

OPEN DOMESTIC TENDER NOTICE

Oscilloscope with Passive and High Voltage Probes



**ELECTRICAL ENGINEERING DEPARTMENT
INDIAN INSTITUTE OF SCIENCE, BANGALORE**

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SECTION 1: BID SCHEDULE

Request for quote (RFQ) from domestic (India-based) manufacturers, Indian OEM or its authorized Indian distributor

Summary

1.	Tender Date	6 th June 2024
2.	Item Description	Oscilloscope with Passive and High Voltage Probes
3.	Tender Type	Two bid system: (a) Technical Bid (Part A) (b) Commercial Bid (Part B)
4.	Place of tender submission	Dr. Sarasij Das Associate Professor Department of Electrical Engineering, Indian Institute of Science Bengaluru - 560012
5.	Last Date & Time for submission of tender	4 th July 2024, 5:00 PM

SECTION 2: ELIGIBILITY CRITERIA

This is a **Request for quote (RFQ) from domestic (India-based) manufacturers, Indian OEM or its authorized Indian distributor only** for procurement of **200MHz 6 channel Oscilloscope with Passive and High Voltage Probes** at the department of **Electrical Engineering (EE)**, Indian Institute of Science, Bangalore. The required quantities are mentioned below.

Item	Quantity
200 MHz 6 channel Oscilloscope	1
High Voltage Probes	3
Passive Probes	6

All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed. As per this order, the government has defined a ‘Class-I local supplier’ as “a supplier or service provider whose goods, services or work offered for procurement, have local content equal to or more than 50%”. A ‘Class-II local supplier’ is “a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%”. **Only Class-I and Class-II local suppliers are eligible to participate** in this open domestic tender. Any “Non-local supplier” i.e. “a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%” is ineligible to participate in this tender.

The deadline for submission of proposals is **4th July 2024 by 5:00 PM**. Proposals should arrive at the office of **Dr. Sarasij Das, Associate Professor, Department of Electrical Engineering, Indian Institute of Science, Bangalore, Karnataka 560012, India**.

Direct all questions concerning the acquisition to addresses to **Dr. Sarasij Das** at: sarasij@iisc.ac.in

SECTION 3: TERMS AND CONDITIONS

A) Submission of Tender

1. The bid should be submitted in the two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, except the price.
2. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If "no" the second column should state the extent of deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
3. In the commercial bid, the price should be inclusive of all discounts.
4. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
5. The covering letter should clearly state that whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.
6. The vendor to state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.
7. Please quote the price of each optional line item, separately. **The quotations should be on FOR-IISc Bangalore basis in INR only.**

B) Delivery

1. The lead time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.

C) Validity of the Offer

1. All the quotations must be valid for at least 90 days at the time of submission.

D) Customers and References

1. List of customers and references: The Bidder should have supplied similar equipment in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT) Please provide the details and contact information.

E) Dispute and Jurisdiction

1. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.

F) Warranty and Annual Maintenance Contract

1. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.
2. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.

G) Purchase Order

1. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.

2. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
3. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to the Class-1 supplier.
4. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

H) General

1. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
2. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.
3. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitor.

SECTION 4: TECHICAL BID

Technical requirements: Vendors are expected to meet the criteria listed.

Technical Specification:

Specifications of 200 MHz 6 channel Oscilloscope with Probes

Sr. No.	Parameter	Specifications
1	Number of Channels	6 Analog Channels
2	Bandwidth	200 MHz on all Channels
3	Sample Rate	Up to 6.25 GSa/s on all Channels simultaneously or higher
4	Rise time	≤2.5 ns or better
5	Record Length	≥ 31 MSample Points on all channels or better
6	Vertical Resolution	12 Bits, 16 Bits with High Resolution Mode or better
7	Input Coupling & Impedance	DC (50 Ω), 50Ω, 1 MΩ
8	DC Gain Accuracy (for scale > 2mV/div)	≤ ± 1 % of full scale
9	Time base range	20 ps/div to 1000 s/div
10	Waveform Capture Rate	500,000 wfm/sec in Real Time capture mode
11	Trigger types	Auto, Single, Edge, pulse width, Runt, Sequence, Parallel bus, Window on all Channels simultaneously Auxiliary trigger input should be available
12	Vertical sensitivity	1 MΩ: 500 μV/div to 10 V/div in a 1-2-5 sequence 50 Ω: 500 μV /div to 1 V/div in a 1-2-5 sequence
13	Acquisition mode	Sample, Peak Detect, High Resolution, Faster Acquisition, Envelope, Averaging
14	Spectrum Analysis	It should have DDC based Spectrum Analysis on all channels simultaneously with time domain analysis with independent centre frequency settings.
15	DDC Span	20Hz to 300 MHz
16	Measurements	Amplitude, Maximum, Minimum, Peak-to-Peak, Positive Overshoot, Negative Overshoot, Mean, RMS, AC RMS, Top, Base, Area, Period, Frequency, Unit Interval, Data Rate, Positive Pulse Width, Negative Pulse Width, Skew, Delay, Rise Time, Fall Time, Phase, Rising Slew Rate, Falling Slew Rate, Burst Width, Positive Duty Cycle, Negative Duty Cycle, Time Outside Level, Setup Time, Hold Time, Duration N-Periods, High Time, Low Time, Time to Minimum, and Time to Maximum With at least 32 simultaneous measurements
17	Measurement Analysis	Histogram, Time trend, Spectrum Plots
18	Search & Mark	It should be available and be able to find min & max for debug.
19	Result Table	Search Result table & Measurement Result Table
20	Report Generation	It should be available
21	Trigger Frequency Counter	With 8 Digit resolution or better

22	Digital Voltmeter	4 Digit Resolution or better
23	Display	13.3" Full HD 1920x1080 Touch Screen
24	Temperature Range	Operating: +0 °C to +50 °C
25	Passive Probes	6 quantities of compatible Passive probes having a bandwidth of 200MHz or higher, with better than 4pF capacitive loading
26	High Voltage Probes	3 quantities High Voltage probe: Differential and common mode voltage range: ± 1500 V Bandwidth: 200 MHz Rise time: < 2 ns Input impedance: 10 M Ω , <2 pF
27	AC Input	230 V, 50 Hz
28	Warranty	3 Years Warranty

Dr. Sarasij Das

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