

All India Institute of Medical Sciences  
Dept. of Endocrinology & Metabolism

**SPECIFICATION FOR ULTRA SLIM DEEP FREEZER(-86)**

<b>TYPE</b>	:	<b>Upright</b>
<b>EXTERNAL DIMENSION</b>	:	<b>180-200H x 65-70W x 85-90(cm)</b>
<b>CAPACITY</b>	:	<b>350-400 Liters/ 12.7 Cu ft.</b>
<b>OPERATING TEMPERATURE</b>	:	<b>-50°C TO -86°C</b>
<b>POWER CONSUMPTION</b>	:	<b>10-15 KWH/day.</b>
<b>ELECTRIC SUPPLY</b>	:	<b>220V/50Hz, 13 Amps. single phase</b>

- ✓ **Freezer must have in build fully programmable microprocessor controlled with automated data logging: temperature , alarms and door opening data are stored up to 30 -90 days. Downloadable to PC with optional communication ports, for strictest validation requirement.**
- ✓ **System must be capable of storing more than 25000-30,000 storage vials of 2 inch size. At least 3 nos. of Storage racks of appropriate size should be quoted along with the system.**
- ✓ **Construction should have modern vacuum Insulation technology such as thin nanogel.**
- ✓ System should have 304L grade stainless steel interior and tough, powder coated exterior finish.
- ✓ Freezer should have insulated doors giving access to shelves which should be adjustable. Should come with 2-3 adjustable shelves to make 3-4 inner compartments.
- ✓ **Freezers should have heated air vent to prevent vacuum formation between door and internal chamber which will help end user at the time of door opening and must have front panel air filter.**
- ✓ Heavy duty lockable castors and lockable outer doors.
- ✓ Freezer must have battery back-up and 4-5 PIN security lock for unauthorized tempering.
- ✓ **Freezer must have RS 232- 485 interface data logging port and it must also have on board diagnostic software.**
- ✓ 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 bright easily read backlit LCD display and on screen system messaging – displays set points as well as alarms and operating conditions.
- ✓ **Freezer should be able to work at ambient temp. of 28-32 °C.**
- ✓ **Freezer must use CFC-FREE, HCFC-FREE nonflammable refrigerants, and refrigeration system must be energy efficient and hermetically sealed cascade refrigeration system. Compressor should be capable to run any voltage between 190 – 270V. Freezer must have ISO9001 safety requirements (European CE certified). Certificates must be attached along with tender documents.**
- ✓ **System must have 10-12 Years Warranty on vacuum insulation panel and 5 years warranty on whole system.**
- ✓ System should come with 5 KVA Servo Stabilizer.
- ✓ Accessories must be quoted as optional.

The above features must be mentioned/visible in the original catalogue of instrument.

It is certified that the specifications of ultra slim low deep freezer are of general nature/ board parameter and do not favour a particular company.