

Request of quotation (for Domestic suppliers) for the procurement of low noise amplifier and isolators in 4-8 GHz frequency range

Last Date for submission of quotation: Nov 15th, 2023, 5 pm

Reference No: PH/VBSI/575/2023-24 dated Oct, 25th

A request for quotation from domestic (India-based) manufacturers of low noise amplifiers for applications in the measurements of superconducting qubit devices. Quotation should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. The quotation should clearly indicate the terms of delivery, delivery schedule, transportation charges (if any). The quotations should be on FOR-IISc Bangalore basis in INR only.

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 of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020, will be followed. Per this order, the government has defined a ‘Class-I local supplier’ as “a supplier or service provider, whose goods, services or works offered for procurement, has 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.

1. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their “local content” as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
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.

Technical specifications:

Item-1		Low noise Cryogenic amplifiers	
		Quantity	6
	1	Frequency range	4 – 8 GHz
	2	Gain	40 dB nominal
	3	Noise Temperature (Figure)	1.5 K (0.022)
	4	Input Impedance	50 Ohm
	5	Output Impedance	50 Ohm
	6	Ripples in the gain	< 3.5 dB
	7	Connectors	SMA

	8	Physical Dimensions of the packaging	Approx. 60mm X 30mm X 10mm
	9	Operating temperature	4K
	10	Include necessary bias connectors and power supply for the amplifier and a common distribution unit for the bias controller of the amplifiers	
Item-2	Low noise RT amplifiers		
		Quantity	6
	1	Frequency range	4-8 GHz or more
	2	Gain	40 dB
	3	Noise Temperature (Figure)	57 K (0.78)
	4	Input Impedance	50 Ohm
	5	Output Impedance	50 Ohm
	6	Ripples in the gain	< 3.5 dB
	7	Connectors	SMA
	8	Physical Dimensions of the packaging	Approx. 60mm X 30mm X 10mm
Item-3	Cryogenic Isolators		
		Quantity	6
	1	Frequency range	4-8 GHz
	2	Insertion loss	0.4 dB
	3	Isolation	60 dB
	4	Number of junctions	3
	5	Input Impedance	50 Ohm
	6	Output Impedance	50 Ohm
	7	Connectors	SMA
	8	Operating temperature	4K
Item-4	Magnetic shielding for cryogenic Isolators		
		Quantity	6
		Operating temperature	4K
		Physical dimensions should be compatible with item-3	

Warranty: Comprehensive warranty and support for at least 1 year.

DELIVERY TIME: Maximum 2 months from the date of Order Acknowledgment (OA). The vendor must provide the OA within 3 weeks after receiving the purchase order. The delivery time should be mentioned in the technical and commercial bids.

General terms and conditions:

- Payment terms should be mentioned in the technical bid.
- In the commercial bid, the price should be inclusive of all discounts.
- A pre-tender meeting for any technical clarifications can be scheduled by sending an email to "vrekha@iisc.ac.in".

- The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time before the award of contract without thereby incurring any liability of the affected bidder or bidders.
- The bids can be addressed to "The Chairperson, Dept. of Physics, Indian Institute of Science Bangalore-560012"