



DEPARTMENT OF BIOTECHNOLOGY
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Ref: BT/SMAH/2018/016/SPL

Dt. 07.06.18

Due Dt. 29.06.18

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Specification for -86°C Ultra Low Temperature Freezer

- Capacity should be around 500 to 550 liters.
- Sample capacity around 40,000 (2ml vials)
- The freezer must be constructed using 1" thick vacuum panel insulation in conjunction with environmentally-friendly water blown foam
- Freezer shall be painted with high-impact, scratch resistant powder coat finished interior and exterior to ensure long term viability and enhanced temperature uniformity.
- Door latch allows one-handed opening and closing. Handle must include door key lock as well as padlock provision for added security.
- Freezer shall have 4 or 5 internal storage compartments with a minimum of 4 polystyrene insulated inner doors to ensure sample security. Inner doors should have no latches or external magnets and must be removable for easy cleaning without the use of tools.
- Freezer shall have an automatic heated pressure equalization port which allows for rapid re-entry to cabinet.
- Freezer shall have two-1 inch access ports as standard.
- Freezer shall have a RS485 output, dry contacts and 4-20mA output for remote monitoring purposes.
- Freezer door must open at least 180 degrees for easy sample access.
- Freezer shall allow for set-point security control that blocks specific users from changing freezer set point or alarms through the use of a user name and password control.
- Freezer shall have a high performance operating mode that can be activated by the user without loss of power to the freezer.
- Freezer shall have an on-board data logger that allows for a minimum of 4GB of data storage
- Data must be available from the display for a minimum of 7 days. Data must also be downloadable via a USB port.
- Freezer shall log all power interruptions and provide audio and visual notifications.
- Freezer shall have a screen auto-off selection that allows the screen to darken between the hours of 9pm and 6am.
- Freezer shall have a graphical indication of operating status as well as a redundant LED light.
- Freezer shall record number of door openings and date/time of last opening. This counter shall be resettable by the user. .
- Freezer shall record events in an event log viewable on the freezer display. This log shall include the event type, date and time. Event log data shall be downloadable via a USB port and viewable in standard programs such as MS Excel.
- Freezer shall notify customer to perform preventative maintenance tasks including filter change and backup battery test.
- Display shall notify user if a power failure, high temperature, or low temperature alarm occurred in the past and has since corrected itself. User must acknowledge past alarm to ensure cargo security.
- Freezer shall use only natural, commercially available refrigerants (Hydrocarbon) with no special blends required.
- Freezer must be built to and contain the registration mark for UL, cUL, and CE standards for safety and performance.