Mechanical Engineering Department

27 June 2013

Notice Inviting Quotations

Subject: High Speed Data Acquisition System

Quotations are invited in a sealed envelope for High Speed Data Acquisition System for Split Hopkinson Pressure Bar with the following specifications:

S. No.	Description	Specification
1	PXIe based Core i5-2510E 2.5 GHz Controller, Win 7 32-bit	• 2.5 GHz dual-core Intel Core i5-2510E processor (3.1 GHz maximum in single-core, Turbo Boost mode) • Up to 1 GB/s system bandwidth and 250 MB/s slot bandwidth • 2 GB (1 x 2 GB DIMM) single-channel 1333 MHz DDR3 RAM standard, 8 GB maximum • Two Gigabit Ethernet, 6 Hi-Speed USB, Express Card/34, GPIB, serial, and other peripherals • Dual Boot capability with RTOS installed along with Windows • Windows OS and drivers duly installed; hard-drive-based recovery
2	Real Time Deployment License for PXI Controllers (ETS RTOS)	• Converts a Windows PXI system to a Real-Time target • Includes Graphical Programming Real-Time embedded software, hardware support files, and one deployment license
3	PXIe 8-slot 3U PXIe/ PXI Chassis	• 4 PXI slots, 1 PXI Express system timing slot, and 2 PXI Express hybrid slots • 354 W power available from 0 to 55 ºC • High performance - up to 1 GB/s per-slot dedicated bandwidth and more than 3 GB/s system bandwidth • Compatibility with PXI, PXI Express, Compact PCI, and Compact PCI Express peripheral modules required
4	Terminal Block for Strain Gauge Acquisition module	• Front-mounting terminal block • Screw terminal connectivity • Should be Auto-detected in software
5	PXI Simultaneous High Speed Data Acquisition module	• For applications up to 4 MS/s. • 4 high-speed analog inputs, 10 MS/s per channel, with onboard anti-aliasing filters • Deep onboard memory (32 or 64 MS) and extended input ranges to ±42 V

		• Two 12-bit analog outputs, 4 MS/s single channel, 2.5 MS/s dual channel • 8 digital I/O lines; two 24-bit counters with analog and digital triggering
6	PXI Front-mount SMB Terminal Block for High Speed Data Acquisition module	• Direct SMB connectivity • Access to 4 simultaneous-sampling analog inputs and 2 analog outputs • Additional SMB connectors for analog or digital triggering and onboard signal routing
7	PXIe 8 Ch, 24-Bit, 102.4 kS/s High-Speed Bridge Input Module	• 8 simultaneously sampled analog input channels; 102.4 kS/s/ch sampling rate • 24-bit ADC per channel; antialiasing filters • Software-selectable excitation voltage per channel (0.625 V to 10 V) • Built-in programmable quarter-, half-, and full-bridge completion and shunt calibration per channel • Multi-device triggering and synchronization via PXI Express; smart sensor (TEDS) support
8	High Speed Camera	• Resolution horizontal/vertical: 2048 pixels x 1088 pixels • Frame rate: 320-360 fps • Monochrome • Interface: Camera link with PoCL (Power on Camera Link) • Sensor Type/ Size (optical) : CMOS / 2/3 Inch • With tripod adaptor plate
9	Ultra low distortion lens	• C-Mount • Resolution: 3 Mega Pixel • Focal length: 16 mm • With adjustable locking set- screws for iris and focus control.
10	PXIe Camera Link Frame Grabber	• With Real Time LabView support • Camera Link Configuration: (Base/Medium/Full/Extended) • PoCL support • Digital I/Os: 8 (2 no. isolated input channels, 4 no. bi-directional TTL channels & 2 no. RS-422 inputs) • Operating System: Real Time, Windows • Inclusive of vision acquisition software

Terms and Conditions

1) Please quote prices C.I.F. IIT –Delhi.
2) Quotations must be valid for at least three months from the date of the NIQ and indicate the delivery schedules.

3) Taxes, terms and conditions must be clearly mentioned. IIT-D can provide the 'Excise Exemption Certificate'.
4) The supplier should be principal/manufacturer of the goods or must be an authorized dealer/distributor of the same. An authorization certificate from the principal/manufacturer is essential if the supplier is a dealer/distributor. Quotations without authorization certificate will be rejected. If the product/ items are proprietary, then a certificate must be included.
5) 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 tenderer for its authenticity and acceptance that any incomplete ambiguous information found submitted, will result in disqualification of the tender. The quotation should be complete in all respects (as per IIT-Delhi rules).
6) A special discount/rebate must be given wherever admissible keeping in view that supplies are being made for research purpose in respect of public institution of national importance, and may please be highlighted.
7) Preferred modes of payment for foreign agents are through letter of credit, or as payment on delivery. For Indian agents, typically payment is on delivery after successful installation and commissioning of the equipment through RTGS.
8) The installation, commissioning, hands on training and demonstration of the system should be done at IIT-D premises without any additional charges.
9) The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof. No correspondence regarding acceptance /rejection of quotation will be entertained.
10) Quotation should be sent in a **sealed envelope**, clearly marked with the title of the relevant goods and items and should reach the following address on or before **15.07.2013, 5 PM:**

(**Prof. Naresh Bhatnagar**)
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