

Technical Specifications of liquid nitrogen cryostats (2 Qty)

1.0 Bidder Eligibility Criteria-I

Sl. No	Bidder Eligibility Criteria-I	Complied / Not Complied	Reference Page No.	Remarks, If any
1	The bidder should have supplied at least three similar instrument in India in the past three years. List of their customers and their contact details should be provided. IIT-Madras shall inquire the bidders' customers about the quality of product/service. If the testimonial from their customers is not satisfactory, IIT-Madras reserves the right to reject the bid based on technical grounds.			
2	The OEM should have direct presence in India to enable quick service or if a reseller/distributor submits tender, proof of service engineers available with them for the quoted cryostats should be provided.			
3	Installation and training onsite is required			

2.0 Technical Specifications II

Sl. NO	SPECIFICATIONS	Complied / Not Complied	Reference, Page. No.
1	The cryostat should be portable with a maximum height of 55 cm. This would enable us accommodate them in our existing spectrometers.		
2	Should hold liquid nitrogen for at least 12 hours of continuous operation with fresh refilling of cryogen		
3	Should have at least two optical windows, one in front and another at 90 degree to enable photoluminescence measurements. The optical windows should be transparent to at least between 250 nm and 900 nm photons. The diameter of window should be at least 1 inch.		
4	The cryostat should operate between 77 K and 500 K		
5	Should provide sample holder suitable for thin films and single crystal samples.		
6	The electric wiring for cryostat should be based on 10 pin system to connect multiple V/I measurements. The wires should be suitable with cryogenic systems with low ohmic losses. Appropriate mating pins should be provided to enable external connections to the cryostat.		
7	The thermal stability should be less ± 0.1 K.		
8	Temperature controller should be provided.		
	a. Should have user interface, preferable touch screen based.		
	b. Should have provision for add additional sensors, heater or other auxiliary measurements		
	c. Should support different commonly used temperature sensor types without limitation.		
	d. Should support cards to connect cryogen level meter		
	e. Should have connectivity to computer via ethernet, GPIB and/or USB		
9	To enable better contact with samples, low vapour pressure thermal anchoring grease should be provided.		
Other Terms and Conditions			

1	Minimum one year onsite warranty from the date of installation of the products		
2	Any additional components required for cryostat should be added as per the required technical specifications.		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)