Meditech®

Touch Screen Deep Freezer -20 Degree

Green Technology for life

Environmentally friendly Ultra Deep Freezer, -20 degree powered by Meditech Technology for safe storage.

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.

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.

User Friendly Design

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

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 samples , 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.

Temperature Variations Prevented

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

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

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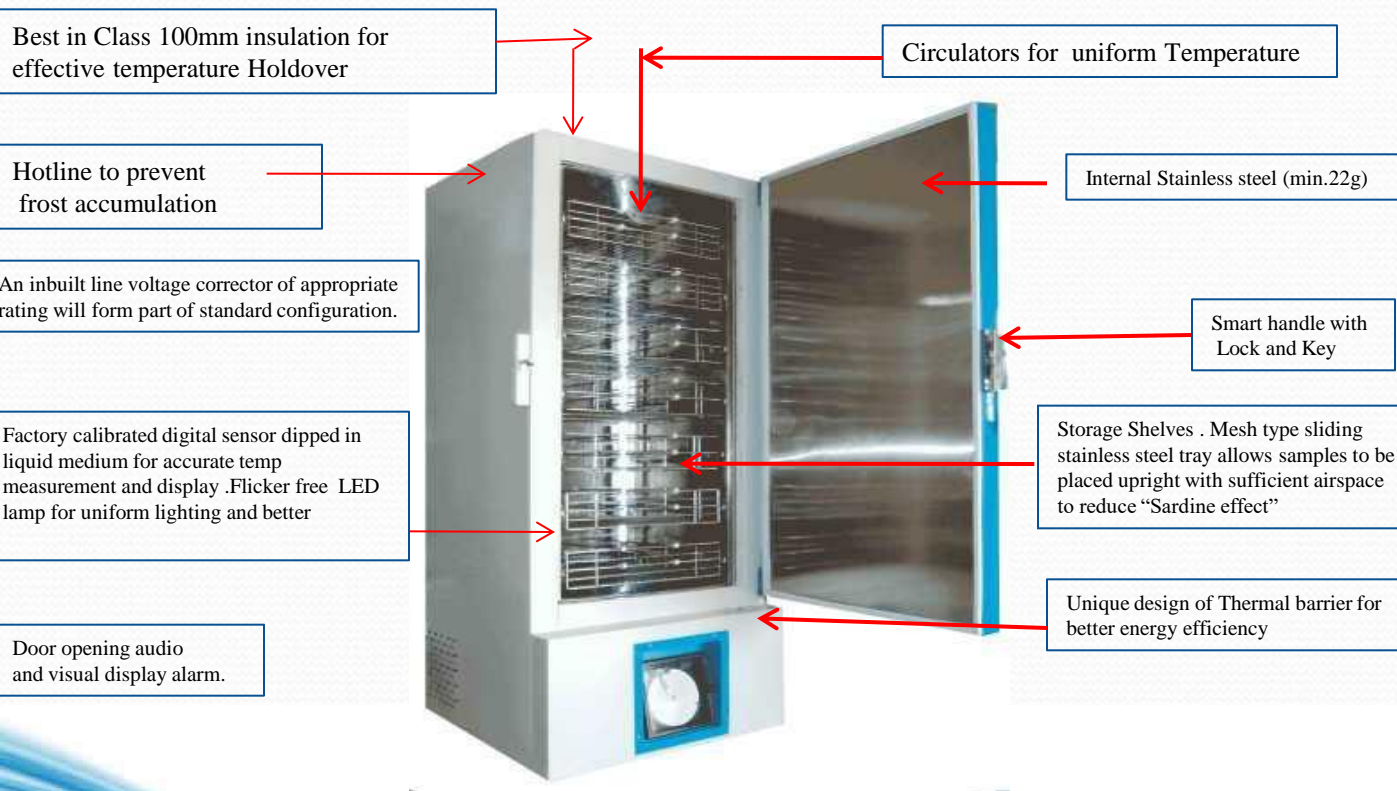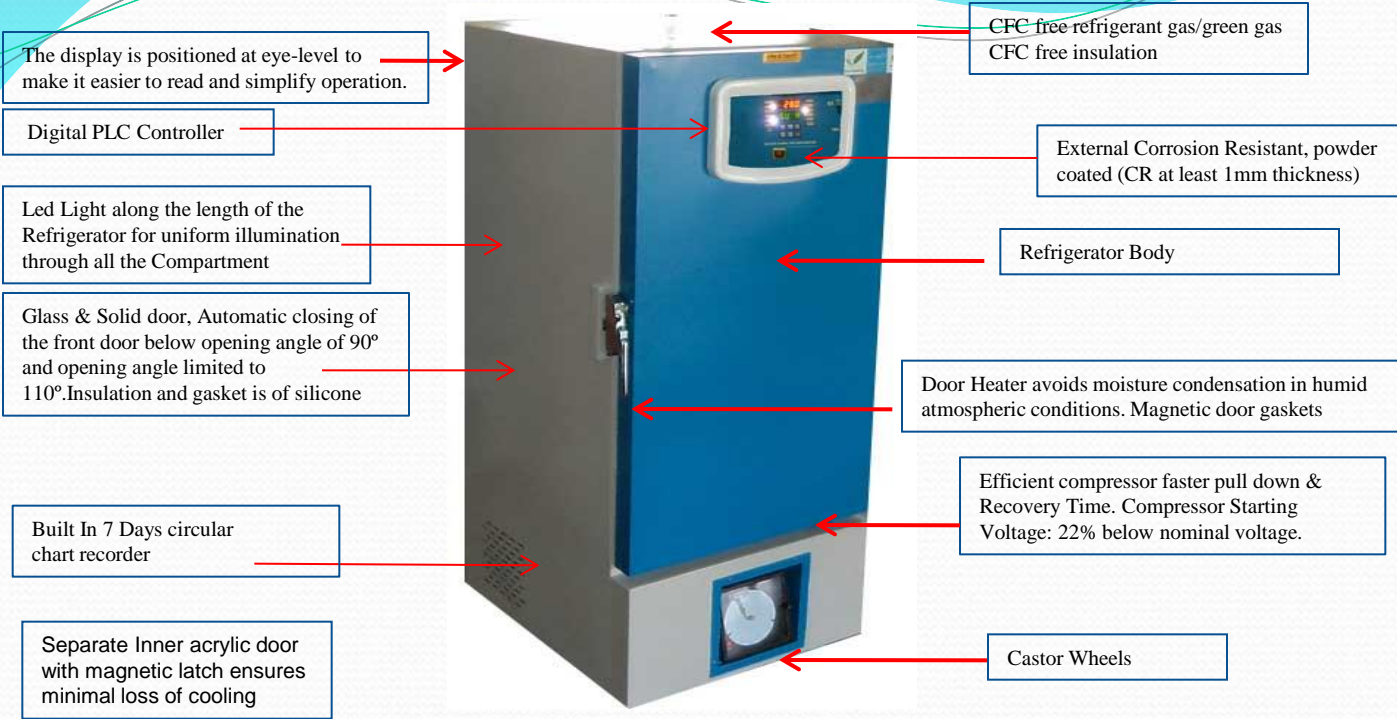

Multi air-flow plenum system ensures excellent temperature uniformity in larger capacity models.

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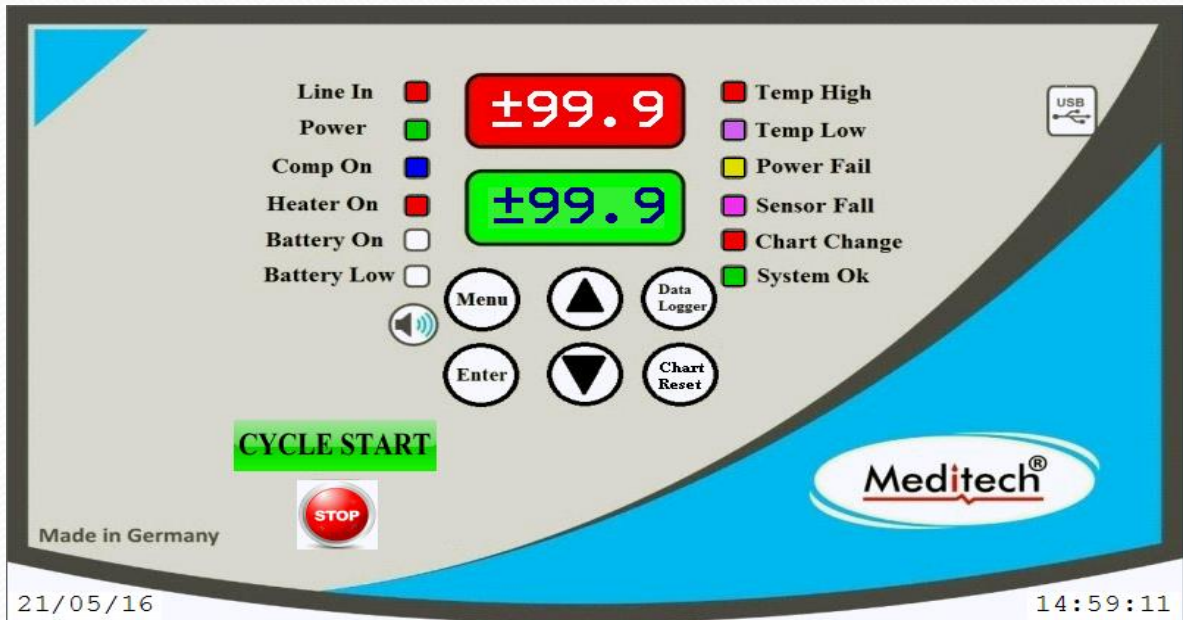
2 Know your Machine

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

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

Digital PLC Controller

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 90º and opening angle limited to 110º.Insulation and gasket is of silicone

Built In 7 Days circular chart recorder

Separate Inner acrylic door with magnetic latch ensures minimal loss of cooling

CFC free refrigerant gas/green gas CFC free insulation

External Corrosion Resistant, powder coated (CR at least 1mm thickness)

Refrigerator Body

Door Heater avoids moisture condensation in humid atmospheric conditions. Magnetic door gaskets

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

Castor Wheels

Best in Class 100mm 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.

Circulators for uniform Temperature

Internal Stainless steel (min.22g)

Smart handle with Lock and Key

Storage Shelves . Mesh type sliding stainless steel tray allows samples to be placed upright with sufficient airspace to reduce "Sardine effect"

Unique design of Thermal barrier for better energy efficiency

Touch Screen LCD Controller

Scrolling LIVE Data logger on LED screen
1. Temperature
2. Incoming Voltage
3. Ambient Temperature
4. Time in hours of revolution chart
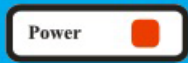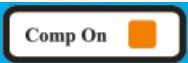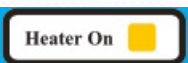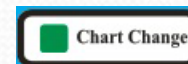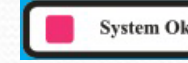5. Current Date
6. Current Time
7. Battery Voltage
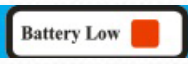
User Friendly Settings
1. Date
2. Time
3. High Temp Alarm
4. Low Temp Alarm
5. Hysteresis
6. Compressor Delay

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

6.0 LED Indicators

| Sl.No	Photos	Function Indication
1.	Line In	This LED is on when there is a power supply to the machine from the main source
2	Power	This LED is on when theController is in working condition.
3	Comp On	This LED is on when the compressor is in working condition
4	Heater On	This LED is on when the heater is in working condition
5	Battery On	This LED is on when the battery is in working condition
6	Battery Low	This LED is on when the battery is discharged
7	Temp High	This LED is on when the inside compartment temperature of the refrigerator is high above the set temp
8	Temp Low	This LED is on when the inside compartment temperature of the refrigerator is Low below the set temp
9	Power Fail	This LED is on when there is power failure.
10	Sensor Fail	This LED is on when there is sensor fail
11	Chart Change	This LED is on when after 162 hours of charge change (6 hours before the completion of 7 days)
12	System Ok	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	Door Open	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	USB	The USB is provided to connect the Refrigerator to the computer system.

Blood Bank Refrigerators Green Technology for life

Environmentally friendly blood bank refrigerator powered by Meditech Technology for safe storage of blood bags.

TOUCH SCREEN FUNCTIONS
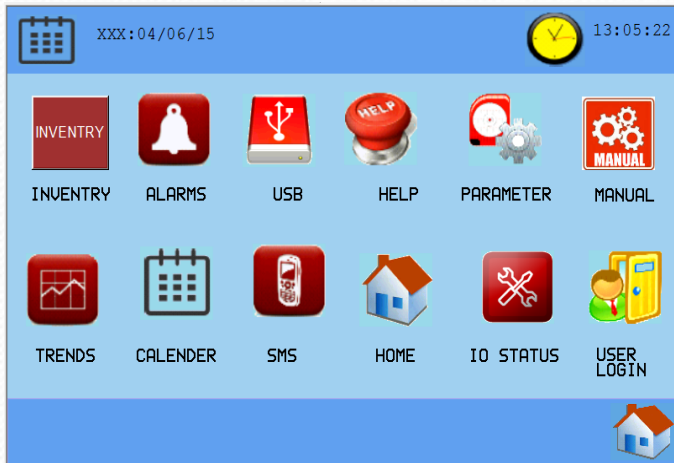
INVENTORY: Now maintain inventory of Blood Groups Electronically. No need of bulky registers and manual confusion. Meditech Helps to maintain Blood groups row wise , tray wise and partition wise so that the touch screen always displays the current stock in Refrigerator. Also Meditech screen displays blood stock group wise such as A, A+, B+, B-, AB+, AB-, O+ and O-

SCADA software is also available for full Blood Bank management system.

ALARMS: Low Temperature and high temperature alarms history and graphs can be viewed or printed or transferred using PEN drive.

**USB**: USB Menu helps to transfer all logs to a flash PEN Drive

**TRENDS**: This Menu displays higher and lower temperature parameters with time in Historical and Real Time.

CALENDAR: Time and Date can be set using this MENU

SMS: This MENU is set to sent SMS of all critical parameters to a predefined number

IO STATUS: This MENU is used at the time of trouble shooting

USER LOGIN: Keep you Refrigerator and data protected with passwords. User are created using this MENU
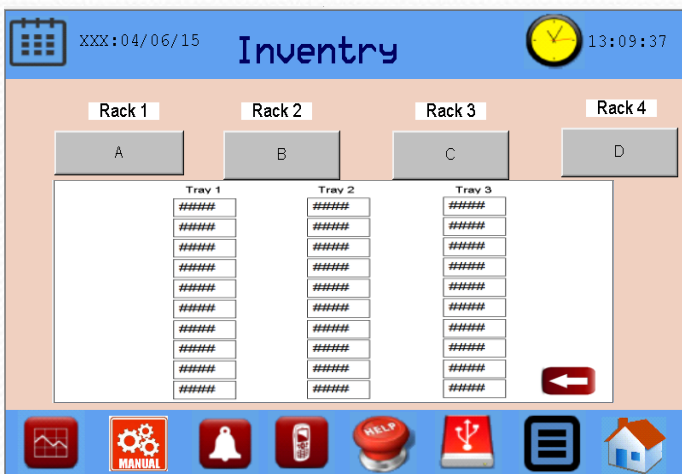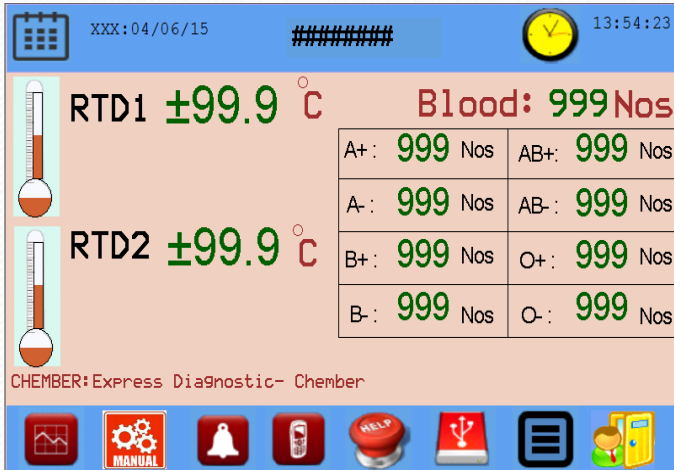
MTDF Series

Model	MTDF01	MTDF01 Touch Screen	MTDF02	MTDF02 Touch Screen	MTDF03	MTDF03 Touch Screen
Type			Vertical			
Effective storage volume	165 Litre		300 Litre		600 Litre	
Trays (removable type)	3 stainless steel slide out trays		4 stainless steel slide out trays		6 stainless steel slide out trays	
Steel door	4 compartments		4 compartments		4 compartments	
Steel door hinge	SS 304					
Steel door ring	SS 304					
Door	made of 1 8swg CR Sheet, powder coated with structure finish and filled with formed in position PUF					
Miniature Circuit Breaker (MCB)	240V / 10 A					
Cabinet material	18 swg CR Sheet - powder coated					
Inner chamber	22 SWG Stainless Steel Sheet					
Input voltage	160 - 270 V, 50Hz, single phase AC					
Stabilizer	4 KVA stabilizer					
Chamber temperature range	-20ºC					
Air circulation inside the chamber	Continuously operated forced air circulation using the evaporator fan					
Slide out rail	Heavy duty telescopic rail					
Lamp	LED Lamp 14W / LED Lamp					
Compressor	Hermetically sealed compressor					
Refrigerant	R404a					
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	(+/- 0.5ºC)					
Display	4x7 segment LED (red)					
Display resolution	0.5ºC					
Alarms & Indications	Line in		Visual			
	Power		Visual			
	Compressor ON		Visual			
	Heater ON		Visual			
	Temperature High		Audio - Visual			
	Temperature Low		Audio - Visual			
	Door open		Audio - Visual			
	Battery Low		Visual			
	Battery ON		Visual			
	Power failure		Audio - Visual			
	Sensor failure		Audio - Visual			
	Chart change		Visual			

1. Meditech can manufacture freezers according to customer Specifications and size
2. Full SS Body with life time warranty available on customer demand