

Dated: 2nd May 2024

To whom it may concern

GTE Reference No.: IISc-GTE-2024-343

Quotations are invited for the procurement of 4-channel super conducting single photon detector (SNSPD) as part of a global tender at the department of Electrical Communication Engineering (ECE), Indian Institute of Science (IISc), Bangalore along with following technical specifications on C.I.P. Bangalore basis (by Air Freight only). The quotation must mention the terms of delivery, delivery schedule, estimated delivery date, and payment terms.

The bid should be addressed to: The Chair, ECE department, Indian Institute of Science, Bangalore 560012, India.

Direct all questions concerning the acquisition to Dr. Varun Raghunathan at: varunr@iisc.ac.in . The deadline for submission of proposals is **23rd May 2024 by 5:00 PM**. Proposals should arrive at the office of **Dr. Varun Raghunathan, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, Karnataka 560012, India.**

Direct all questions concerning the acquisition to **Dr. Varun Raghunathan** at: **varunr@iisc.ac.in** .

General Terms and Conditions:

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 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.
6. All the quotations must be valid for at least 90 days at the time of submission.
7. 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.
8. 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.

9. 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.
10. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
11. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
12. 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.
13. 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.
14. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
15. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
16. Please quote the price of each optional line item, separately.

Technical requirements:

Please note that the requirements and options listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason for disqualification. They will be discussed by the technical committee prior to making an informed decision.

Technical Specifications	Values/ Range
Description	Super conducting single photon detector (SNSPD)
No. of channels	Four
Center wavelength	1550 nm
Wavelength bandwidth	≥ 100 nm
System detection efficiency	≥ 90% across the wavelength range (efficiency spectrum to be provided)
Dead time	≤ 15 nano-second
Timing jitter	≤ 15 pico-second (measurements to be provided)
Dark counts	< 100 Hz (dark counts spectrum to be provided)
Maximum count rate	≥ 65 MHz
Output pulse voltage	≥ 200 mV
Output pulse width	≥ 5 nano-second
Output type	TTL/ LVTTTL or similar
Fiber or Free-space coupling	Fiber-coupled
Type of fibers	Single mode fibers, FC/APC connector
Electrical Connector	To be specified
Electrical Cables	To be included
Cryostat type	Closed-cycle cryostat system
Detector base temperature	< 1 K
Temperature stability	< 10 mK

Runtime at base temperature	> 24 hours
Cryostat dimensions	To be specified
Vacuum pump	To be included
Compressor pump	To be included, as required
External cables and tubing for pump	To be included
Electrical power requirement	Voltage and power rating to be specified
Installation and Training	On-site training to be included
Compatible requirement with Time-correlated single photon counter (TCSPC)	To be compatible with ID900 TCSPC
Rack Cabinet Housing solution	To be included as option

Other requirements:

1.	Detailed test report supporting the above required specifications to be included with the equipment at the time of delivery
2.	Expected performance data sheets to be included with the technical bid
3.	Compatible operating system(s) for the interface software should be specified. Suitable software drivers available should be specified and made available
4.	Please include other options currently available which can be added
5.	Cost of shipping to Indian Institute of Science, Bangalore should be included
6.	Warranty terms to be specified in the commercial proposal and is subject to negotiations
7.	Payment terms to be specified in the commercial proposal and is subject to negotiations
8.	List of acceptance tests for on-site (vendor) inspection and after installation at IISc
9.	A set of basic experiments for performing routine checks of acceptable operation with clear instructions to be provided
10.	Please provide details of the number of trained personnel in India, number in southern region or in Bangalore who can service the instrument
11.	Service credentials: The supplier should have at least five similar installation in India. Customer list with contact details mandatory to prove your credential
12.	Authorisation letter from OEM manufacturer to be included
13.	Vendor must provide complete compliance statement against each technical point

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