

NATIONAL INSTITUTE OF TECHNOLOGY
KURUKSHETRA-136119

No. EED/2019/6222 / 1362

Dated: 13/02/19

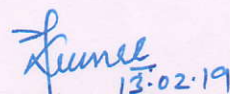
M/s Institute website

Sub: INVITATION OF QUOTATIONS FOR THREE PHASE POWER QUALITY ANALYZER.

1. You are invited to submit your most competitive quotation for the following goods:

Sr. No.	Brief Description & Specifications of Goods	Quantity	Delivery period
1.	Three phase Power Quality Analyzer	04 Nos.	02 weeks or up to 15.03.2019 whichever is earlier

- Necessary literature of the goods may please be sent to facilitate to take decision.
- Payment will be made Online through RTGS/NEFT within 30 days after receipt of material in good condition and according to specifications and installation of the same. The Bank detail for making online payment may be indicated in the quotation.
- The supplier shall deposit Earnest Money along with the Quotation amounting to Rs. 35000 /- in shape of Accounts Payee Demand Draft/Fixed Deposit Receipt/Bankers Cheque or Bank Guarantee from any scheduled commercial Bank in favour of the Director, National Institute of Technology, Kurukshetra. The Quotations without Earnest Money shall be rejected, the EMD will remain valid for a period of 45 days beyond the final validity period of quotation.
- Performance Security @ 5% of the total value of the equipment must be furnished in shape of Demand Draft/Fixed Deposit Receipt or Bank Guarantee from any scheduled Commercial Bank in favour of the Director, NIT Kurukshetra valid up to 60 days after the date of completion of warranty by the successful bidder.
- The items must be supplied within delivery period or delivery period extended by the Institute on the request of the supplier on genuine grounds otherwise the penalty for delayed period @ 0.5% of the amount shall be charged for every week or part thereof and the maximum 10%. The request for extension of delivery period (if any) must be made before the last date of supply as per P.O.
- Vide Notification No.45/2017-Union Territory Tax (Rate) and 47/2017- Integrated Tax Rate dated 14.11.2017 issued by the GoI Ministry of Finance, Department of Revenue towards exemption of GST, NIT Kurukshetra is eligible to get concessional GST (i.e. 5% in all cases) for the items which are supposed to be used in research activities of the Institute.
- The quotation should remain valid for a period not less than 90 days from the date of submission.
- The firm must have got GST No. printed on their quotation
- The right of accepting or rejecting any quotation and to cancel the bidding process and reject all quotations without assigning any reason is reserved with the Institute.
- The supplier must attach copies of two latest purchase orders (preferably from IITs/NITs) indicating the price for the equipment.
- The due date for receipt of quotation is 26.02.2019 and will be opened on next working day at 10:00 AM. Please quote on the top of the envelope our Ref. No. and due date of opening.


13.02.19
Prof-Incharge (Stores)

Technical Specification for Three Phase Power Quality Analyzer

S/N.	Parameters	Specifications
1.	Measurement Line types	Single –Phase 2-Wire, Single Phase 3-wire, Three –Phase 3- wire or Three –phase 4-wire plus one extra input channel.
2.	Voltage ranges	Voltage measurement : 1000.0V rms or DC, Transient measurement 2.200kV peak
3.	Current ranges	50.000mA AC to 5.0000kA AC, 10.000A DC to 2.0000kA DC (depends on current sensor in use)
4.	Power ranges	50.000W to 6.0000MW (determined automatically based on current range in use)
5.	Basic accuracy	Voltage: $\pm 0.2\%$ of nominal voltage, current: $\pm 0.1\%$ rdg $\pm 0.1\%$ fs + current sensor accuracy, Active power: DC $\pm 0.5\%$ rdg. $\pm 0.5\%$ f.s + current sensor accuracy, AC $\pm 0.2\%$ rdg. $\pm 0.1\%$ + current sensor accuracy
6.	Measurement items	<ol style="list-style-type: none"> 1. Transient over voltage: 200 KHz sampling 2. Frequency cycle: Calculated as one cycle 3. Voltage(1/2)RMS, Current(1/2)RMS: one cycle calculation refreshed every half cycle 4. Voltage swell, Voltage dips, Voltage interruption, RVC: voltage(1/2) RMS calculation 5. Inrush Current: half-cycle calculation: Calculated as the current RMS value for current waveform data sampled every half-cycle 6. Frequency 200 ms: Calculated as the 10 or 12 cycles 7. 10-sec frequency: Calculated as the whole-cycle time during the specified 10 s period 8. Voltage waveform peak, Current waveform peak 9. Voltage, Current, Active power, Reactive power, Active energy, Apparent energy, Reactive energy, Energy cost, Power factor, Displacement power factor, Voltage unbalance factor, Current unbalance factor 10. Voltage crest factor, Current crest factor 11. Harmonic/Harmonic phase angle(voltage/current), Harmonic power: 0th to 50th orders 12. Harmonic voltage-current phase angle: 1th to 50th orders 13. Total harmonic distortion factor(voltage/current) 14. Inter harmonic distortion factor(voltage/current): 0.5th to 49.5th orders 15. K Factor (multiplication factor) 16. IEC Flicker, ΔV_{10} Flicker
7.	Record	Maximum recording interval : 1 Year, Maximum Number of recordable events : 9999x365 days
8.	Interfaces	SD/SDHC card, RS-232C LAN (HTTP server function), USB 2.0 (for communication)
9.	Display	6.5-inch TFT color LCD (640X480 dots)
10.	Power Supply	AC Adapter (100V to 240V AC, 50/60 Hz, rated current 1.7A), Battery pack.
11.	Accessories	Instruction manualx1, Measurement guidex1, voltage cord x1 Set (Red/Yellow/Blue/Gray/Black, Alligator clipx5, Spiral tubex5), Color clip (for identifying clamp sensor colorx1 set, Spiral tubex5, AC Adapterx1, Strapx1, USB Cable x1, Battery pack X1, Software CD x1, AC Current Sensor 600A AC
12.	Warranty	1 Year