

Department for Ocean Engineering
Indian Institute of Technology Madras
Chennai 600036

Ref: OE/2017/inslab/004/sas
Due date: 8/September/2017

Date: 24/August/2017

- 1 Quotations are invited in duplicate for the various items shown in Enclosed list.
- 2 The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- 3 Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. A minimum of two years warranty is required.
- 4 Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
- 5 Compliancy certificate is to be provided indicating conformity to the technical specifications.
- 6 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 cggopy of the RC.
- 7 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.
- 8 The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. 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 concessional Sales Tax Certificate will be issued at the time of final settlement of the bill.
- 9 Imported supplies should be quoted for CIF Madras.
- 10 IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty. 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.
- 11 Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
- 12 Packing, delivery and installation charges must be clearly indicated.
- 13 Goods should be supplied carriage paid and insured.
- 14 Goods shall not be supplied without an official supply order.
- 15 Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.
- 16 Delivery and installation at IIT Madras must be done by the vendor.
- 17 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.
- 18 After **qualifying the eligibility criteria^{##} and specification, the quotation will be considered.**



Yours faithfully
Prof.S.A.Sannasiraj

डॉ. स.अ. सन्नासिराज/Dr. S.A. Sannasiraj
प्राध्यापक एवं अध्यक्ष / Professor and Head

समुद्र अभियांत्रिकी विभाग
Department of Ocean Engineering

Eligibility criteria 1. After Sales and Service facility should be in Chennai 2. O E M or authorized distributor only. The distributor should have atleast 5 years of selling/dealing the items

Digital Signal conditioned acquisition system

Quantity: Two Nos.

Specification:

**TECHNICAL SPECIFICATIONS
DIGITAL SIGNAL CONDITIONED ACQUISITION SYSTEM**

A Data Acquisition system (DAS) is required to monitor force and displacement. The basic DAS shall be modular type with webserver software. The total number of channels required is 8 channels, shall be capable of handling Strain in half & full bridge and LVDT. It Should be modular type and upgradable up 16 channels.

Specifications for 8 Channel Force and displacement acquisition system

- High accuracy through low-noise 24-bit A/D conversion with high signal resolution and larger measuring bandwidth
- 32 real-time calculation channels with peak/limit values and mathematical and scientific functions.
- Channel status LED as direct diagnostics information

I	Specifications for 8 Channel Force and displacement acquisition system	
1	No of input Modules	: 8 electrically isolated & individually configurable channels.
2	Transducers Supported	: Stain Gauge in full and half bridge with 6 & 4 wire configurations for force, inductive transducers in full and half bridge, Potentiometric transducer, and Resistance thermometer (Pt100) (in combination with completion resistor)
3	Measurement Range SG Inductive LVDT & Potentiometers	: ± 4 mV/V : ±100, ±1000 mV/V : : ±500 mV/V
4	Measurement frequency	: 2KHz
5	Carrier frequency	: 4800Hz ± 0.1%
6	Bridge Excitation Voltage (effective)	: 2.5 V ± 5%

7	Accuracy class	:	0.1% of FS
8	Filters (Bessel & Butterworth)	:	4 th order, 0.1 Hz to 2 kHz, can be able to switch off.
9	Sampling Rate	:	≥19kHz/ channel
10	TEDS	:	TEDS (IEEE 1451.4) supported on every channel. Support full bridge TEDS in ≤ 6 wire circuit.
11	Permissible cable length	:	Up to 100m
12	Degree of protection	:	IP20 per EN60529
13	Zero drift & Full scale drift	:	< 0.05% /°C
14	Operating temperature range	:	-10 to +60°C
15	Interface	:	USB/ Ethernet

Note:

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The sealed quotation to be sent to:

Prof.S.A.Sannasiraj,
Head,
Dept. of Ocean Engineering, IIT
Madras, Chennai-600036, Tamil
Nadu, India

With kind attention: Prof.S.A.Sannasiraj / M.Santhanam

For any technical details you may contact

M.Santhanam

Email: san@iitm.ac.in or sant2000@yahoo.com