

Indian Institute of Technology
Department of Mechanical Engineering
Hauz Khas, New Delhi-110016

NOTICE INVITING QUOTATIONS

Dated: 06 March 2017

Subject: Purchase of Accelerometers and associated signal conditioners and chassis

Indian Institute of Technology Delhi invites sealed tender offers in two bid format (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for **"Accelerometers and associated signal conditioners and chassis"** with one year on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document.

TECHNICAL SPECIFICATION:

| Sl. No. | Description | Quantity required |
|---------|--|-------------------|
| 1. | Accelerometers <ul style="list-style-type: none">- 3-axis MEMS accelerometer- Range $\pm 2G$- Sensor bandwidth 1000 Hz- Supply voltage 3 V- Output voltage 0 - 3 V- Size approx. 25 x 25 mm | 02 nos. |
| 2. | Accelerometers <ul style="list-style-type: none">- 3-axis MEMS accelerometer- Range $\pm 5G$- Sensor bandwidth 1000 Hz- Supply voltage 3 V- Output voltage 0 - 3 V- Size approx. 25 x 25 mm | 02 nos. |
| 3. | Accelerometers <ul style="list-style-type: none">- 3-axis MEMS accelerometer- Range $\pm 16 G$- Sensor bandwidth 1000 Hz- Supply voltage 3 V- Output voltage 0 - 3 V- Size approx. 25 x 25 mm | 02 nos. |

| | | |
|----|---|---------|
| 4. | Signal conditioner for accelerometer <ul style="list-style-type: none"> - 16-bit A/D converter - Sensor input power 3 V - Output signal: Bipolar differential, ± 2.5 V - Signal conditioning type: voltage attenuation and noise filtering - Signal bandwidth 10 kHz - Power supply ± 4 to 6 V | 04 nos. |
| 5. | Signal conditioner for load cell <ul style="list-style-type: none"> - 16-bit A/D converter - Sensor input power 5 to 15 V - Output signal: Bipolar differential, ± 2.5 V - Signal conditioning type: voltage attenuation and noise filtering - Programmable gain required - Signal bandwidth 10 kHz - Amplification: 100x (desirable: selectable 50x to 200x) - Power supply ± 4 to 6 V | 04 nos. |
| 6. | Chassis for signal conditioner <ul style="list-style-type: none"> - 16-bit, 4 channel, A/D converter - Sampling frequency selectable from 1 Hz to 5 KHz per channel. - Computer interface: Minimum USB 2.0 - Input power supply 220 – 240 V AC, 50 Hz - Input signal: (a) Type: differential, (b) Range: up to ± 3 V - Input signal overvoltage protection: ± 35 V - Acquisition mode: continuous sampling - Operating temperature range of - 40 to 85 °C and operating humidity 5-95 % RH. - Software/utility to be provided including GUI software for Windows 10/Ubuntu systems on multiple workstations simultaneously. | 02 nos. |

Terms and Conditions

Sealed quotations are to be submitted in two separate envelopes super-scribed as:

Envelope-A : Technical Quote (Specifications), and

Envelope-B : Financial Quote.

For details see ANNEXURE – I.

Both these envelopes should be enclosed in an outer envelope, which should also be sealed and addressed to, Dr. J. P. Khatait, clearly mentioning on top right corner of the envelope "**Accelerometers and associated signal conditioners and chassis**".

Every envelope (inner two nos. & outer one no.) should be addressed to *Dr. J. P. Khatait, Mechanical Core Laboratory, Block –II Room No. 156, Department of Mechanical Engineering, IIT Delhi, Hauz Khas, New Delhi-110016*. Those who want to submit quotations by hand should submit the same to: *Department of Mechanical Engineering Office, Block II, Room 261*.

The last date for receipt for quotations is **21 March 2017 (1700 hours)**.

ANNEXURE - I

Envelope A: Technical Quote: The following details are to be enclosed:

1. A compliance chart based on the specifications as per the NIQ.
2. List and addresses of organizations where similar equipment has been supplied in last 03 years in India.
3. Catalogue of the equipment.
4. Sole agency certificate on the letterhead of the principal company if quote is for imported material to be supplied through Indian Agent, or if quotation is from an Indian Agent.

Envelope B: Financial Quote: The following details are to be enclosed:

1. The validity of the quotation must be at least 3 months from last data of receipt of quotations.
2. Prices should be quoted CIF IIT Delhi.
3. The prices quoted must include charges of delivery at IIT Delhi.
4. For each item, the unit price and total price should be clearly indicated.
5. The compliance certificate should be provided.
6. Purchase procedure/rules of IIT Delhi will be strictly followed. IIT Delhi reserves the right to cancel any or all quotations without assigning any reason thereof. IIT Delhi does not encourage any advance payment and payment will be made after delivery and successful installation.
7. The supplier should be able to supply the quoted material within 15 (fifteen) days of date of purchase order.
8. If some specifications are not being met, deviations may be clearly stated. In the unlikely event that none of the vendors are able to meet all the specifications, the committee reserves the right to waive or relax any of the requirements at the technical evaluation stage.
9. The Quotation received after due date will not be considered.

Dr. J. P. Khatait
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