

Global Tender Enquiry for 4K Closed-Cycle Cryostat.

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A request for quotation from interested manufacturers for a **4K Closed-Cycle Cryostat**. The quotation should clearly indicate the terms of delivery, delivery schedule, transportation charges (if any).

All interested vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. Only vendors who meet the technical requirement will be considered for the commercial negotiation. The last date for submission of proposals is 09-Jan-2024, 5:00pm.

Proposals should arrive at the office of

The Chairman,

Kind attention; Prof Arindam Ghosh,

F1-04,

Department of Physics, Indian Institute of Science,

Bangalore-560012 (INDIA) with a clear mention of the reference no. on the envelope.

Enclose a compliance certificate along with the bid. This certificate should have a table that should describe your compliance in a “Yes” or “No” response against each of the items in the specifications listed below. If “No” is selected, the second column should state the extent of deviation. The third column should state the reasons for the deviation (if any). Please enclose a compliance statement along with the technical bid. Bids with no statement of compliance will be considered invalid.

General terms and conditions:

- Vendor must have prior experience in manufacturing similar system and must submit list of at least 3 customers with contact information, and details of the supplied system.
- Payment terms should be mentioned in the technical bid.
- The commercial bid and technical bids must be submitted in two separate envelopes. A technical bid must contain a point-by-point technical compliance document. The technical bid must not contain any price information.

- 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 “phanindrasai@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 technical details of the system are given below.

Technical Requirements:

A. Technical Specifications of the 4K Closed-cycle Cryostat

1. Cryocooler Minimum Temperature: at least 4 K (Heat Load:0.2W @4.2K) @50Hz
2. Cryocooler Maximum Temperature: 325 K
3. Bolt-on Aluminium/Steel Instrumentation Skirt with:
 - a. Two instrumentation feedthroughs for 19-pin connectors.
 - b. Vacuum Valve with NW-25 flange for evacuation.
 - c. One extra blank port for AC wiring
4. water cooled Helium compressor compatible with cryocooler with low water flow rate
5. Voltage specification, Standard Compressor: As per Indian input power conditions, single phase, 50 Hz
6. Helium Hoses, 1 set
7. Closed Vacuum Shroud: Aluminium/Steel Construction, Large Sample Space (minimum 30mm diameter)
8. Closed radiation Shield: No holes, Aluminium/Steel Construction
9. Instrumentation for sample temperature control:
 - a. 10-Pin hermetic feedthrough
 - b. 1*50 Ohm Durable metalized thermofoil heater
 - c. 1* Curved Matched Silicon Diode sensor installed at the cooler tip for temperature control (possibly LS-DT-670B-SD)
 - d. 1* Calibrated Silicon Diode sensor installed with 4” [102 mm] free length for accurate sample temperature measurement (possibly DT-670-SD)

10. Installation Kit and Technical Manuals

11. Export packing

Optional Items:

1. Cryocooler Minimum Temperature: $< 4 \text{ K}$ (Heat Load: 1 W @ 4.2 K) @ 50 Hz

2. 2*19 DC cables wiring (thermally anchored with stages) from connector to sample space

B. Spares and accessories

NA

C. Installation and demonstration

System should be installed at the premises and minimum temperature i.e. $< 4 \text{ K}$ should be demonstrated.