

## Tender Ref. No.IITK/PHY/2022-23/SoM/16

Date: 20<sup>th</sup> December 2022

Bid Opening Date : 02/01/2023 Bid Submission Closing Date : 30/12/2022

Sealed quotations (technical and financial separately) from prospective vendors are invited by the Department of Physics, IIT Kanpur for "Nanovoltmeter" with the following technical specification. All the quotations and tender related documents should be sent by speed post/Courier to inviting officer's address (mentioned below).

We are looking for Nanovoltmeter (Quantity:01)

	1	1
01	No. of channel	2
02	Voltage Range and resolution at channel 1	$10mV$ to $100V$ and $1nV$ to $10\mu V$
03	Voltage Range and resolution at Channel 2	$100mV$ to $10V$ and $10nV$ to $1\mu V$
04	Accuracy	+/-0.002%.
05	Display resolution	7.5 Digit
06	Input resistance	>10GΩ
07	DC Input Bias Current.	<60 pA (-10 to5V); <120 pA ( 5 to10V) DC
08	Noise @1sec response	25 nV Pk-Pk. (10mV Range)
09	Noise	15nV p-p at 1s response time 40-50nV p-p at 60ms
10	Noise @100 Ohms Source Resistance.	8 nV Pk-Pk
11	Program Memory	1024 Readings.
12	Temperature Measurement.	Using Thermocouples type: J;K;N;T;E;R;S;B.
13	Temperature Range	-200 Deg.C upto +1800 Deg.C.
14	Input protection.	150V Pk-Pk.
15	Analog Output	+/-1.2V max.; 1KOhms; with adjustable gain.
16	Hardware Architecture.	Should provide for Math functions (Rel; Min- Max; Ave; Std.Dev; Pk-Pk; limitTest; mX+b) IEEE-488.2 & RS232 Interface;

## **TECHNICAL SPECIFICATION FOR Nanovoltmeter**

		External Trigger Delay.
17	Input protection	150V peak to any terminal. 70V peak Channel 1 LO to Channel 2 LO.
18	Common Mode Current :	<50nAmp p-p at 50Hz
19	A/D Linearity:	$\pm$ (0.8ppm of reading + 0.5ppm of range).
20	Warranty	1 Year
21	POWER REQUIREMENT	230V AC, +/- 10%; 50Hz

## Minimum Eligibility Criteria:

- 1) Bidder should submit printed technical literature / brochure of the offered model, which should be fully complied with the specification as mentioned above otherwise the bid will be disqualified.
- 2) The OEM should successfully installed and commissioned similar or higher rating Systems to any Govt. / Defence / Research Institutions. Copy of PO / Installation report / Performance certificates should be submitted towards evidence.
- 3) The OEM should have minimum 10 years of experience in manufacturing.

## General Terms & Condition.

- 1. All vendors are requested to submit "technical and financial bids" together in separately sealed envelopes.
- 2. Evaluation will be done on the basis of technical specifications given in tender document.
- 3. Financial bid will be open for those only who qualify all the technical specification as per our tender notice.
- 4. Quotation must be valid for 60 days.
- 5. Payments terms: 100% after delivery & successfully installation.
- 6. Warranty should be clearly mentioned, the Warranty must start from the date of installation at IITK.
- 7. Only OEM or its authorized agents should quote, Quotation should carry proper certifications like proprietary certificate/ authorization certificate from manufacturer, etc.
- 8. Vendor must be able to perform factory acceptance testing of the product and demonstrate all the features prior to the dispatch.
- 9. The technical and price bid should indicate the model and part numbers of items quoted.
- 10. Bidders must submit minimum 5 satisfactory certificates from previous users.
- 11. Delivery time 6-8 week from the date of receipt of purchase order.

- 12. As per the new GST rule, Institute is not able to provide GST exemption certificate. GST has to be levied as per the applicable rate.
- 13. At any time prior to the deadline for submission of bid, the institute may, for any reason, at its own initiative, modify the bid document by amendments. Such amendments shall be uploaded on the website through corrigendum and shall form an integral part of bid document. The relevant clauses of the bid document shall be treated as amended accordingly. It shall be the sole responsibility of the prospective bidders to check the website from time to time for any amendment in the tender document. In case of failure to get the amendments, if any, the Institute shall not be responsible for it.
- 14. The Penalty @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment, if supply is not completed within aforesaid delivery period.
- 15. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved.

Approved by

**Dr. Soumik Mukhopadhayay (PI/Indenter)** Associate Professor Department of Physics IIT Kanpur, Kanpur – 208016

**Inviting Officer** 

Biswarath Samantarcary

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