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

**Stable Temperature Control**

Temperature is controlled by two sensors located in the liquid-loaded monitor bottles, which are in the shape of a blood bag.

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

**Microprocessor control** ensures the most accurate temperature control available.

**Temperature Variations Prevented**

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

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

**FEATURES**

Digital temperature recorder controller unit coupled with a unique air flow system maintains the chamber uniformly at the AABB recommended temperature of 22 +/- 0.1°C.

Digital sensor placed inside the solution-filled bottle ensures error-free readings and matches the exact temperature inside the bag.

Agitation at 70 +/- 5 cycles per minute to avoid platelet clumping and to ensure maximum viability.

SS304 grade sliding stainless steel trays.

Pause switch provided to arrest agitator motion for 10 seconds, for easy placement and removal of bags.

Toughened glass door for safety and better visibility of platelet bags.

Magnetic gaskets for doors ensure no air is lost in a ‘door closed’ condition.

The internal fan switches off when the door is opened to avoid the loss of cold air.

Eyelevel positioning of TRCU for better visibility.

Automatic illumination when the door is opened allows for better visibility.

The stabilizer protects the incubator from input voltage fluctuations and ensures that the equipment has a long life-cycle.
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
- Refrigerator Body
- External Corrosion Resistant, powder coated (CR at least 1.2mm thickness)
- Refrigerator Body
- Door Heater avoids moisture condensation in humid atmospheric conditions. Pane heated glass door insulates the refrigerator from atmospheric temperature Magnetic door gaskets
- Built In 7 Days circular chart recorder
- Circulators for uniform Temperature
- Internal Stainless steel (min.22g)
- 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”
- Unique design of Thermal barrier for better energy efficiency
- USB Data Logger
- Agitator
- Removable Plates
- Pause Button

Best in Class 80mm 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.

4 Castor Wheels, 2 Lockable & 2 Movable

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

CFC free refrigerant gas/green gas
CFC free insulation

www.newmeditech.com
Incubator and Agitator

Advance LED based 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

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

<table>
<thead>
<tr>
<th>Incubator-Agitator</th>
<th>Model</th>
<th>Bags, 350 ml</th>
<th>Capacity</th>
<th>Temperature Recording Device</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MTIA01</td>
<td>48 Bags</td>
<td>150 litres</td>
<td>7 days Chart recorder</td>
</tr>
<tr>
<td></td>
<td>MTIA02</td>
<td>96 bags</td>
<td>275 litres</td>
<td>7 days Chart recorder</td>
</tr>
<tr>
<td></td>
<td>MTIA12A</td>
<td>130 Bags</td>
<td>330 Litres</td>
<td>7 days Chart recorder</td>
</tr>
<tr>
<td></td>
<td>MTIA03</td>
<td>168 bags</td>
<td>500 Litres</td>
<td>7 days Chart recorder</td>
</tr>
</tbody>
</table>
### 6.0 LED Indicators

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Photos</th>
<th>Function Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><img src="#" alt="Line In" /></td>
<td>This LED is on when there is a power supply to the machine from the main source</td>
</tr>
<tr>
<td>2</td>
<td><img src="#" alt="Power" /></td>
<td>This LED is on when the controller is in working condition.</td>
</tr>
<tr>
<td>3</td>
<td><img src="#" alt="Comp On" /></td>
<td>This LED is on when the compressor is in working condition</td>
</tr>
<tr>
<td>4</td>
<td><img src="#" alt="Heater On" /></td>
<td>This LED is on when the heater is in working condition</td>
</tr>
<tr>
<td>5</td>
<td><img src="#" alt="Battery On" /></td>
<td>This LED is on when the battery is in working condition</td>
</tr>
<tr>
<td>6</td>
<td><img src="#" alt="Battery Low" /></td>
<td>This LED is on when the battery is discharged</td>
</tr>
<tr>
<td>7</td>
<td><img src="#" alt="Temp High" /></td>
<td>This LED is on when the inside compartment temperature of the refrigerator is high above the set temp</td>
</tr>
<tr>
<td>8</td>
<td><img src="#" alt="Temp Low" /></td>
<td>This LED is on when the inside compartment temperature of the refrigerator is Low below the set temp</td>
</tr>
<tr>
<td>9</td>
<td><img src="#" alt="Power Fail" /></td>
<td>This LED is on when there is power failure.</td>
</tr>
<tr>
<td>10</td>
<td><img src="#" alt="Sensor Fail" /></td>
<td>This LED is on when there is sensor fail</td>
</tr>
<tr>
<td>11</td>
<td><img src="#" alt="Chart Change" /></td>
<td>This LED is on when after 162 hours of charge change (6 hours before the completion of 7 days)</td>
</tr>
<tr>
<td>12</td>
<td><img src="#" alt="System Ok" /></td>
<td>This LED is on when all functions of the System is in working condition</td>
</tr>
</tbody>
</table>

[www.newmeditech.com](http://www.newmeditech.com)
<table>
<thead>
<tr>
<th>Sl.No</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image1" alt="Menu" /></td>
<td>The Menu button is pressed to enter into MENU option.</td>
</tr>
<tr>
<td>2</td>
<td><img src="image2" alt="Enter" /></td>
<td>The Enter button is pressed to enter into “ENTER” option.</td>
</tr>
<tr>
<td>3</td>
<td><img src="image3" alt="Up Arrow" /></td>
<td>The Up Arrow button is pressed to go Upwards in the menu option.</td>
</tr>
<tr>
<td>4</td>
<td><img src="image4" alt="Down Arrow" /></td>
<td>The Down Arrow button is pressed to go Downwards in the menu option.</td>
</tr>
<tr>
<td>5</td>
<td><img src="image5" alt="Data Logger" /></td>
<td>The data logger is pressed to get the data from the PLC to the computer</td>
</tr>
<tr>
<td>6</td>
<td><img src="image6" alt="Mute" /></td>
<td>The MUTE button is pressed to MUTE any Alarms and sounds</td>
</tr>
<tr>
<td>7</td>
<td><img src="image7" alt="Door Open" /></td>
<td>The Door Open LED is activated along with the buzzer sound indicating the Door Open function</td>
</tr>
<tr>
<td>8</td>
<td><img src="image8" alt="ON" /></td>
<td>The ON button is pressed to switch on the refrigerator</td>
</tr>
<tr>
<td>9</td>
<td><img src="image9" alt="USB" /></td>
<td>The USB is provided to connect the Refrigerator to the computer system.</td>
</tr>
</tbody>
</table>
Incubator and Agitator

Touch Screen LCD Controller

Made in Germany

21/05/16

14:59:11
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.