHONE:22578918/19

Ref: No. PROJECT NO: OEC/18-19/155/MOSH/SASA

DATE:17.07.2019

Tender ref no: NTPWC/DDAQ/SASA/013

Item Description: 16 CHANNEL DIGITAL DATA ACQUISITION SYSTEM -1no (as per specification attached)

Tender Due date: 07.08.2019 at 3.00 P.M.

Dear Sir,

1. Sealed Quotations/Tender with compliance sheet are invited in duplicate for the various items shown below/overleaf/**enclosed list**.
2. The quotations are to be in **two parts as Technical Offer and as Commercial offer**:
The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation are not acceptable. Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. Warranty clause will be as said in the specification. PBG will be collected as per GFR Rule.
3. Imported supplies should be quoted **for CIP Chennai basis indicating mode of shipment**.
4. Local firms to quote for free delivery to this Institute. If quoted for Ex-Go down delivery charges be indicated separately.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges and collected back at the supplier's expenses. Compliancy certificate is to be provided indicating conformity to the technical specifications
6. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. GST concession Certificate will be issued at the time of final settlement of the bill for 5% GST.
7. Goods should be supplied carriage paid and insured.
8. Goods shall not be supplied without an official supply order.
9. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
10. The Guarantee period of the item may be indicated clearly.
11. No Advance payment will be made for Indigenous purchase. However, 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). (IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty and GST for 5%. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
12. **Acceptance and Rejection**: - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
13. **All tender amendments will be uploaded on the website only**. Bidders should keep themselves updated & conditions mentioned in the specification needs to be strictly followed

Tenders to be addressed to: The Project Co-Ordinator, NTPWC, room no.606, 6th floor new academic complex, IIT Madras, Chennai- 600036

Annexure I**Ref: OEC/18-19/155/MOSH/SASA****Date: 17.07.2019****Due Date: 07.08.2019****Quotation required for the supply of 16 Channel Digital Data Acquisition System.****Technical Specifications**

16 Channel Digital DAQ with suitable accessories (Quantity - 1 No.)		
S.No.	Parameter	Description/Range
1	No. of channels & type	Single module containing 16 electrically isolated & individually configurable channels. Facility to upgrade to 64+ channels (Cascading)
2	Type of Input signals	Strain Gauge full bridge, half bridge and quarter bridge configurations, Potentiometric transducers, Voltage (10 V differential, 0 - 30 V unipolar), Resistance and Resistance thermometers
3	A/D converter	Each channel should have separate 24-bit A/D Converter for synchronous & parallel measurements
4	Sampling rate per channel	≥ 20 Ks/channel for a recording duration of 30 min (Min)
5	Bridge excitation voltage	0.5-5V
6	Carrier frequency	1200 Hz
7	Accuracy class	0.1 or better
8	Range	a) ± 20 mV for strain gauges b) ± 500 mV for potentiometer transducers c) ±10 V differential for voltage transducers d) 0 – 1000 Ω for resistance and resistance thermometers
9	Transducer impedance	300 to 1000 Ω
10	Transducer cable length	Should support ≥ 80 m
11	Transducer connection	D or Push in type connector
12	Interface	Ethernet, Fire Wire
13	Protection	IP20
14	Operating temperature	Up to 50° C
15	Humidity	5-95% RH
16	Distributed and scalable modules	The module must work with the existing Quantum MX840B DAQ as well as NI-PCI express card (while acquiring data simultaneously)
17	Connectivity	Ethernet cable (CAT5+) 2m
18	AC-DC Power Supply	Auxiliary power supply < 30 W, Input voltage – 100 - 240 V AC, Output - 24 V DC, 2m Power supply cable with ODU plug (2 wire)
19	Weight	< 2 kg
20	Software	Software need not be quoted.

For any technical query please contact –

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