



INDIAN INSTITUTE OF TECHNOLOGY KANPUR
DEPARTMENT OF CIVIL ENGINEERING

DR. SUPARNO MUKHOPADHYAY
Assistant Professor

PO. IIT KANPUR-208016 (UP), INDIA

21 June 2016

Enquiry no. CE/STR/2016-17/SUP/JUN/05

Sensors/Transducers for Structural Health Monitoring

For experimental research work at our Structural Engineering Laboratory, we would like to purchase the following sensors/transducers along with network data recorder (make: Kinemetrics or equivalent) with basic technical specifications as mentioned below;

1. Force Balance accelerometer (uni-axial, $\pm 2g$) Dynamic Range: 155 dB+; output: ± 5 VDC differential; frequency range: DC to 200 Hz; Cross-axis sensitivity: <1% including misalignment; Hysteresis: < 0.1% full scale; Horizontal & vertical mounting options; Power Consumption: < 10mA; with industrial connector; EMI/RFI housing (waterproof); etc.
2. Force Balance accelerometer (tri-axial, $\pm 2g$) Dynamic Range: 155 dB+; output: ± 5 VDC differential; frequency range: DC to 200 Hz; Cross-axis sensitivity: <1% including misalignment; Hysteresis: < 0.1% full scale; single bolt mounting with 3 adjustable leveling feet and bubble level; Power Consumption: < 40mA; with industrial connector; EMI/RFI housing (waterproof); etc.
3. Cable rolls for item number 1 and 2 with cable stand and suitable connectors.
4. 24 bit data recorder with individual 24-bit Delta Sigma converter per channel with Black Fin DSP; Number of input channels: 24 (± 5 VDC differential); sampling rate: 1 to 2000 sps; Dynamic Range: 200 sps ~ 127 dB; Double precision anti alias filter; ~64GB Internal flash memory with option of HDD; GPS timing with accuracy of <1 μ s of UTC; Communication with Ethernet and Modem; Auto diagnostic advanced firmware with Ethernet/USB/Bluetooth user interface; support software for network operation; etc.

Kindly send your offer for the above mentioned system along with the following:

1. Cost of the item with technical specifications in detail
2. Cost of additional optional accessories must be mentioned separately
3. The price should be quoted per unit on FOB basis along with maximum possible *educational discount to enable us to place the order for suitable number of FBA's considering availability of very limited funds*
4. The freight/shipping/documentation etc. costs are to be mentioned separately
5. Warranty & Delivery period and after sales service
6. Proprietary certificate, if applicable
7. Any other relevant details

An early reply latest by **04 July 2016** (02:30 P.M) will be highly appreciated. For any further information/clarifications in this regard, please write back to us at kunwar@iitk.ac.in or suparno@iitk.ac.in.

Thanking you,

Sincerely

Suparno Mukhopadhyay

The last date for the submission of quotation has been extended up to 11 July 2016