### Office of the Dean Research and Consultancy Indian Institute of Engineering Science & Technology (IIEST), Shibpur Howrah-711 103

#### DRC/DST-WB (HE STB)/CE/AG/020/18-19

#### Department of Civil Engineering Indian Institute of Engineering Science and Technology, Shibpur (Formerly Bengal Engineering and Science University, Shibpur)

# Ref.: Tender Advt. No. CE1553, published in the "Statesman (All Edition)", dated 09.11.2019

### Notice Inviting Quotations

Sealed tenders are invited by the Civil Engineering Department, Indian Institute of Engineering Science and Technology, Shibpur, Howrah-711103 for the supply of the following item for Geotechnical Engineering Laboratory under **DRC/DST-WB (HE STB)/CE/AG/020/18-19** of Prof. Ambarish Ghosh.

Tender Documents containing details of the items and terms and conditions may be downloaded from the institute website and completed bidding documents are to be submitted to the Head, Department of Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur; Howrah-711103 or dropped into the Tender Box kept in the Department within 07 working days from the date of publication in the newspaper. (upto 4:00 pm).

The intended vendors/manufacturers are requested to submit technical and financial bid in separate sealed envelopes within stipulated time.

# The procurement is for the purpose of research activity only vide Circular No. 170F/2017-18/194 dated 09.02.2018 of IIEST, Shibpur

For any clarification you can contact to Prof. Ambarish Ghosh (9831286527).

Enclosures Section-I: General conditions and Important Instructions for Bidders. Section-II: Specification of the Items.

Name of Product:

- 1. 4 Channel vibration analyzers cum USB data logger
- 2. Vibration transducer / transmitter with Compatible Vibration analyzers

Dean (R & C)

## Department of Civil Engineering Indian Institute of Engineering Science and Technology, Shibpur (Formerly Bengal Engineering and Science University, Shibpur)

## Section I:General Conditions and Important Instructions for Bidders

- 1. Interested parties/vendors are requested to download the tender documents with detailed specifications from the institute website (<u>www.iiests.ac.in</u>)
- 2. It is necessary to submit the original tender documents along with technical/price bids in separate sealed envelopes to the Head, Department of Civil Engineering, Indian Institute of Engineering Science and Technology (IIEST), Shibpur; Howrah-711103
- 3. Bidders are to abide by the terms and condition and submit this tender document in original duly signed with acceptance of the terms and conditions.
- 4. Last date of receipt of tender is **07 working days from the date of publication in the newspaper. (upto 4:00 pm).** Tenders received at late will not be accepted under any circumstances. Tenders will be opened in the Seminar Hall or in any other place of the Civil Engineering Department, on the same day at 4:15 pm. In case the Institute remains closed on the said date, tenders will be received and opened on next working day at same time.
- 5. The Price Bid should clearly mention the price including the following: Transport cost, Toll Tax, Parking, All taxes (especially GST), duties, and levies applicable.
- 6. DGS & D rate contract price will be preferred wherever applicable.
- 7. The equipment is to be supplied at the Department of Civil Engineering, Indian Institute of Engineering Science and Technology between 11.00 am and 4.00 pm from Monday to Friday except holidays. The bidders will be responsible for any breakage, damage or defect in the equipment detected subsequently.
- 8. Period of delivery of equipment should be within one month from the date of issue of Purchase Order.
- 9. Bills in triplicate should be presented for payment within 7 days of supply of the equipment. No advance is paid for execution of the order. The Purchase Order No. is to be noted on both Challan and Bill. All bills are to be accompanied by order copies and Challan receipt.
- 10. Payment will be made on submission of Proper Bills, Challans etc, by A/C Payee Cheque and no cashpayment will be made under any circumstances.
- 11. All payments are subjected to statutory deductions as and when applicable.
- 12. Tender is to be kept valid for acceptance for 3 months with effect from the last date of issue of the tender without any modifications in its terms and conditions.
- 13. Documents mandatory to be submitted with the tender:
  - Tender Documents, General Conditions and Important Instruction in original duly signed by the Proprietor/ Partner/ Director of the company as a token of acceptance of Terms and Conditions of Tender.
  - Latest Income Tax, GST, Professional Tax clearance certificates and copy of valid Trade License
  - Bid according to specifications.
  - Certificates and Literature in support of the item.
- 14. Demonstration are required at a time of delivery of the product.

### I/We accept the above terms and conditions.

Signature of vendor with Date &Seal

## Section – II Specification of the Items

| No of Channel         | 4 Channel  |
|-----------------------|--|
| Real-time Sampling    | 1G Sample/s  |
| Rate                  |  |
| Memory Depth          | 64K  |
| Time Base Precision   | ±50ppm   |
| Time Base Range       | 2ns/div-1000s/div (1-2-4 sequences)  |
| Input Impedance       | 1MΩ 25pF   |
| Input Sensitivity     | $2mV/div \sim 10V/div$   |
| Vertical Resolution   | 8Bit   |
| Vertical Displacement | $2mV \sim 10V/div @ x1 probe; 20mV \sim 100V/div @ x10 probe ;$            |
| Range                 | 200mV ~ 1000V/div @ x100 probe; 2V ~ 10000V/div @ x1000 probe              |
| DC Gain Accuracy      | $\pm 3\%$  |
| Bandwidth Limit       | 20MHz  |
| Trigger Mode          | Edge, Pulse, Video, Alternative  |
| Trigger Source        | CH1, CH2, CH3, CH4   |
| Waveform Signal       | +, -, x, ÷, FFT, Invert  |
| Process               |  |
| Cursors Measurement   | Horizontal, Vertical   |
| Auto Measurement      | Vpp, Vmax, Vavg, Vrms, Preshoot, Overshoot, Frequency, Period, Rise Time,  |
|                       | Fall Time, Positive Width, Negative Width, Duty Cycle                      |
| Accessory             | 4 probes, Microsoft Window based logging software, USB cable for PC/Laptop |
|                       | based logging (pc or Laptop at user scope)                                 |

1. 4 Channel Vibration Analysers Cum USB Data Logger

2. Specification for Vibration Transducer\*\*\*\* / Transmitter (50 mm/Sec Velocity Max)

| Output Current         | 4-20 mA DC                                     |
|------------------------|--|
| Supply Voltage Range   | 12 – 32 V DC                                   |
| Frequency Response     | 2 Hz to 1 kHz                                  |
| Mounted Base Resonance | 5 KHZ (nominal)                                |
| Isolation              | Electronics in Faraday cage isolated from body |
| Dynamic Range          | 50g Peak                                       |
| Traverse Sensitivity   | Less than 5 %                                  |
| Case Material          | stainless steel                                |
| Mounting Torque        | 8Nm  |
| Sealing                | Ip 67  |

\*\*\*\*\*Vibration transducer needs to be certified by NABL accredited calibration lab.