

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

79551-89

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

Dated 10 MAR 2022

From: Comptroller

To: List Attached

Sub: Extension for receiving date of quotations for the purchase of Ultra Low Temperature Freezer.

Sir

I am directed to refer to this office NIQ No.QSD.CPDU/4-3/CSKHPKV/-12010-19 dated 09-02-2022 for the purchase of Ultra Low Temperature Freezer and to intimate you that the receiving date of quotations is hereby extended upto 21-03-2022 by 5.00 PM and opening date will be 22-03-2022 at 3.00 PM. Other terms & conditions shall remain the same.

Yours faithfully,

Section Officer (CPDU),
CSK HPKV, Palampur.

Cc:

1. The Incharge, UNS, CSK HPKV, Palampur for uploading in the University Web Site.
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/ft³)** when freezer is at -80 °C and **5.7 KWh/day (0.37 KWh/ft³)** when freezer is at -70°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 °C - -1 °C) to -80 °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 °C to 0 °C) of at least 36 hrs or longer: 8 hrs for Warm up from -85 °C to -50 °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 U.L.T.
- 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 °C) of +9.5 °C/-0.0 °C [± 4.75 °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 °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 °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).

		<ul style="list-style-type: none">• 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 CO₂ and LN₂ 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. <p>Additional Terms & Conditions:</p> <ol style="list-style-type: none">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 /ft³) when freezer is at -80 °C and 5.7 KWh/day (0.37 KWh/ft³) when freezer is at -70°C3) 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 empty4) 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 longer5) 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