

Specifications for Upright Ultra Low Temperature (ULT) -86 °C freezer

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Technical specifications:

- 1) Capacity: 550- 800 liters volume and capable of holding at least 400 cryoboxes.
- 2) Shelves – 5 or more
- 3) Temperature range: -50 to -86° C, with an ability to maintain interior temperature of -86°C.
- 4) Freezer interior and shelf material should be made of corrosion free stainless steel
- 5) Freezer racks should be made of corrosion free stainless steel
- 6) Cryobox capacity – at least 400
- 7) Doors – Low temperature safe Inner and Outer doors.
 - separate doors with gaskets for each shelf with frost free opening
 - Outer door with good locking system and gasket for effective insulation and frost-free opening
- 8) Stand by time in case of power cut for an unopened freezer to be atleast 4 to 5 hrs
- 9) Effective Insulation with a minimum of 5” high density polyurethane foam with preferable additional insulation to prevent temperature fluctuations.
- 10) The freezer should have effective two stage cooling system with HFC class refrigerants
- 11) Microprocessor based temperature controller with LED display
- 12) Washable and reusable pre-filters
- 13) Should be fitted with heavy duty castors for easy mobility of the freezer.

- 14) Steel Racks and cryoboxes – to be provided for all the shelves
- 15) Stabilizer: an external stabilizer with appropriate voltage capacity to be included in the quote.
- 16) Voltage boosters and back-up power kits.
- 17) The quote should provide technical details of the compressor such as its working type, coiling system, its power consumption and capacity.
- 18) To be compatible with 230V, 50Hz power supply line. Long electrical cord length of at least 10-12 feet required.
- 19) Warranty period: minimum of 3 years from the date of installation.
- 20) Warranty coverage: whole unit including compressor and other major electrical units in the instrument
- 21) Quotation cost should include till installation