



**Department of Aerospace Engineering
IIT Kanpur**

Sep 22, 2013

Quotation request notice
(Enquiry No - IITK/AE/R_Kitey/21)

Sealed quotations are invited from dealers/distributors by the undersigned for 'Data Acquisition System'. The technical and commercial bids should be submitted in separate envelopes to the Department of Aerospace Engineering, IIT Kanpur by 29.09.2013.

Enquiry No.: IITK/AE/R_Kitey/21
Opening date: 0900hrs, 22.09.2013
Closing date: 1800hrs, 29.09.2013

Basic requirement of data acquisition system

Channels – 16 channels extendable up to 32 channels (for 1/4, 1/2 and full bridge configuration)
Sampling rate – Simultaneous sampling at 50 kS/s with 24 bit resolution

The system should also be usable with the following input modules (include in the quote)

1. 8 channel analog voltage input module (500 ks/s)
2. 8 channel analog current input module (200 ks/s)

Include additional required accessories to make this module working.

Note: Detailed specifications are attached at the end of this inquiry.

Terms & Conditions of the quotations are as under:

1. The equipment (or the set-up components) will be selected purely based on the technical specifications (within the budgetary constraints).
2. The quotations should be submitted in the properly sealed envelope, addressed to the undersigned. The enquiry no., technical/commercial quote and date should be mentioned on the top of the envelope.
3. The time allowed for carrying out the above note work is 07 days.
4. The quoted price should be inclusive of sales tax and other taxes including freight charges (if any).
5. The quotations shall remain valid for two months from the date of opening.
6. Commercial quotes will be opened only if the technical specifications mentioned in this tender are fulfilled. The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.

Your early response in this matter would be highly appreciated.

Sincerely,
Dr. Rajesh Kitey
Assistant Professor
Department of Aerospace Engineering, IIT Kanpur
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Detailed Specifications of Graphical Data Acquisition System

8 Slot Data Acquisition Chassis

- For hot-swappable I/O modules with integrated signal conditioning
- At Least Four general-purpose 32-bit counter/timers built into chassis (access through digital module)
- Run up to 7 hardware-timed analog I/O, digital I/O, or counter/timer operations simultaneously
- Stream continuous waveform measurements with patented NI Signal Streaming technology
- Built-in BNC connections for external clocks and triggers (up to 1 MHz)

8 channel, 12-bit, +/-10VDC, 500 kS/s, Analog Voltage Input Module

- 8 analog inputs, ± 10 V input range
- 500 kS/s aggregate sampling rate
- 12-bit resolution, single-ended inputs, screw terminal or D-Sub connectors
- Hot-swappable operation; overvoltage protection; isolation
- NIST-traceable calibration
- -40 to 70 °C operating range

16 -Channels of Analog input with bridge based Strain Measurement with at least 50 kS/s/Ch, 24-Bit ADC along with all the accessories

Resolution	24 bits
Sample Rate	50 kS/s
Max Voltage	25 mV/V
Maximum Voltage Range	-25 mV/V - 25 mV/V
Maximum Voltage Range Accuracy	0.038 mV/V
Simultaneous Sampling	Yes
Excitation Voltage	5 V , 3.3 V , 2.5 V , 10 V
Bridge Configurations	Half Bridge , Full Bridge , Quarter Bridge

- 24-bit resolution, ± 25 mV/V analog inputs with RJ50 connectors
- 4 simultaneously sampled analog inputs; 50 kS/s maximum sampling rate per card
- Programmable half- and full-bridge completion; up to 10 V internal excitation
- Smart-sensor (TEDS) compatible
- 1,000 Vrms transient isolation
- -40 to 70 °C operating range

8-Ch Analog Input Module for Current ± 20 mA, 200 kS/s, 16-Bit AI Module

779516-01

- 8 current input channels, ± 20 mA, 0 to 20 mA programmable input ranges
- 16-bit resolution, 200 kS/s aggregate sampling rate
- -40 to 70 °C operating range
- NIST-traceable calibration