# Bio Medical Freezer





Up Right Type −35° Deep Freezer Non-CFC high-density polyurethane Insulation thickness 145mm

- ☐ The Unique Refrigeration technology with Non-CFC/HCFC natural refrigerant
- ☐ Fast Cooling down to -35°C with perfect contacted evaporator system
- High quality stainless steel inner chamber with rounded corners for easy clean
- Mechanical designed cabinet with perfect door seal and closure
- ☐ Microprocessor PID digital controller with Audible & Visible Alarm system
- Built-in access port for external data monitoring and supply



# Feature

### Complete sealing and closure mechanism for ultra low temperature

- Triple air tight Santoprene sealing gaskets made from Thermoplastics Elastomer
- The individual inner doors made from cold-free HDPE material
- Mechanically heated door frame seal keeps ice formation-free
- Advanced door latch system for perfect closing and easy opening

## Non-CFC/HCFC Refrigeration System

Natural refrigerant and hermetically sealed compressor are used for compliance with the New Environmental Protection Regulation

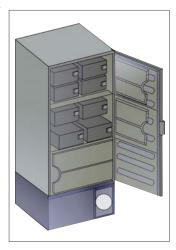
# Heavy-duty and user friendly designed chamber structure

- Heavy-duty caster with built-in adjustable stands for easy movement
- 145mm High density polyurethane foamed insulation maintain cool temperature
- Easy opening access door for electric and refrigeration compartments
- Height adjustable shelf is stainless steel or epoxy powder coated wire

# Automatic voltage regulation and Energy saving electric circuit system

Efficienct and durable electric parts and components, provides long life cycle, and minimaize electric load leading to consumption of low energy and to protection

Optional LN2 & CO2 back up System





Custom made order is available

Specifications can be changed without prior notice for quality improvement.

# **Upright Type**



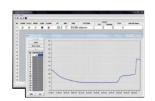
#### Control System



Microprocessor PID digital controller with Self-Diagnostic and Alarm System

- High / Low limited temperature parameters set and value
- Automatic voltage stabilization (Buck-boost) system
- Password locking system for protection set parameters
- Battery back-up system for data and display of controller
- Visible and audible alarm system for safety operation
- Optional CO2 back-up system in case of power failure

### PC Software System



RS - 232C/485 Interface

Graphic monitoring for temperature on real-time

### Alarm System

- High / Low limit temperature alert
- Electric power failure warning alert
- Status of door opening warning alert
- Low battery back-up level warning alert
- High and low temperature check alert
- Password for set parameters alert
- Self-Diagnostic system alert
- Condenser temperature alarm alert

# Optional Accessories



7-days Chart Recorder



Electromagnetic door password locking system



CO2 / LN2 Back up System





IQ - OQ Documentation & Validation

| MODEL              |          | LBF-4010U(/E)   | LBF-4015U(/E)    | LBF-4020U(/E)     | LBF-4025U(/E)      |
|--------------------|----------|---|------------------|-------------------|--------------------|
| Refrigeration Type |          | Single Stage Refrigeration System / Upright Type                  |                  |                   |                    |
| Dimension          | Inner    | 600 x 640 x 960   | 600 x 640 x 1280 | 750 x 640 x 1280  | 750 x 760 x 1280   |
| (W x D x H mm)     | Outer    | 895 x 990 x 1730  | 895 x 990 x 2050 | 1045 x 990 x 2050 | 1045 x 1110 x 2050 |
| Capacity           |          | 369 ℓ   | 492 ℓ            | 615 ℓ             | 730 ℓ              |
| Compressor         |          | 3 / 4HP   | 3 / 4HP          | 1HP               | 3 / 2HP            |
| Controller         |          | Microprocessor Digital PID Controller with Battery back up system |                  |                   |                    |
| Temperature        |          | -10°C to -35°C  |                  |                   |                    |
| Insulation         |          | 145mm High density polyurethane foamed insulation                 |                  |                   |                    |
| Material           | Interior | Stainless Steel 304 (/E : EGI Steel)                              |                  |                   |                    |
|                    | Exterior | Epoxy powder coated EGI steel                                     |                  |                   |                    |
| Safety             |          | High / Low Temp. Protector, ELCB, Thermal Protector               |                  |                   |                    |
| Electric Supply    |          | 220/230V, 50/60Hz   |                  |                   |                    |