

भू-प्रौद्योगिकी प्रयोगशाला  
जानपद अभियान्त्रिकी विभाग  
भारतीय प्रौद्योगिकी संस्थान  
कानपुर-208 016 (उ.प्र.)



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**No. CE/GTE/NRP/2018/4**  
**Dated: 19/06/ 2018**

Subject: Enquiry for the purchase of Soil pressure cells.

Dear Sirs,

We intend purchasing of soil pressure cells for our Geotechnical Engineering laboratory. Kindly arrange to submit your lowest offer with complete technical details of the same so as to reach to the undersigned latest by 11 July 2018. **(Extended up to 01/08/2018)**

**EARTH PRESSURE CELLS WITH FOUR CHANNEL DATA LOGGER FACILITY:**

Design to measure total pressure in earth fill up to 20 kPa, 60 kPa, 120 kPa and 160 kPa be placed at a depth of 1 m , 3.0 m , 6 m and 8.0 m respectively below ground surface.

**Technical specifications**

Transducer type	Vibrating wire type
Characteristic	Static measurement
Output:	2000-3000 Hz
Over Range	1.5 x rated pressure
Resolution	±0.025% FS
Accuracy	± 0.1% FS
Linearity	< 0.5% FS
Excitation voltage	2.5-12 V swept square wave
Excitation Frequency	1400-3500 Hz
Material	Stainless steel
Transducer dimension (approx)	<b>150mm (dia) X 25mm(Height)</b>
Temperature range	-20 °C to 80 °C
Cables	16 meter or as per site requirement (shielded cable)

*Nihar Ch. Patra*

The four-channel based data acquisition system is suitable for acquiring data from 4 independent sensors consisting 4 soil pressure cells. All these channels are being measured directly in their respective engineering units. The system receives the output signals of the all channels as its input and amplifies the same to be displayed on the touch panel display at the front panel. The data of all channels can be transferred to computer through Ethernet/RS-232 and can also be online monitored in the software.

The electronic unit will be operated on 220VAC, 50Hz.

Broadly the following facilities will be incorporated in the system:-

- ❖ 4 independent channels for soil pressure cells.
- ❖ Programming keys are provided on the front panel to perform various operations such as TARE, PROGRAMMING, START, STOP etc.
- ❖ Print interval / data transfer interval is programmable (between 1 second to 1 hour)
- ❖ Automatic data saving on stop button.
- ❖ Online date and time of test will be stored along with the data.
- ❖ On line (while the test is in progress) data transfer to the computer through Ethernet/ RS-232 which will be stored in the computer with a particular file name.


Please send your offer for the above mentioning the following:

1. Cost of the software/Hardware including 1 year warranty with all calibration charts and complete installation, demonstration at IIT Kanpur.
2. Validity of the quotation should be at least 90 days.
3. Technical specifications in detail with operating manuals.
4. Delivery time.
5. Educational discount applicable.
6. Payment terms.
7. Proprietary Certificate, if applicable.
8. Any other relevant details.

Kindly arrange to send the quotation(s) with detailed specifications of the item in a sealed envelope to the given address, cited above, so as to reach us on or before the **closing date 11 July 2018(Extended up to 01/08/2018)**. The undersigned reserves the right to accept the offer in part or full or reject without assigning any reason.

Thanking you

Sincerely,

  
(N.R Patra)