

CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur  
Central Purchase & Disposal Unit  
Office of the Comptroller

No.QSD/CPDU/4-3/CSKHKV/-

12010-19

9-2-2022

Dated :

**Notice Inviting Quotations for purchase of Ultra Low Temperature Freezer**

Sealed quotations are invited by the Comptroller for the purchase of articles listed below. The quotations should be strictly according to the terms and conditions as given below, otherwise the quotations will not be considered:

S.No.	Name of Item	Specifications	Quantity	Rate (in Rs.)
1.	Ultra Low Temperature Freezer	Attached as Annexure-I	1 No.	

**Note:** Rate should be quoted on the letter pad of firm.

**TERMS & CONDITIONS**

1. The quotations should reach in the O/O the Comptroller, CSK HPKV, Palampur in sealed cover and super-scribed "quotation for purchase of Ultra Low Temperature Freezer" on 07-03-2022 by 5.00 PM. The quotations will be opened on 08-03-2022 at 3.00 PM in the presence of quotee or their authorized representative, if present.
2. The rates should be quoted F.O.R. CSK HPKV, Palampur inclusive of all charges. Nothing will be paid extra. Concessional GST @ 5% will be applicable against GST exemption certificate issued by the University.
3. Price list should be attached.
4. The quantity of materials can be increased or decreased.
5. The Comptroller also reserves the rights to consider or reject any of the quotations without assigning any reason.
6. The supply of the material is to be made by the supplier immediately.
7. The quotation received after due date will not be considered.
8. The condition of advance payment or through cash etc. will not be considered.
9. The quotation should be submitted only if the items can be supplied promptly on demand.
10. The price quoted should be strictly according to the specifications stated above.
11. The payment will be made after satisfactorily Inspection Report of the Inspection Committee so constituted for the purpose by the University.
12. Each quotation should be accompanied with a refundable earnest money @ 2%, if the total amount for the supply of the material exceeds Rs. 1.00 lakh in the shape of fixed deposit receipts/TDR/DD in favour of the Comptroller, CSK HPKV, Palampur. Without EMD the quotations will not be considered.
13. The supplier will adhere to the provision of Motor Vehicle Act for transportation of material.
14. Performance security will be obtained from successful bidder @ 5% of the awarded material.
15. GST may be shown separately, copy of GST registration be enclosed with quotation and GST No. may be mentioned in the quotation.
16. The E-way bill is to be required alongwith actual bill.
17. Authorization Dealer Certificate and warranty certificate duly attested must be attached with quotation.
18. The quotation should accompany the satisfactory user report/certificate from the Institutions to whom the said equipment earlier supplied by the firm.
19. The conditional quotation will not be entertained.
20. The firms/suppliers shall observe all the guidelines/SOPs for COVIDI-2019 prescribed by the H.P. State Govt/Central Govt. from time to time.

M/S

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Section Officer,  
CSK HPKV, Palampur.

Copy to:

1. Incharge, UNS, CSK HPKV, Palampur for uploading in University Website.
2. The Head, Deptt. of Agril. Biotechnology, COA, CSK HPKV, Palampur.

Name of the instrument/equipment: **ULTRA LOW TEMPERATURE (ULT) FREEZER**

- Make: 1. Eppendorf (or)
- 2. Thermo Fisher Scientific (or)
  - 3. Panasonic

**SPECIFICATIONS**

with LED interface, Green HC cooling liquids, PUF Insulation and air-cooling. handle left side. 5 (five) shelves.

- Upright Ultra-Low Temperature Freezer (ULT) with Internal Dimension of 126.5 x 61.6 x 57.5 cm (49.8" x 24.3" x 22.6" in) Approx. and external dimension of 195.0 x 95.5 x 89.8 cms (76.8" x 37.6" x 35.4" in) Approx.: Height x Width x Breadth respectively
- Fully programmable microprocessor controlled with membrane keypad and eye level control panel.
- Freezer should be of 10 – 450 Liters capacity and should have clear and legible Blue LED display with advanced Interface conveniently located at Eye level.
- Freezers should have an Automated vent port for quick re-access to samples as part of the eye level display / advanced interface
- Compressor fan air filter conveniently located on the front panel for ease of access for cleaning and maintenance.
- System should have Dedicated alarm and backup system for 24/7 sample safety
- System should have Programmable operating temperature from -50 °C up to -86°C with 1°C increment at 32 °C Maximum ambient operating temperature.

- System should be highly energy efficient, with energy consumption around **8.3 KWh/day (0.54 KWh/f3)** when freezer is at  $-80^{\circ}\text{C}$  and **5.7 KWh/day (0.37 KWh/f3)** when freezer is at  $-70^{\circ}\text{C}$
- Insulation should be of advanced PolyUrethane Foam (PUF) to maintain highest heat insulation.
- System Exterior should be made up of powder coated Steel to resist scratch and rust and the interior should be of Polished Stainless-Steel grade 304 2B for easy cleaning and to eliminate potential for oxidation.
- At least 5 Inner doors should have tight sealing to prevent temperature loss and Outer door should have reinforced tight sealing.
- Ambient ( $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ) to  $-80^{\circ}\text{C}$  Pull down time should be 3 h 35 min (215 min) or lesser: with freezer being maintained empty
- Warm up time (freezer 2/3 full, from  $-85^{\circ}\text{C}$  to  $0^{\circ}\text{C}$ ) of at least 36 hrs or longer: 8 hrs for Warm up from  $-85^{\circ}\text{C}$  to  $-50^{\circ}\text{C}$ , freezer 2/3 full or longer
- System should have an Ergonomically designed door handle for smooth and easy operation: for enhanced safety of user.
- Should have security keyed locks and also with option to lock the ergonomically designed door handle with a padlock. third party padlock not supplied with ULT.
- System should have Heavy duty castors wheels to easily move the freezer to a new position
- Freezer should have Cabinet uniformity (freezer set to  $-80^{\circ}\text{C}$ ) of  $+9.5^{\circ}\text{C}/-0.0^{\circ}\text{C}$  [ $\pm 4.75^{\circ}\text{C}$ ] or better with Enhanced shelf design for efficient and consistent air circulation in the chamber and rounded metal rims of shelf edges for enhanced safety of users' fingers.
- System should have Silence level/Noise level (at  $-80^{\circ}\text{C}$ ) 51.5 dB or lesser
- Freezer must have battery back-up and pass word protection security for unauthorized tampering of freezer settings.
- System should have Door open recovery (DOR) of 16 min or lesser for 15 sec, Door opening OR Door open recovery (DOR) of 22 min or lesser for 30 sec Door opening: freezer set to  $-80^{\circ}\text{C}$  in either case.
- Freezer must have Standard (BMS) Remote alarm port
- System should have Option for RS-485 interface and option for VisioNize® connectivity via VisioNize® box
- System should have battery powered back-up circuit; in event of a main/power outage the battery should supply power to the alarms and display for up to 72 hrs. at least.
- Audible and visible alarms for temperature, power failure, system failure, battery low etc., and it also have remote alarm port for connection to an auto dialer.
- Freezer must have HFC-free, CFC-FREE, HCFC-FREE non-flammable refrigerants, and should have Green Natural HC Gas based refrigeration system (High stage: R290; Low stage: R170).

- It must be energy efficient and hermetically sealed **two stage cascade refrigeration** system.
- Freezer must have ISO 9001 standard quality test requirements and IEC 61010 Electrical safety CE certified.
- Freezer must have capacity to hold **25 racks and 320 (32,000 samples) boxes of 2" height vials**
- Freezer should have electric supply of 230v/50hz. 10 amps. Single phase.
- It should have an Optional chart recorder for 24/7 documentation on paper
- **Optional Back Up for CO<sub>2</sub> and LN<sub>2</sub> are optionally available.**
- Warranty of 1 year on Freezer & 5 years on compressor.
- Racks & Boxes for 2 shelves of the freezer.
- A compatible servo voltage stabilizer along with capacity in KVA.

**Additional Terms & Conditions:**

- 1) System should have Programmable operating temperature from -50 °C up to -86 °C with 1 °C increment at 32 °C Maximum ambient operating temperature.
- 2) System should be highly energy efficient, with energy consumption around 8.3 KWh/day (0.54 KWh /ft<sup>3</sup>) when freezer is at -80 °C and 5.7 KWh/day (0.37 KWh/ft<sup>3</sup>) when freezer is at -70 °C
- 3) Ambient (20 °C +/- 1 °C) to -80 °C **Pull down time** should be 3 h 35 min (215 min) or lesser; with freezer being maintained empty
- 4) Warm up time (freezer 2/3 full, from -85 °C to 0 °C) of at least 36 hrs or longer for Warm up from -85 °C to -50 °C, freezer 2/3 full or longer
- 5) System should have Door open recovery (DOR) of 16 min or lesser for 15 sec, Door opening OR Door open recovery (DOR) of 22 min or lesser for 30 sec Door opening; freezer set to -80 °C in either case.

Signature of indenting officer/Official