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.

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 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.

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.

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.

Environmentally friendly Ultra Deep Freezer, -86 degree powered by Meditech Technology for safe storage of Plasma Bags.
2 Know your Machine

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

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

Refrigerator Body

Blood Storage Shelves. Mesh type sliding stainless steel tray allows bags to be placed upright with sufficient airspace to reduce “Sardine effect”

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.

Circulators for uniform Temperature

Smart handle with Lock and Key

Blood Storage Shelves . Mesh type sliding stainless steel tray allows bags to be placed upright with sufficient airspace to reduce “Sardine effect”

Internal Stainless steel (min.22g)

Built In 7 Days circular chart recorder

Built In 7 Days circular chart recorder

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.

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

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

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.

CFC free insulation

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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. Chart Change
12. System On

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
## MTDF Series

<table>
<thead>
<tr>
<th>Model</th>
<th>MTUD01</th>
<th>MTUD02</th>
<th>MTUD03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Vertical</td>
<td>Vertical</td>
<td>Vertical</td>
</tr>
<tr>
<td>Effective storage volume</td>
<td>165 Litre</td>
<td>300 Litre</td>
<td>600 Litre</td>
</tr>
<tr>
<td>Storage capacity per tray</td>
<td>80 nos of plasma bags per tray</td>
<td>80 nos of plasma bags per tray</td>
<td>80 nos of plasma bags per tray</td>
</tr>
<tr>
<td>Trays (removable type)</td>
<td>3 stainless steel slide out trays</td>
<td>4 stainless steel slide out trays</td>
<td>6 stainless steel slide out trays</td>
</tr>
<tr>
<td>Steel door</td>
<td>4 compartments</td>
<td>4 compartments</td>
<td>4 compartments</td>
</tr>
<tr>
<td>Steel door hinge</td>
<td>SS 304</td>
<td>SS 304</td>
<td>SS 304</td>
</tr>
<tr>
<td>Dimensions (external with caster wheel (W x D x H) in mm)</td>
<td>600 x 630 x 1340</td>
<td>600 x 630 x 1785</td>
<td>810 x 905 x 1750</td>
</tr>
<tr>
<td>Dimensions (internal) (WxDxH) in mm</td>
<td>510 x 480 x 900</td>
<td>510 x 500 x 1360</td>
<td>705 x 770 x 1200</td>
</tr>
</tbody>
</table>

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: 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: -40ºC
- 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

<table>
<thead>
<tr>
<th>Alarm/Indication</th>
<th>MTUD01</th>
<th>MTUD02</th>
<th>MTUD03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line in</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Power</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Compressor ON</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Heater ON</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Temperature High</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
</tr>
<tr>
<td>Temperature Low</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
</tr>
<tr>
<td>Door open</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
</tr>
<tr>
<td>Battery Low</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Battery ON</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td>Power failure</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
</tr>
<tr>
<td>Sensor failure</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
<td>Audio - Visual</td>
</tr>
<tr>
<td>Chart change</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
</tr>
</tbody>
</table>

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