

DC Freezer Refrigerators

Environmentally friendly DC Freezer-Refrigerator powered by Meditech Technology for safe storage for following applications such as Remote homes, Eco - resorts, Disaster preparedness, Beverage vending, Medical Clinics, Boats and Marine, Missionaries and Remote Storage

Save On Cost

Save on costs with Meditech DC refrigerators and freezers. These high efficiency refrigerators and freezers have exceptionally low energy consumption, requiring smaller, less expensive power systems and low operating expense. High quality construction provides excellent reliability and long life.

Super-insulated cabinets feature 11cm of polyurethane insulation with powder-coated galvanized steel exterior/SS304 and galvanized steel interior/SS304. A zero-maintenance, brushless, thermostatically controlled DC compressor operates on 12 or 24 VDC. A patented low-frost system reduces frost and moisture build up for low maintenance. These chest-style refrigerators and freezers are easy to clean using the drain hole at the bottom of the unit.

With thick insulation and refrigeration system optimized for solar, Meditech refrigerators and freezers provide outstanding economical and reliable operation. Low energy consumption is the key that allows Meditech refrigerators and freezers to be cost effectively powered from solar, wind, fuel cells or batteries. This technology allows refrigeration in remote locations where it was previously unavailable or prohibitively expensive.

Temperature-maintained defrost designed with thermal sensors and heaters in the evaporator, all under precise microprocessor control.

Features

- 110mm PUF insulation
- Upto 53% less power consumption
- Require the power supply of 8 hrs only in a day.
- Retain temperature of the freezer for upto 16 hrs after power cut.
- Super tropicalised to perform in extreme temperatures



Designed to conform to AABB criteria, the series ensures stable and reliable temperature control utilizing Meditech original technology. A special highly efficient compressor designed and used by Meditech provides rapid cooling and quiet performance for each model.

Temperature Variations Prevented

The Meditech BBR Series is designed to minimize cold air loss even with frequent door openings.

Foamed-in-place insulation in the walls and magnetic sealed outer doors prevent chamber air leakage and promote complete door closings

User Friendly Design

Selectable storage system **Fluorescent interior lamp** with ON/OFF switch and a **large view window** in the outer door provide a clear view of stored items

Eye Level Digital display is easy to see, and is calibratable through the control panel Filterless construction eliminates bothersome filter cleaning

Alarm and Safety Functions

To ensure the safety of precious blood supply, the Meditech Series provides the following safety functions

Audible and flashing LED visual alarms with remote alarm contacts, in case of power failure, high or low temperature

Door Alarm and key lock are standard features

Built-in temperature recorder if required

Multi air-flow plenum system ensures excellent temperature uniformity in larger capacity models.

Temperature-maintained defrost designed with thermal sensors and heaters on the evaporator, all under precise microprocessor control.

Stable Temperature Control

Temperature is controlled by two sensors located in the liquid-loaded **monitor bottles**,

Two thermistor sensors constantly monitor the temperature in both the upper and the lower part of chamber.

Microprocessor control ensures the most accurate temperature control available.

Know your machine

Equipment meets electrical safety specification such as that of IEC (Class I)

CFC free refrigerant gas/green gas CFC free insulation. Upto 53% less power consumption

Led Light along the length of the Refrigerator for uniform illumination through all the Compartment

Glass & Solid door, Automatic closing of the front door below opening angle of 90° and opening angle limited to 110°. Insulation and gasket is of silicone

Digital PLC Controller

The display is positioned at eye-level to make it easier to read and simplify operation.

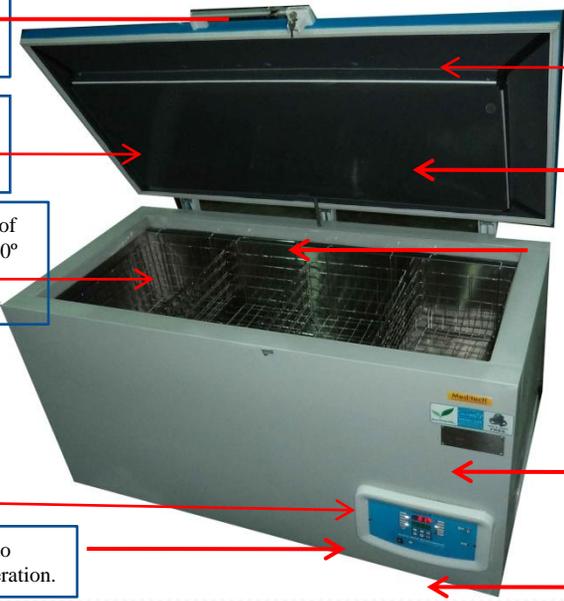
External Corrosion Resistant, powder coated (CR at least 1.2mm thickness)

Refrigerator Body

Door Heater avoids moisture condensation in humid atmospheric conditions. Pane heated door insulates the refrigerator from atmospheric temperature Magnetic door gaskets

Efficient compressor faster pull down & Recovery Time. Compressor Starting Voltage: 22% below nominal voltage.

4 Castor Wheels, 2 Lockable & 2 Movable



Best in Class 110mm insulation for effective temperature Holdover

Hotline to prevent frost accumulation

An inbuilt line voltage corrector of appropriate rating will form part of standard configuration.

Factory calibrated digital sensor dipped in liquid medium for accurate temp measurement and display .Flicker free LED lamp for uniform lighting and better

Door opening audio and visual display alarm.

Smart handle with Lock and Key

Circulators for uniform Temperature

Storage Baskets . Mesh type sliding stainless steel baskets allows to be placed upright with sufficient airspace to reduce "Sardine effect"

Unique design of Thermal barrier for better energy efficiency



PLC Based Controller



User Friendly Settings

1. Date
2. Time
3. High Temp Alarm
4. Low Temp Alarm
5. Hysteresis
6. Compressor Delay

Scrolling LIVE Data logger on LED screen

1. Temperature
2. Incoming Voltage
3. Ambient Temperature
4. Time in hours of revolution chart
5. Current Date
6. Current Time
7. Battery Voltage

LED INDICATION

1. Line In
2. Power
3. Comp On
4. Heater On
5. Battery On
6. Battery Low
7. Temp High
8. Temp Low
9. Power Fail
10. Sensor Fail
11. Chart Change
12. System On

RM-Series

Please mention following code while ordering. W-Glass Door , M- Solid Door

Technical Specification

Particulars	MTBBR1 LED	MTBBR2 LED	MTBBR3 LED	MTBBR4 LED	MTBBR5 LED
Temperature Control	PLC & Microprocessor	PLC & Microprocessor	PLC & Microprocessor	PLC & Microprocessor	PLC & Microprocessor
Display	LED	LED	LED	LED	LED
Capacity [Liters]	120	215	310	410	500
Number of Drawers	3	3	3	5	6
Temperature	Preset at 5°C to -15°C ± 1°C				
Temperature Alarm	High 6°C & Low 2°C, Audio Visual Alarm				
Internal Body Material	Powder Coated CRCA Steel / Stainless Steel 304 (AISI Grade, Non Corrosive, Non Magnetic)				
External Body Material	Powder Coated CRCA Steel / Stainless Steel 304 (AISI Grade, Non Corrosive, Non Magnetic)				
Insulation	110mm Cabinet & Door	110 mm minimum for Body & 110 mm for for Door, CFC free polyurethane foam			
Illumination	LED on Request on customer request				
Recorder	Seven Days Circular Chart Recorder on customer request				
Noise Level	Less Than 65 db(A)				
Battery Backup (Controller)	Rechargeable, Fully charged Sealed Maintenance Free battery runs for more than eight hours				
Line Voltage Corrector	In built of suitable rating				
Power Failure Alarm	Audio Visual Alarm				
Electrical	Incoming Voltage : 12-24 Volts DC Source. Battery (or) Solar panels (or) Equivalent Source of energy				