Department of Applied Mechanics
Indian Institute of Technology Delhi

27th February, 2013

NIQ for Data Acquisition System for Split Hopkinson Pressure Bar

Sealed quotations are invited for Data Acquisition system for Split Hopkinson Pressure Bar for soft material testing.

Sl. No	Description	Specification
1	PXIe based Core i5-2510E 2.5 GHz Controller, Win 7 32-bit	1.1 2.5 GHz dual-core Intel Core i5-2510E processor (3.1 GHz maximum in single-core, Turbo Boost mode) 1.2 Up to 1 GB/s system bandwidth and 250 MB/s slot bandwidth 1.3 2 GB (1 x 2 GB DIMM) single-channel 1333 MHz DDR3 RAM standard, 8 GB maximum 1.3 Two Gigabit Ethernet, 6 Hi-Speed USB, Express Card/34, GPIB, serial, and other peripherals 1.4 Dual Boot capability with RTOS installed along with Windows 1.5 Windows OS and drivers already installed; hard-drive-based recovery
2	RT Deployment License for PXI Controllers (ETS RTOS)	2.1 Converts a Windows PXI system to a Real-Time target 2.2 Includes Graphical Programming Real-Time embedded software, hardware support files, and one deployment license
3	PXIe 4-Slot 3U PXI Express Chassis	3.1 Hybrid slots 3.2 230 W total power available from 0 to 50 °C 3.3 High performance - up to 1 GB/s per-slot dedicated bandwidth and 3 GB/s system bandwidth 3.4 Compact and lightweight PXI chassis, 13.1 lb (5.94 kg) 3.5 Compatibility with PXI, PXI Express, Compact PCI, and Compact PCI Express modules
4	Terminal Block for strain Gauge Acquisition module	4.1 Front-mounting terminal block 4.2 Screw terminal connectivity 4.3 Should be Auto-detected in software; hot swappable

5	PXI Simultaneous High Speed Data Acquisition module	5.1 For applications up to 4 MS/s.
		5.2 4 high-speed analog inputs, 10 MS/s per channel, with onboard antialiasing filters
		5.3 Deep onboard memory (32 or 64 MS) and extended input ranges to ±42 V
		5.4 Two 12-bit analog outputs, 4 MS/s single channel, 2.5 MS/s dual channel
		5.5 8 digital I/O lines; two 24-bit counters; analog and digital triggering
6	PXI Front-mount SMB Terminal Block for High Speed Data Acquisition module	6.1 Direct SMB connectivity
		6.2 Access to 4 simultaneous-sampling analog inputs and 2 analog outputs
		6.3 Additional SMB connectors for analog or digital trigging and onboard signal routing
7	Graphical Programming Environment Academic License for Programming the DAQ Hardware	
8	PXIe 8-Ch Bridge Analog Input, 102.4kS/s	8.1 Simultaneously sampled analog input channels; 102.4 kS/s/ch sampling rate
		8.2 24-bit ADC per channel; antialias filtering
		8.3 Software-selectable excitation voltage per channel (0.625 V to 10 V)
		8.4 Built-in programmable quarter-, half-, and full-bridge completion and shunt calibration per channel
		8.5 Multi-device triggering and synchronization via PXI Express; smart sensor (TEDS) support

General condition:
1. The vendor should at least have sold this kind of instrument **more than five units** in India, and should be able to arrange for "on site" demonstration on request. Purchase committee needs the list of the references where the instruments have been sold.
2. The purchase committee will also give priority to after sell service record of the vendor.

General guidelines:
1. The import of the system should be **made in FOB** (Freight on Board) mode as per the IIT Delhi policy.
2. Letter from the manufacturer specifically to quote for this tender is to be attached for authenticity of dealership/ agency and the dealer should be authorized service provider.
3. Vendor should get a fresh certificate directly from their product principal's clearly mentioning

about three years warranty of the equipment to be delivered from the date of installation.

4. The lowest quotation however does not depend upon the warranty period.

5. The validity of the quotation should be at-least three months, the vendors will do the **installation, training and demonstration in the IIT Delhi premises without additional charges**.

6. Taxes, terms and conditions should be clearly mentioned.

7. Specifications form should be similar to the given specification sheet.

8. Compliance statement for the required specification should be attached.

9. Payment terms and conditions should be clearly mentioned. No advance payment is encouraged by IIT Delhi.

10. Firm MUST provide a compliance statement vis-à-vis specifications in a "tabular form" clearly stating the compliance and giving justification, if any supported by technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the tender. The quotation should be complete in all respects. (as per IIT-Delhi rules).

The Institute/ purchase committee has the right to accept or reject any bid or all quotations without assigning any reason whatsoever. Sealed quotations in separate envelopes of Technical and Commercial bids kept in one sealed outer envelope (superscribed "Quotation for DAQ for SHPB") should be addressed to

Dr. S. Pradyumna
Room 247, Department of Applied Mechanics,
IIT-Delhi, Hauz Khas, New Delhi 110016

The quotations should reach the Department of Applied Mechanics, IIT-Delhi by 1200 hrs on March 14th, 2013.