

राष्ट्रीय पशु जैव प्रौद्योगिकी संस्थान National Institute of Animal Biotechnology





An Autonomous Institute of the Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India

STORES AND PURCHASE SECTION

E-mail spm@niab.org.in
Telephone +91 40 2304 9404
Telefax +91 40 2304 2740
Website www.niab.org.in



Address

D. No: 1-121/1, 4^{th} & 5^{th} Floors, Axis Clinicals Building, Miyapur, Hyderabad, Telangana, India – 500049

TENDER / BID DOCUMENT

NOTICE INVITATING SEALED TENDERS /QUOTATIONS (SINGLE BID)

(SINGLE BID SYSTEM = Technical specification and price to be quoted in single quotation)

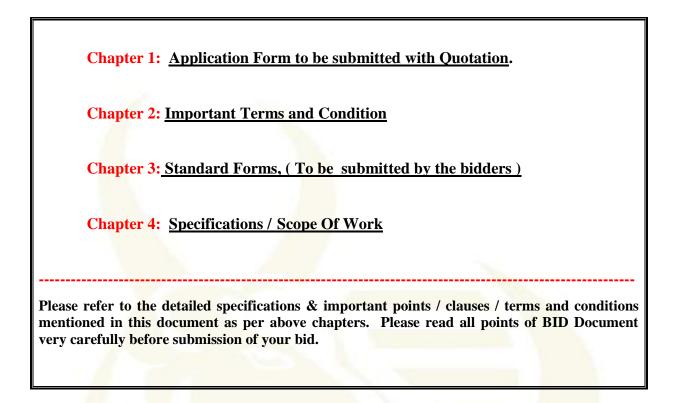
Director, NIAB, Hyderabad, invites sealed offers from reputed manufacturers or their authorized agents for the supply of the following items.

SN	Name of item	Qty.	Put this Ref. No. on the top of cover	Bid Type
1	Liquid Nitrogen Preservation System <u>Details, specification mentioned in Chapter 4</u>	1 No	NIAB/SP/2016-17/12	SINGLE Bid

TENDER EMD (REFUNDABLE)	Rs Nil /-	Tenders without TENDER FEES / EMD	
TENDER FEES (NON - REFUNDABLE)	Rs 500/-	(if applicable) will be rejected.	
MODE OF PAYMENT OF EMD/FEES	Demand Draft of any nationalized/commercial bank. Demand Draft must be enclosed along with the quotation. Please mention firm name & contact no, tender ref no backside of demand draft.		
DD IN FAVOUR OF	National Institute of Animal Biotechnology payable at Hyderabad.		
TENDERS TO BE SUBMITTED TO	Stores & Purchase Manager National Institute of Animal Biotechnology (NIAB), D. No. 1-121/1, 5 th Floor, Axis Clinical Building, Opp. to Cine Town, Miyapur, Hyderabad, Telangana, India - 500 049		
LAST DATE & TIME FOR SUBMISSION	24/03/2017 up to 14.00 hrs Please strictly adhere to the d		
DATE & TIME FOR OPENING OF TENDER	24/03/2017 at 14.30 hrs	mentioned in this document.	
PLACE OF OPENING	Store and Purchase section - NIAB , Hyderabad		
PRE-BID MEETING	No Pre-Bid meeting. (Contact information given at the end of this document for queries (if any) about tender.		

The objective of Pre-Bid Meeting is to provide a platform for clarifying issues and clearing doubts, if any, about the specification and other allied technical / commercial details of the bid document. This is also an opportunity to question the bidding conditions and the bidding process. Bids should be submitted only after the PBM if any so as to take care of the changes made in the bidding document. The prospective PBC participants should inform their intention to participate and send written queries at the email santosh@niab.org.in, spm@niab.org.in
sufficient before PBC date to enable us to keep the response ready. The changes made to the bidding document subsequent to the PBM shall be treated as amendment to this bidding document and the same shall also be hosted on NIAB website.

BID DOCUMENTS CHAPTERS



This Tender/Bid shall be submitted in Single Bid

Single bid means total offer/bid/Quotation with EMD / Tender Fees (if applicable), all terms and conditions, price quote & technical literature/details etc. required formats in and as one single document & in One Single Envelope.

Please Check and submit all forms and formats to be submitted with quotations as per chapter No 3. Offers/BID without this shall be summarily rejected.

The competent authority in NIAB will have full right to reject any/all offer(s) without assigning any reason thereof and does not bind itself to accept the lowest or any other tender and full authority to postpone the tender issue date, submission /opening date or to alter any other condition of tender as per Policy/Committee recommendations of NIAB for which no claim from whomsoever will be entertained.

Sd /-Manager (Stores & Purchase) For Director , NIAB

Chapter 1: Application Form to be submitted with Quotation.

The following form should be filled / printed, stamped/attested by firm and to be submitted along with quotation.

	APPLICATION FO	RM FOR NIAB TENDER
	TENDER NO - NIAB/S	SP/2016-17/12 dt 09-03-2017
1	1. Name of the Company/Firm :	
	2. Name of Authorized Person	
	(Who signs on the tender document):	
	3. Office Address :	
	4. Phone No. :	
	5. e-mail address :	
	6. Mobile No. :	
2	Status (Whether Company/ Proprietary/ Firm/ Individual/Any other)	
3	Annual Turnover of Last 03 years	
		(Proof to be attached)
4	Sales Tax registration Number	
	Permanent Account Number	
	VAT/TIN Number	
	Service tax Registration Details	
		(Proof to be attached)
5	Certificate of Authorized distributors of the products is submitted?	Yes / No
		(Proof to be attached)
6	Reference with contact details of Two Customers where this item / similar line of research instrument/scientific equipment has	Yes / No (Proof to be attached)
	been sold is submitted.	
7	All the forms (FORM NO 1 to 5 as per chapter 03 with this main application form	Yes / No
	and price schedule A&B) required as per the tenders are submitted on letter head of the firm.	
	ove information provided is true and in case if it	is found incorrect/false, my participation in this tender will
be can	celled.	Compatent Authority to sign
		Competent Authority to sign: Name, Designation:
		Date with stamp & seal of organisation:

Chapter 2: Important Terms and Condition

- 1. The rate quoted must be inclusive of all taxes and other charges up to NIAB /CIP, Hyderabad. Firm must have past experience of supply of same items/service as per this tender requirement. **Proof of the same is required.**
- 2. Please <u>read following points</u> before preparing Price Bid /Quotation and submit your quotation along with PRICE SCHEDULE 'A' & PRICE SCHEDULE 'B' after considering all the points.

		g points before preparing Price Bid /Quotation and submit you	_
		CHEDULE 'A' & PRICE SCHEDULE 'B' after considering all the po	
SN	Point	Description	Point Noted & complied in Price Bid.
			Mark √
1	Price Breakup	The Bidder shall indicate the unit prices, discounts rate / percentage and total bid prices of the goods it proposes to supply. All breaks up of price incl Packing, Transportation, Taxes, incidental expenses must be given up to satisfactory installation in NIAB premise. Vague terms like "packing, forwarding, transportation, taxes etc. extra" without mentioning the specific amount/percentage of these charges will NOT be accepted. Where there is no mention of packing, forwarding, freight, insurance charges, such offers shall be summarily rejected as incomplete / non-responsive.	□ Point Noted for Bid
		Prices quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account.	Preparation
2	Quote for Complete item set up / functioning required as per specification.	Item quoted should be complete in all respects; any additional accessories required for instrument to operate /function should also be quoted as part of the instrument and should be supplied along with instrument. It should not be included in optional.	
3	Optional accessories / PC /UPS /stabilizer if any	The cost of accessories in optional should be quoted separately. List of all optional accessories with detail specification must be given with List price & discount.	□ Point Noted for
4	Bid Currencies	Prices shall be quoted in Indian Rupees or in freely convertible foreign currency preferably in USD (\$), Euro (€), Yen (¥), GBP (£) wherever possible for correct evaluation during comparison.	Bid Preparation
5	For indigenous Items OR goods of foreign origin to be supplied in Indian currency	Ex-factory / Ex-warehouse //Ex-showroom /Off-the shelf Excise Duty (if any) [%age & value] Sales Tax/ VAT (if any) [%age & value] Transportation, loading/ unloading and incidental costs till NIAB site Insurance charges (if any with period cover) Incidental services (including installation & commissioning, and training) at NIAB site	☐ Point Noted for Bid Preparation
6	Taxes, Custom duties etc.	NIAB is exempted from payment of Excise Duty under notification number 10/97 dated 01.03.1997 and Customs Duty under notification No.51/96 dated 23.07.1996. Hence Excise Duty and Customs Duty, if any, should be shown separately. Please mention the applicable taxes (VAT/Service Tax etc.) clearly. We don't issue any 'Form C' or 'Form D'. Custom bonded warehouse price should be quoted in case of imported item quoting INR. Instrument quoted should be complete in all respects. If there is no explicit mention about taxes in your offer, then quoted price will be deemed inclusive of all such taxes and no other charges except those mentioned clearly in the quotetien will be paid.	□ Point Noted for Bid Preparation
7	Bid Validity	the quotation will be paid. The Bid should be valid for at least 180 days.	

8	Comprehensive WARRANTY & AMC	The charges for Annual CMC after warranty shall be quoted separately as per price schedule 'B'. Standard Warranty period must be quoted by firm otherwise it will be taken/assumed as 12 Months. Please quote for Extra Warranty After completion of standard warranty period. The Warrantee should be comprehensive and on site. Do not club the cost of extra warranty in main item cost otherwise your bid will be rejected. The total cost of requirement/item/service to be purchased is main criteria for evaluation irrespective of different standard warranty period offered in any. The purchase of Additional warranty /CMC is at sole discretion of institute and not mandatory for comparison in case of standard warranty period differs. > The cost of Annual Maintenance Contract (AMC) which includes preventive maintenance including testing & calibration as per technical/service/ operational manual and labour, after satisfactory completion of warranty period may be quoted for next 3 (or as specified) years on yearly basis for complete equipment. > The cost of CMC may be quoted along with taxes applicable on the date of Tender opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.	☐ Point Noted for Bid Preparation		
		 Cost of CMC will be added for ranking/evaluation purpose. The uptime warranty will be 98% on 24 (hrs) x 7 (days) x 365 (days) basis. The stipulation in technical specification will supersede above provision. The supplier shall keep sufficient stock of spares required during comprehensive maintenance contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to 			
9 PLE	For Imported items ASE READ AF	import and get them custom cleared and pay all necessary duties. Price can be Quoted in following terms FOB price at sea/airport of Lading Insurance (Warehouse to warehouse basis) Freight CIP by Air/Sea at the port of Entry (Hyderabad) If possible DDP value may please be quoted with consideration of Custom Duty amount as % of Net CIP (amount with CDEC as applicable) & Custom Clearance & Handling charges, incidental charges till satisfactory installation up to NIAB. The purchaser can place the order on FOB/ CIP or DDP basis. Export Packing, Loading Charges, and Inland Freight etc. In the shipper country will have to be paid by the Supplier. The Price for inland transportation, insurance and other local costs incidental to delivery of the goods up to their port of dispatch to be payable by the Supplier. Items as per the Purchase Order duly cleared for export in shipping country would be required to be handed over to our nominated freight forwarder in case of FOB order. The quoted price shall be deemed to include all taxes and duties/fee etc that will have to be paid in the country of origin/export by the bidder. Items are to be Packed, Marked & Labelled as per international norms. Small individual boxes must be palletized for easy handling & movement. State packing/ forwarding/ documentation charges etc. (each one) separately, if applicable. CIF/CIP rates for shipping items up to Hyderabad (India) preferably through AIR INDIA should also be mentioned. Even if the order is placed on CIF/CIP basis, bidder will have to only use the services of our nominated freight forwarding agent for the sake of operational convenience at the time of customs clearance at our end. This condition will be mandatory. BOVE POINTS BEFORE PREPARING PRICE BID /QUOTAT	□ Point Noted for Bid Preparation		
SUBMIT THE SAME ALONG WITH PRICE SCHEDULE 'A' & PRICE SCHEDULE 'B'					

SUBMIT THE SAME ALONG WITH PRICE SCHEDULE 'A' & PRICE SCHEDULE 'B' GIVEN BELOW AFTER CAREFULLY READING /CONSIDERING ALL THE POINTS.

DAX/A/FINI/FI	Designed Terms will be finalized by NIAD Delice and an in the finalized by NIAD Delice and an interpretable by NIAD Delice and
PAYMENT TERMS	Payment Term will be finalized by NIAB Policy and remain mandatory for supplier. Our rules do not permit any advance payment either direct or through a bank. However, payment of your bill will be made after receipt & successful installation of the articles in good condition by way of Cheque/DEMAND DRAFT / Foreign Demand Draft (FDD) or Wire Transfer. Alternatively, by way of Confirmed Irrevocable Letter of Credit, for 100% Order value and 85 % of order value will be released against receipt of complete shipping documents and the balance 15% value will be released after successful installation acceptable to NIAB and submission of performance security. For Indigenous items Payment will be made after delivery and installation. For service contract /work order Payment will be made 90 % after delivery and installation. 10 % after submission of bank guarantee for warranty period. All banking charges outside India will be borne by the supplier and inside India charges will
	be borne by the purchaser. Commercial Invoice produced by Reprographic system or automated computerized system marked as original not acceptable. The following documents shall be required by the Purchaser for payment. Signed commercial invoice in quadruplicate, Certificate of Origin issued by the Beneficiary/ Concerned Chamber of Commerce, Insurance copies/ certificates, Airway Bill / Bill of Lading Copy, Packing list indicating description of goods and quantity package wise in triplicate.
PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS	The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders. The Purchaser reserves the right at the time of award of Contract to increase or decrease the quantity of goods and services originally specified in the Tender documents without any change in unit price or other terms and conditions.
COPY RIGHT	The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party
INSPECTIONS AND TEST	The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services. or as discussed during the course of finalizing the contract. The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data -shall be furnished to the inspectors at no charge to the Purchaser.
STANDARDS	The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution
PENALTY CLAUSE	Subject to clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Purchase order, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 1 percent of the order value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 Percent. Once the maximum is reached, the Purchaser may consider termination of the Contract for Default
APPLICABLE LAW	The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction Hyderabad.

PRICE SCHEDULE 'A'

To be attached along with your main quotation

SI.No	Description	Qty	Unit	Each unit Price	Total Price

PRICE SCHEDULE 'B'

To be attached along with your main quotation

WARRANTY

Name of item :-			
Qty:-			
STANDARD WARRANTY AS PER BID SUBMITTED	YEAR	/ YEARS	
Extra Warranty After completion of standard warranty	·	Cost in RS (Incl all)	Remark if any
Extra warranty for 1 st year After completion of standard warranty			
Extra warranty for 2 nd year After completion of standard warranty			
Extra warranty for 3 rd year After completion of standard warranty			

AMC

Name of item		
Qty		
EXTRA AMC After completion of warranty period	Cost in RS (Incl all)	Remark if any
1st yr of AMC		
2 nd yr of AMC		
3 rd yr of AMC		

DECLARATION TO BE SUBMITTED WITH BID

I /We the undersigned have read and considered all the above points carefully as per Chapter -2 before preparing the price bid and noted all the points. The price bid will be prepared considering all the above points. The best possible break up of all the prices unit and total up to delivery and installation of the item in tender up to NIAB premise / location for delivery , standard & Extra Warranty , AMC will be mentioned in price bid.

Prices quoted shall remain fixed during the entire period of contract and shall not be subject to variation on any account.

Competent Authority to sign: Name, Designation: Date with stamp & seal of organisation

Chapter 3: Standard Forms, (To be submitted by the bidders)

(FORM MUST BE SUBMITTED ON FIRM LETTERHEAD AND IN ORIGINAL BY THE BIDDERS)

FORM -1

form must be submitted on firm letterhead and in original

BID COVERING LETTER

The Director,

National Institute of Animal Biotechnology (NIAB), D. No. 1-121/1, 4th & 5th Floors, Axis Clinicals Building, Opp. to Talkie Town, Miyapur, Hyderabad, Telangana, India - 500 049

Sir,

We, the undersigned, declare that:

We have examined and have no reservations to the Bidding Documents, including addendum (if any). We offer to supply in conformity with the Bidding Documents and in accordance with the condition of contact, specified in the tender Document

Our bid shall be valid for the period from the date fixed for the bid submission deadline, and it shall remain binding upon us and accepted at any time before the expiration of bid validity period as per this tender. If our bid is accepted, we commit to provide a performance security (10 % of the Contract Value) for due performance of the Contract/PO as per NIAB policy/format of PBG and warranty-guarantee as per tender specification or as per contract/PO if awarded.

We understand that this bid, together with your written acceptance thereof included in your notification of award/placement of Order, shall constitute a binding contract between us. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Competent Authority to sign: Name, Designation: Date with stamp & seal of organisation:

FORM -2

form must be submitted on firm letterhead and in original

TECHNICAL COMPLIANCE STATEMENT

The Director,

National Institute of Animal Biotechnology (NIAB), D. No. 1-121/1, 4th & 5th Floors, Axis Clinicals Building, Opp. to Talkie Town,

Miyapur, Hyderabad, Telangana,India - 500 049

Sir,

Please find attached technical compliance statement as required vide this Tender No	dt
For the item	

Sr No.	Specifications	Specifications	Compliance (Yes/No)	(If any)

Competent Authority to sign: Name, Designation: Date with stamp & seal of organisation:

Please note:

An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications must be provided. If any deviation is proposed by the Bidder, the same must be clearly indicated and enclosed as deviation as per given format.

Compliance/Deviation statement comparing the specifications of the quoted model to the required specifications should also give the page number(s) of the technical literature where the relevant specification is mentioned. Bids must have supporting documents (technical literature or copies of relevant pages from the service manual or factory test data) for all the points noted above, failure regarding which may result in rejection of bid.

FORM	FORM -3 form must be submitted on firm letterhead and in original							
	DETAILS OF LOCAL / ANY OTHER SERVICE SUPPORT							
Location /Address of Service Centre :- Name of Technical /In charge Person/Qualification :- Phone/Fax/Email :- Office Hours :- Service Facilities /list of similar type equipment's serviced in the past 3 years:-								
						Competent Authority to s Name, Designation: Date with stamp & seal of	_	
FORM	[-4			form n	nust be submitted or	n firm letterhead and in orig	ginal	
			PEF	RFORMANCE S	TATEMENT/ CLI	ENTELE /LIST OF USER	<u>R</u>	
D. No. Axis C	rector, al Institute of A 1-121/1, 4th & linicals Buildin ur, Hyderabad,	z 5th Flo ng, Opp	oors, o. to Talkie	Town,				
Sir,								
Please	find attached dt	herewit	th our list	of clients to who	m we have supplied	I the same /similar ITEM	S as required vide this Tender No	
	Name Address purchaser		rder No. nd date	Description of work	Date of delivery as per Contract/Actual	Date of installation/completion of work	Contact Person along with Tel. NO., Fax No. & e-mail address	
Note:-I	Please provide	details	of at least l	ast 3 yrs with sup	porting documents if	Competent Authority to s Name, Designation: Date with stamp & seal of		
FORM	1-5			form m	ust be submitted on	firm letterhead and in origi	inal	
				-		-		
MANUFACTURERS' AUTHORIZATION The Director, National Institute of Animal Biotechnology (NIAB), D. No. 1-121/1, 4th & 5th Floors, Axis Clinicals Building, Opp. to Talkie Town, Miyapur, Hyderabad, Telangana,India - 500 049								
Sir,								
WeAgent)	on our behalf	_ (addre	ess of facto	who ory) do hereby aut egotiate and recei	are established and horize M/sve the order from yo	reputed manufacturers of u against your tender No	the equipment having factories at (Name and address of dt	
We her	eby extend ou	r full su	upport, gua		nty as per the Terms		ve Tender/PO (issued if any) for the	
						Competent Authority to s	sign:	

power of attorney to bind the manufacturer.

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the

Name, Designation:

Date with stamp & seal of organisation:

(Attach this page with your quotation) Checklist">Checklist

Before	e sending Tender, Please Check once that you fulfil the following Points.	Point Noted & complied
Sr No	Point	
		Mark ✓
1	Following things are mentioned on the main (outer) envelope	
	Item Name /Reference No. /Last Date For Submission Of Tender/Date Of Opening Of Tender /Firm's Name & Address	
2	TENDER FEES / EMD if applicable is Enclosed	
3	Demand draft is/are in favour of National Institute of Animal Biotechnology payable at Hyderabad.	
	Firm's Name/Ref. No. Etc. Has Been Mentioned On The Back Side of DDs.	
4	Quotation has been duly signed and stamped by the Authorized & Competent person. All cuttings/over writings have been duly checked, initialled and stamped. (if applicable) date is mentioned on quotation	
5	This full Notice Inviting Tender (NIT) should be printed and hard copy to be submitted along with Technical BID. Tender Document with each page duly signed by the Bidder as token of acceptance. This Notice Inviting Tender (N.I.T) shall form part of the Tender Document.	
6	All the forms (FORM NO 1 to 5 with main application form and price	
	schedule A&B required as per the tenders are submitted on letter head of	
	the firm.	

DECLARATION BY BID SUBMITTING FIRM

This is to certify that we have offered the maximum possible discounted price to you for the Item required as per this Tender. We would like to certify that the quoted price are the minimum and we have not quoted the same item on lesser rates than those being offered to NIAB to any other customer nor we will do so till the validity of offer or execution of purchase order, whichever is later.

I/We the undersigned, have read the entire terms and conditions of this Tender document and we are fully agreeable NIAB standard terms/policy of procurement as well as the terms and conditions mentioned herein. The decision of competent authority of NIAB with respect to this Tender-Result will be fully agreeable and binding on us.

Competent Authority to sign: Name, Designation: Date with stamp & seal of organisation:

FOR ANY QUERY CONTACT DETAILS OF NIAB FOR THIS TENDER			
Send email	santosh@niab.org.in spm@niab.org.in		
call on	040 – 23049404 (S & P section)		

Please take print of this full tender Document and submit this duly signed & stamped each page of this document as a token of acceptance of its conditions with above declaration and submit along with your quotation/bid

Chapter 4: SPECIFICATIONS / SCOPE OF WORK

LIQUID NITROGEN PRESERVATION SYSTEM WITH PRESSURISED

Specifications: Qty: 1 no

- Low-profile tank with vacuum-insulated
- Working liquid nitrogen capacity should be 60 -70 litres.
- Flexible lid gaskets to reduce moisture migration into the chamber
- Static evaporation rate : ≤0.85 litres /day or better
- Hanging racks for cryo-boxes with sample capacity of >1600 (1.5 ml vials) or more
- Monitor with LED level indicator panel to continuously display liquid nitrogen.
- Optional Digital temperature display sensor to indicate the highest temperature reading inside the tank
- Audible and visual (Indicator flash light) alarms for storage tank conditions like LN₂ low levels
- Temperature uniformity to maintain all samples at -180°C.
- Should be quoted along with racks and risers for optimum storage in liquid or vapour phase.
- At least 4 to 5 racks should be included with the system
- Manual hand truck with ball wheels should be supplied to carry supply tank.

Other requirements

- Extended comprehensive warranty for 2 years and AMC for 2 years should be quoted separately
- Complete installation and demonstration should be provided by factory-trained certified engineers.
- Local Service Support should be within 24 hours.
- Additional features/accessories if any that can potentially increase safety of this instrument should be quoted as optional items.