



# Indian Institute of Science Bangalore

Prof. Mayank Shrivastava  
Associate Professor  
Department of Electronic Systems Engineering  
Indian Institute of Science Bangalore  
560012, Bangalore, Karnataka, India

**Inquiry Number:** DESE/LU/MSA/3/2024-25

**Dated:** 02/04/2024

**Domestic Tender: Request for Quote from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor for the procurement of Helium Leak Detector.**

**Indian Institute of Science, Bangalore  
(Last Date: 23/04/2024)**

Dear Sir/Madam,

Kindly send your best price quotation (in INR only) for the following item with various accessories on FOR-IISc Bangalore basis to the undersigned. Your quotation should clearly indicate the terms of delivery, delivery schedule, entry tax, payment terms, etc. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.

Your quote should also include mode of payment and **should reach the undersigned, duly signed on or before 10.00 hours (IST) on 23/04/2024.**

The quote must include all details of technical specifications of the equipment along with the commercial terms and conditions, the bill of materials, printed technical brochure and any other supporting document. **Please enclose a compliance certificate, printed on your letter head, along with the quote.**

The commercial bid must include the price of the item in Indian currency, indicating the following separately:

- FOR price
- Insurance
- Post warranty maintenance charges
- Tax
- Total

**The quotation should address to:**

The Chairman,  
Department of Electronic Systems Engineering  
Indian Institute of Science, Bangalore – 560012

**I. Technical Specifications of Different Parts of Helium Leak Detector**

We need a Helium Leak Detector that can be integrated with dilution refrigerator. The general specification of the system is as below:

**System Specifications:**

Detectable gases	$^4\text{He}$ , $^3\text{He}$ , $\text{H}_2$
Dimensions	(L x W x H) 547 x 394 x 389 mm   21.54 x 15.51 x 15.31 inch

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I/O interfaces	RS-232
Input voltage(s)	90 – 240 V AC, 50/60 Hz
Interface: Connection, device	Standard 15 pins I/O side
Minimum detectable leakage rate for helium (sniffing leak detection)	$5 \cdot 10^{-10}$ Pa m <sup>3</sup> /s   $3.75 \cdot 10^{-9}$ Torr l/s   $5 \cdot 10^{-9}$ mbar l/s
Minimum detectable leakage rate for helium (vacuum leak detection)	$1 \cdot 10^{-13}$ Pa m <sup>3</sup> /s
Operating temperature (sniffing test)	0-40 °C   32-104 °F   273-313 K
Operating temperature (vacuum test)	0-40 °C   32-104 °F   273-313 K
Power consumption max.	350 W
Protection degree	IP20
Pumping speed for He	2.5 l/s
Sound pressure level	54 dB(A)
Start-up time (20°C) without calibration	3 min
Test method	Vacuum and sniffing leak detection
Weight	32 kg   70.55 lb

## Other Necessities

- Should include a written guide (tutorial) as well as a demonstration of how to integrate numerous components of the chiller.
- All other connectors, wirings, Cables and other necessary items must be included.
- All the electrical adapters and other accessories related to the equipment must be included.
- The setup should include all the hardware and software modules that are necessary for the system setup.
- Packing and Installation cost should be included.

## II. Optional Items

- Please provide a separate letter indicating annual maintenance charges (AMC) post warrantee / guarantee period.

## III. Additional Items (Must be added to compliance certificate as well):

1. **Support:** Please provide details of support provided within the warrantee period
2. **Shipping:** The quote must be in FOR-IISc Bangalore.
3. **Installation:** Please list a set of acceptance tests for on-site (vendor) inspection and after installation at IISc Bangalore.
4. **Other Options:** Necessary spare parts should be quoted as an option.

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5. Please include any other options currently available that can be added on in the future.
6. **Training:** Please state if training is required to operate this instrument, and if yes, please highlight the extent of training provided as part of this purchase and for how many days.

**All of the above mentioned technical specifications are highly desired. However, lower technical specifications may be considered if the above mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into consideration its technical preferences and financial constraints. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.**

## **Terms and conditions (should be included in compliance certificate):**

1. Necessary training to operate the procured setup and required literature support should be provided without additional cost.
2. In principle onsite installation should be free of cost. The amount of time / day committed by the engineer during installation must be clearly stated.
3. Software upgrade, if any, must be free of cost for next 5 years.
4. The vendor must assure that there are no bugs and glitches with the integration. In case of glitches or bugs at the time of installation, vendor must fix the issues in less than three days from the start date.
5. In case of hardware/software issues or support, vendor should be able to provide required solution within three days.
6. All equipment must be well calibrated before and after installation.
7. Additional quote for an annual maintenance contract should be included for the next 5 years.
8. The vendor should have a good track record of delivering such equipment at universities/research institutions (please furnish the details).
9. Please provide list of customers who have procured your equipment in last 5 years.
10. The vendor should be able to repair and maintain the equipment, once it is installed in India. No travel claims must be made by vendor for servicing during the warranty/guarantee period.
11. The lead time for the delivery of the equipment should not be more than 2 month from the date of receipt of our letter of intent. The smallest lead time will be appreciated. Our expectation is shipment immediately after PO and full or part payment post installation.
12. On all systems the payment terms will be specified in the commercial proposal and is subject to negotiation.
13. The validity period of the quotation should be 90 days at least.
14. Please provide details of the number of trained personnel in India, who can service the machine.
15. Highlight the system/computer requirement to integrate the setup, if any other than specified in the specifications above.

## **IISc Terms and conditions:**

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.

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4. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

Sincerely,

Prof. Mayank Shrivastava  
Associate Professor  
Department of Electronic System Engineering  
Indian Institute of Science  
Bangalore, Karnataka 560012, India  
Secretary (Ms. Rekha's) Contact: 9972525771  
(On Behalf of Purchase Committee)  
Email: msdlab.esc@iisc.ac.in (for tender related queries)