

Phone: (0512) 2597267

## INDIAN INSTITUTE OF TECHNOLOGY KANPUR

#### DEPARTMENT OF CIVIL ENGINEERING

STRUCTURAL ENGINEERING LABORATORY

# DR. SAMIT RAY CHAUDHURI ASSOCIATE PROFESSOR

P.O. IIT KANPUR-208016

February 15, 2018 *Enquiry no. CE/STR/2017-18/Feb/03* 

We would like to invite the sealed quotations for the supply and installation of the following items with all relevant accessories.

**Item Name:** Windows based Modular Data Acquisition System Programmable with Graphical Programming Environment

#### **Major Specifications**

Description	Function	Specifications
System Controller	Embedded MXIe Controller (Computing Device) To have a complete system contained within the chassis with no external PC. The bus architecture should be on PXI or PXI Express, and choice of Operating System between Windows and Real-Time.	<ul> <li>PXI/PXIe Compatible</li> <li>Remote Control and System Expansion through MXI-Express</li> <li>Compatible for Daisy Chaining with PXIe chassis using MXI-Express Interface</li> <li>At least 3.2 GB/s system throughput</li> <li>Ability to share the clock from master controller for synchronization</li> </ul>
Chassis	To provide the power, cooling, and communication buses of PCI and PCI Express for the controller and modules.	<ul> <li>PXI/PXIe Compatible</li> <li>At least 4 hybrid slots, 2 PXI Express slots, 1 PXI Express system timing slot</li> <li>High performance - up to 2 GB/s per slot dedicated bandwidth and 8 GB/s system bandwidth</li> <li>Forced air cooling with inbuilt fan/fans</li> <li>Compatibility with PXI, PXI Express, CompactPCI, and CompactPCI Express modules</li> </ul>
Module 1 Quantity- 1	High-accuracy and High speed Accelerometer Data Acquisition	<ul> <li>PXI / PXIe Compatible</li> <li>At least 6 simultaneously sampled analog inputs at up to 1.25 MS/s with 500 kHz bandwidth</li> <li>Built-in analog and digital filtering for accurate frequency domain measurements</li> <li>24-bit resolution ADCs with 115 dB dynamic range for low-noise measurements</li> <li>4 gain input ranges: ±0.5 V, ±1 V, ±5 V, ±10 V</li> <li>Integrated charge measurement and voltage or IEPE excitation configurable on a per channel basis</li> <li>Up to 20MS/s per channel measurements in time</li> </ul>



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		domain mode
Module 2 Quantity-1	High-accuracy and High speed Strain Based Data Acquisition	<ul> <li>PXI / PXIe Compatible</li> <li>At least 8 simultaneously sampled analog input channels; 25 kS/s/ch sampling rate</li> <li>At least 24-bit ADC per channel; antialias filtering</li> <li>Software-selectable excitation voltage per channel (0.625 V to 10 V) must be available</li> <li>Built-in programmable quarter-, half-, and full-bridge</li> </ul>
		<ul> <li>bunt-in programmatic quarters, harrs, and turn-orlidge completion and shunt calibration per channel</li> <li>Multidevice triggering and synchronization via PXI Express; smart sensor (TEDS) support</li> </ul>

#### **Other Requirements:**

- The Supplier should be the OEM and should produce the OEM certificate.
- The system should be an already existing and well proven product.

Kindly send your offer (Original, Signed with the name of signing authority) in a sealed envelope with label quotation, for the above items mentioning the following:

- 1. Cost of the item with technical specifications in detail
- 2. Warranty period
- 3. Delivery time
- 4. Educational discount applicable considering end use for research and teaching
- 5. Payment terms
- 6. Proprietary Certificate, if applicable
- 7. Any other relevant details

An early reply latest by 05<sup>th</sup> March 2018 will be highly appreciated. For any further information/clarifications in this regard, please write back to us at <a href="mailto:samitre@iitk.ac.in">samitre@iitk.ac.in</a> or <a href="mailto:monitd@iitk.ac.in">monitd@iitk.ac.in</a>.

Thanking you...

Samit Ray Chaudhuri

-: Last date has been extended till 19 March 2018