

Ultra Deep Freezer -86 Degree Double Door



Environmentally friendly Ultra Deep Freezer, -86 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.



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. Ultrathin vacuum insulation panel and silicon gasket on the doors for tight sealing and to reduce temperature recovery time after door opening.



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 MTUDF 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

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 Temperature recorder with rechargeable battery back up including charger maintenance free and insensitive to vibration. 12 Volts Battery NIMH and 1Ampere charger.

Alarm and Safety Functions

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

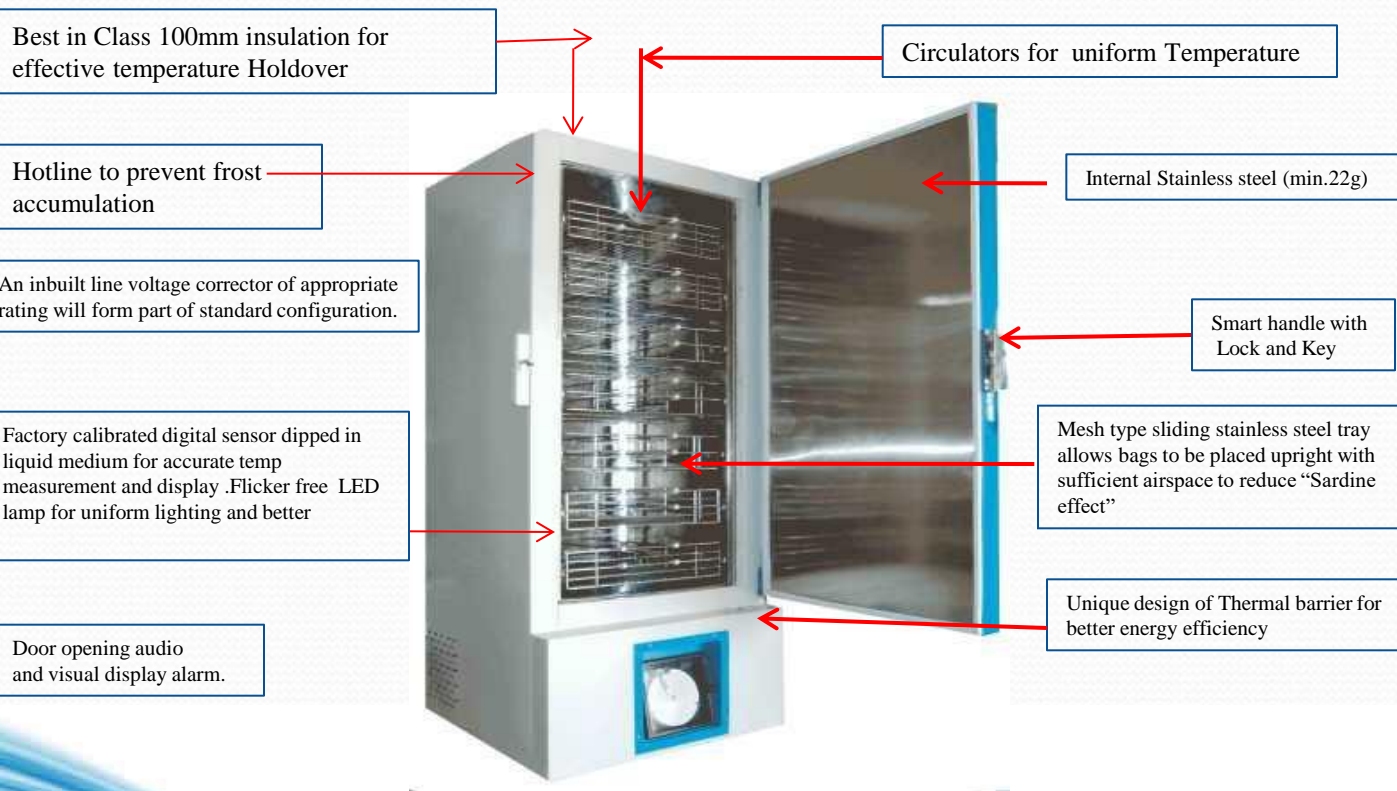
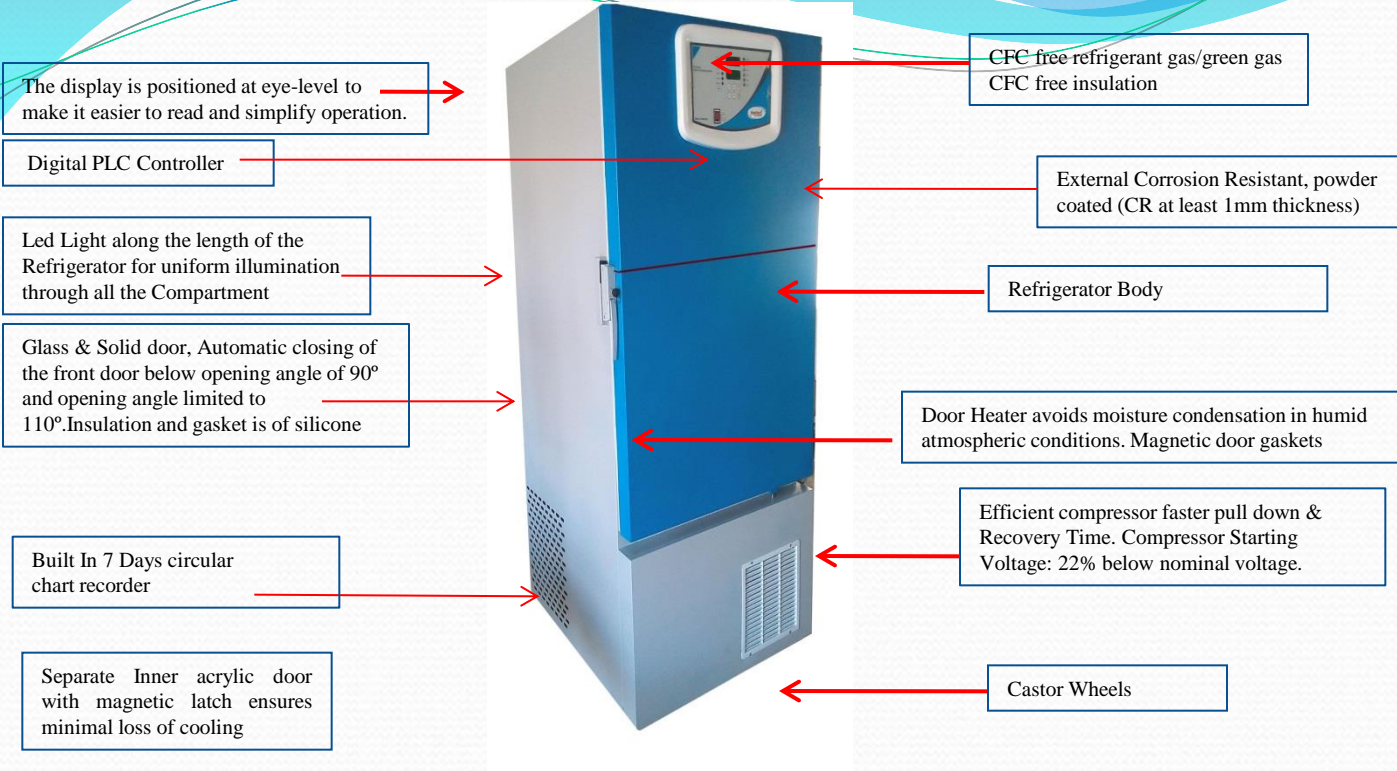
Audible and flashing LED visual alarms with remote alarm contacts, in case of power failure, high or low temperature

Door Alarm, clean filter and key lock are standard features



2 Know your Machine

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



PLC Based 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


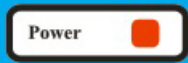
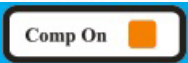
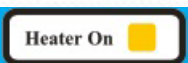

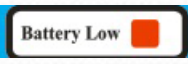




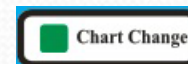
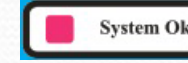
LED INDICATION

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

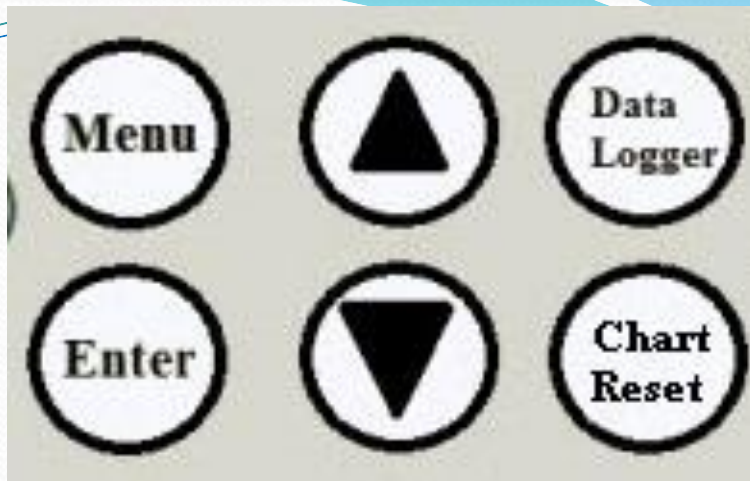
User Friendly Settings







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

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		This button has to be pressed after chart change.

MTDF Series

Model	MTUD01	MTUD01 Touch Screen	MTUD04	MTUD02 Touch Screen	MTUD03	MTUD03 Touch Screen
Type	Vertical					
Effective storage volume	165 Litre		400 Litre		650 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 18swg CR Sheet, 2 nos powder coated with structure finish and filled with formed in position PUF					
Miniature Circuit Breaker (MCB)	240V / 10 A					
Cabinet material	1.5 mm thick swg CR Sheet - powder coated					
Inner chamber	1.2 mm Stainless Steel Sheet					
Input voltage	160 - 270 V, 50Hz, single phase AC					
Stabilizer	4 KVA stabilizer					
Chamber temperature range	-50°C to -86 °C					
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	(+/- 0.5°C)					
Display	4x7 segment LED (red)					
Display resolution	0.5°C					
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