

## Ice Lined Refrigerator



Environmentally friendly Ice Lined refrigerator powered by Meditech Technology for safe storage of vaccines between 2°C to 8°C.

**Temperature Backup – 30 Hours.**  
**Alarms – 12 Types of Audio Visual Alarm**  
**Real Time Clock Date and Time.**

### Features

- Reliable temperature between +2°C to +8°C
- Only 8 hrs. of electricity needed per 24 hrs. at 43°C AMB
- Self-regulating cooling system
- Air flow system in vaccine compartment
- External cabinet and internal liner pre-painted galvanized steel
- Cooling coil of copper
- CFC-free refrigerant and insulation
- Compressor made for use in the tropics
- Solid lid with handle and lock
- 3 baskets for organized storage
- Available in 220V-240V 50/60Hz + 115V 60Hz
- Delivered in solid, wooden crate



### Temperature Variations Prevented

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

**Separated inner doors** minimize the chamber air leakage during door openings.

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

**Large air circulation fan** enables rapid temperature recovery after door openings

### User Friendly Design

Selectable storage system **LED interior lamp** with ON/OFF switch and 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

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

Electronic thermostat, airflow system and the specially designed icelining ensure stable temperature control in range from +2°C to +8°C. The actual temperature is readily checked on the external digital thermometer. Effective insulation and the icelining ensure long hold-over time in case of power cut. The galvanised steel cabinet protects against corrosion. Baskets included for organized storage.



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

# PLC Based Controller



## 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. System On

## 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

## User Friendly Settings

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

Model	MTBBR1	MTBBR2	MTBBR3	MTBBR4
Type	Horizontal	Horizontal	Horizontal	Horizontal
Gross volume, litres (cu. ft.)	64 (2.3)	153(5.3)	218(7.7)	340 (12.0)
Temperature range at 5°C to 43°C AMB	+2°C to +8°C			
Power consumption (stable running) at 43°C AMB per 24h, kW	1.2	1.89	2.13	2.13
Hold-over time during power cut at 43°C AMB, hrs.	30			
Height, mm (inches) x Width, mm (inches) x Depth, mm (inches)	840 (33.1) x 720 (28.3) x 700 (27.6)	840 (33.1) x 920 (36.2) x 700 (27.6) x	840 (33.1) x 1260 (49.6) x 700 (27.6)	1650(65.0)*650(25.6)*855(33.7)(m)
Gross weight, kg (lbs)	70 (154)	102 (225)	126 (278)	335.1/399.0
Net weight, kg (lbs)	57 (126)	78 (172)	97 (214)	152/181
Baskets	3 Nos	3 Numbers	5 Nos	7 Nos
LOADING QUANTITIES Qty. per 20' / 40' container	44 / 92	36 / 72	24 / 50	18 / 42
Door	Solid door fitted in door-frame made of 1 8swg CR Sheet, powder coated with structure finish and filled with formed in position PUF			
Cabinet material	18 swg CR Sheet - powder coated			
Inner chamber	22 SWG Stainless Steel Sheet			
Input voltage of BBR	Available in 220V-240V 50/60Hz + 115V 60Hz			
Stabilizer	1KVA Built in stabilizer			
Chamber temperature range	2°C to 8°C			
Compressor	Hermetically sealed compressor			
Refrigerant	R134a			
Wheels	Caster wheels			
Temperature sensing method	Encapsulated digital sensor dipped in 0.25% glycerine solution kept in a plastic bottle			
Temperature controller	Temperature Recorder and Control Unit (TRCU)			
Accuracy of temperature sensor	(+/- 0.1°C)			
Display	4x7 segment LED (red) and 4x7 segment LED (green)			
Display resolution	0.1°C			

## 6.0 LED Indicators

Sl.No	Photos	Function Indication
1.		This LED is on when there is a power supply to the machine from the main source
2		This LED is on when the Controller is in working condition.
3		This LED is on when the compressor is in working condition
4		This LED is on when the heater is in working condition
5		This LED is on when the battery is in working condition
6		This LED is on when the battery is discharged
7		This LED is on when the inside compartment temperature of the refrigerator is high above the set temp
8		This LED is on when the inside compartment temperature of the refrigerator is Low below the set temp
9		This LED is on when there is power failure.
10		This LED is on when there is sensor fail
11		This LED is on when after 162 hours of charge change ( 6 hours before the completion of 7 days)
12		This LED is on when all functions of the System is in working condition

# 7.0 Keypad Functions



Sl.No	Photos	Function Indication
1		The Menu button is pressed to enter into MENU option.
2		The Enter button is pressed to enter into “ENTER” option.
3		The Up Arrow button is pressed to go Upwards in the menu option.
4		The Down Arrow button is pressed to go Downwards in the menu option.
5		The data logger is pressed to get the data from the PLC to the computer
6		The MUTE button is pressed to MUTE any Alarms and sounds
7		The Door Open LED is activated along with the buzzer sound indicating the Door Open function
8		The ON button is pressed to switch on the refrigerator
9		The USB is provided to connect the Refrigerator to the computer system.