



# DEEP FREEZER -25°C



## Quality, Management, Environment, Health & Safety Standards



CDSCO MD 5 License



USFDA Listed



European CE



ISO 9001: 2015  
IAF



ISO 13485:2016  
NABCB/IAF



ISO 45001 : 2018  
IAF



7 Electric Safety Certifications  
IEC 60335-1 and IEC 60335-2-24, IEC 61010-1,  
IEC 61010-2-020 and 61010-2-101, IEC 61326-1,  
IEC 61326-2-6.

## INTRODUCTION

**MarkEn** Deep Freezers set the gold standard for safe, reliable, and energy-efficient preservation of the most sensitive biological materials including stem cells, plasma, semen, viruses, bone grafts, and other irreplaceable samples. Operating within a precisely controlled temperature range of  $-10^{\circ}\text{C}$  to  $-25^{\circ}\text{C}$ , these advanced units are engineered to meet the uncompromising demands of life science research institutes, hospitals, blood banks, pharmaceutical and biotech companies, and high-precision industrial applications. With robust performance, cutting-edge technology, and meticulous quality standards.



## TECHNICAL EXCELLENCE



**Wide Temperature Range:** Offering precise cooling from  $-10^{\circ}\text{C}$  to  $-25^{\circ}\text{C}$ .



**Tropical Climate Adaptation:** Engineered to maintain peak performance even in high-temperature environments.



**Heavy-Duty Weight Capacity:** Uniformly distributed load-bearing trays for maximum efficiency.



**Advanced Freezing Technology:** Compression cycle system ensuring rapid, frost-free freezing.



**Eco-Conscious Design:** 100% CFC-free refrigeration and PUF insulation for a greener planet.



**Premium-Grade Tubing:** Constructed with 99.97% pure copper for superior durability and efficiency.

## CUTTING-EDGE FEATURES



**Anti-Condensation Innovation:** Hot line at the cabinet mouth prevents moisture buildup, safeguarding stored samples.



**Intelligent Data Management:** Internal memory captures temperature and alarm records, easily transferable to a PC.



**Effortless Defrosting:** Convenient defrosting provision simplifies maintenance.



**Auto Door Closure:** Ensures consistent internal temperatures by preventing accidental exposure.



**Unmatched Longevity:** Designed for a minimum 10-year lifespan with guaranteed spare parts availability.

## RIGOROUS SAFETY AND CERTIFICATIONS



**CE Certified:** Approved by European notified body No.1282.



**Global Electrical Safety Standards:** Fully compliant with IEC 61010, IEC 60335-1, and IEC 60335-2-24 standards.

## ESSENTIAL ACCESSORIES



**Precision Stem Alcohol Thermometer:** Delivers accurate temperature monitoring for optimal sample preservation.



**Advanced Voltage Stabilizer:** Servo-controlled with automatic high-low voltage cut-off and time delay restart, ensuring uninterrupted performance.



**Automated Vent Port**



**Heavy-Duty Door Hinges**



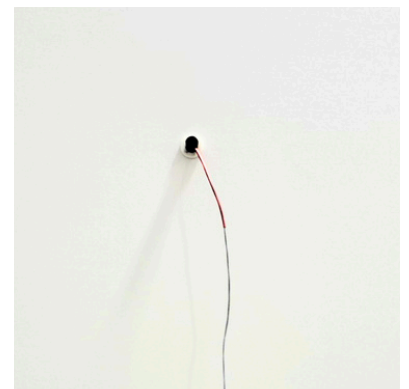
**Secure Internal Door Locking**



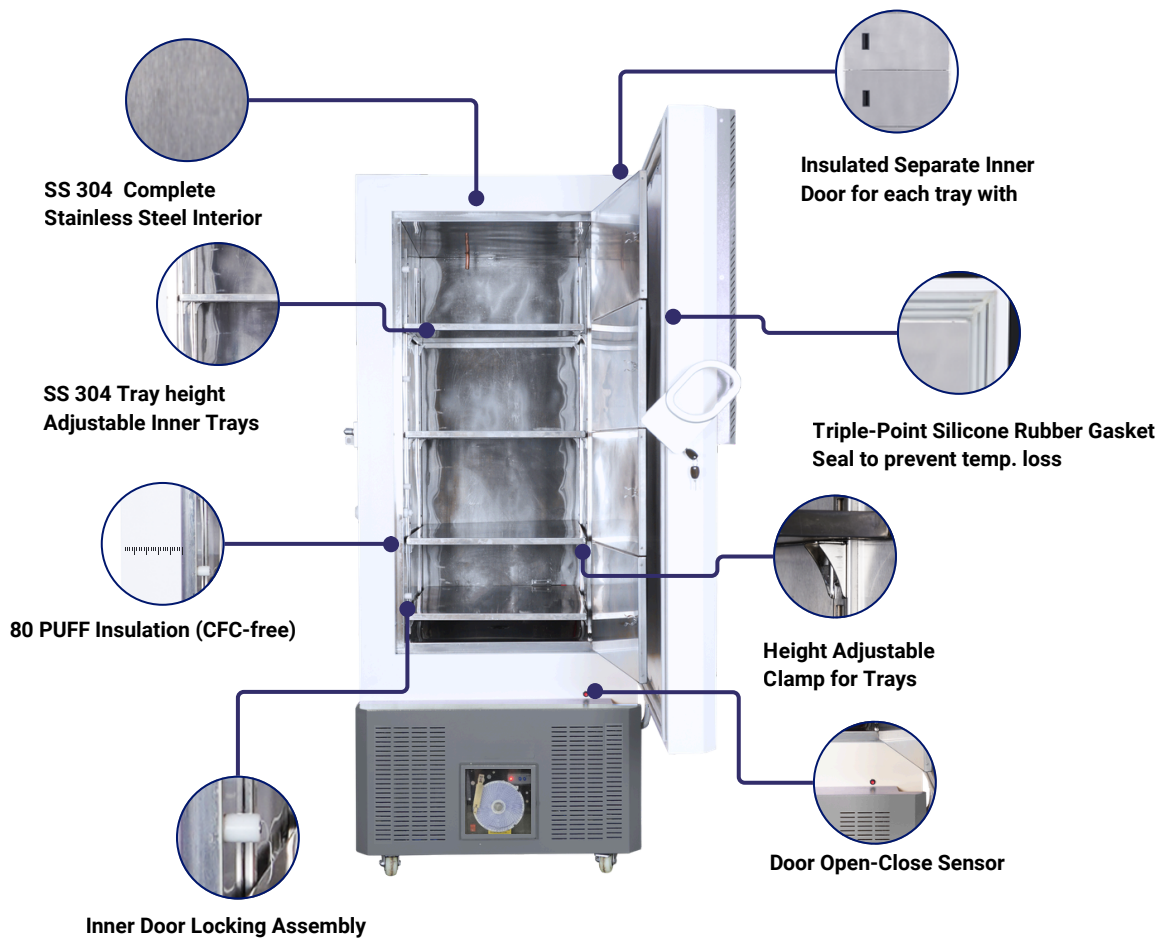
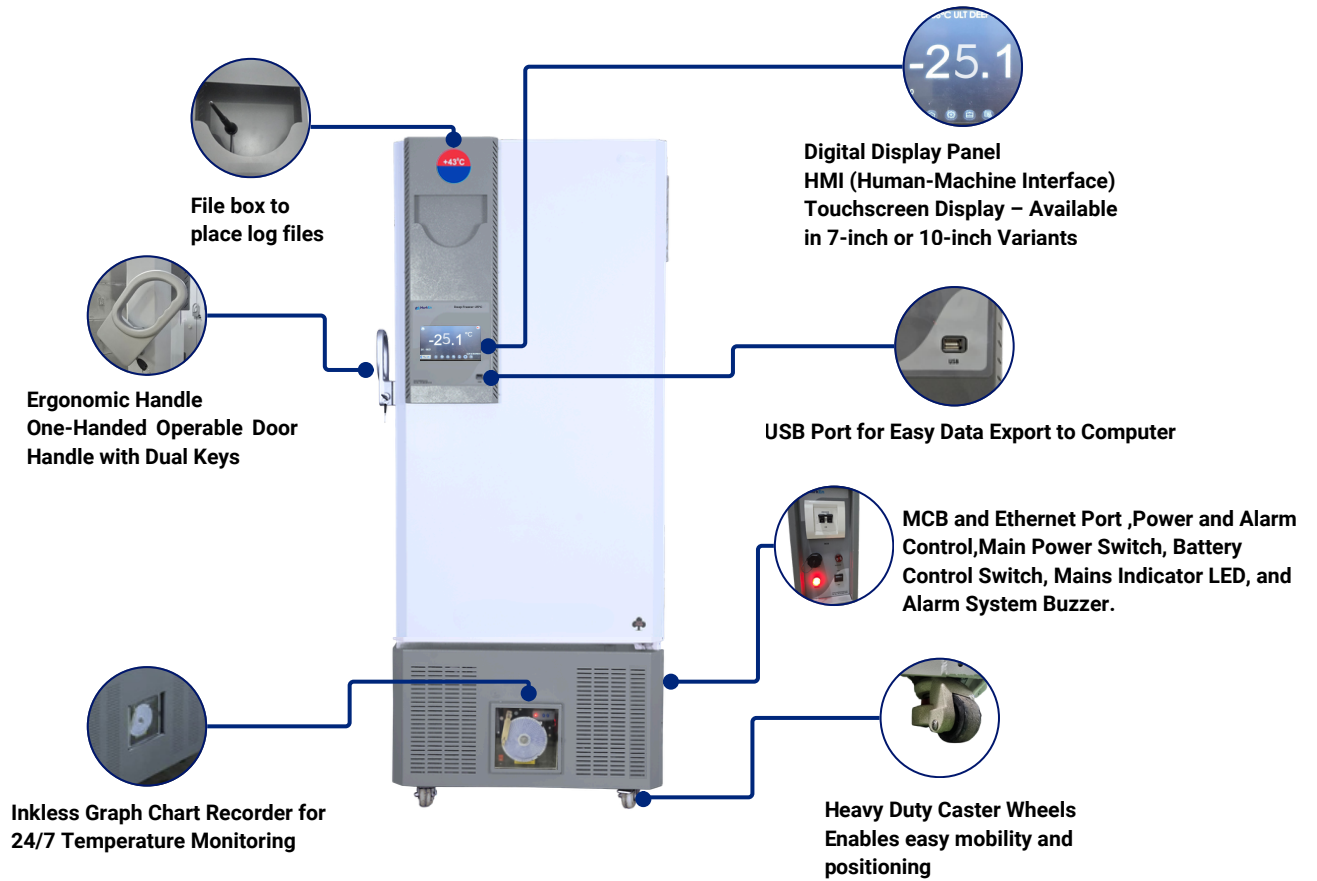
**Inner Door with Thermal Protection**



**Optimized Storage Racking**



**Sensor Port For Centralised Monitoring**



## TECHNICAL SPECIFICATIONS

<b>Make</b>	MarkEn	
<b>Cabinet Type</b>	Vertical / Upright	
<b>Capacity</b>	300 L	
<b>Outer Material of Cabinet</b>	Corrosion resistance CRCA/GI powder coated steel (18swg)	
<b>Inner Material of Cabinet</b>	High grade corrosion-resistant SS 304 (Stainless Steel)	
<b>Dimensions (WxDxH) In mm</b>	<b>Outer</b> : 708 x 886 x 1864 mm	<b>Inner</b> : 450 x 600 x 1060 mm
<b>Insulation Thickness</b>	<b>Cabinet</b> : 80 mm	<b>Door</b> : 80 mm
<b>Ground Clearance</b>	100 mm with adjustable leveling feet as standard; heavy-duty caster wheels (2 lockable and 2 unlockable)	
<b>Door</b>	Front-opening single solid door with lock and handle, featuring four internal compartments. Includes a key lock and provision for additional padlock security.	
<b>Inner Shelves</b>	3/4 Nos, Corrosion Resistant	
<b>Compressor</b>	Hermetically sealed compressor	
<b>Refrigerants</b>	CFC-HCFC-Free non flammable refrigerants. R 404	
<b>Condensing</b>	Skin condensing Inner and air cooled grooved aluminum fins OR forced air circulation to maintain.	
<b>Pull down time</b>	04 Hours	
<b>Temperature Range</b>	-10°C to -25°C with accuracy of $\pm 0.1^\circ\text{C}$	
<b>Temperature uniformity</b>	$\pm 2^\circ\text{C}$ or Less	
<b>Temperature Resolution</b>	0.1°C	
<b>Environmental Condition</b>	Maximum +45°C with Humidity 5% to 95% RH	
<b>Control System</b>	Fully programmable microprocessor controlled with membrane keypad and Password Protected eye level control panel	
<b>Temperature Monitoring System</b>	With IOT (Cloud Manage) supported (Optional) and 7 days inkless Chart Recorder (Optional).	
<b>Display</b>	Digital Temperature Display 7" Touch Screen.	
<b>Alarms</b>	Audible and visual alarm system for High / low temperature, sudden power failure, system failure, Door open and battery low.	
<b>Battery Backup</b>	24/48/72 Hrs Battery Backup for Digital Display, Total Alarm system, Temp. recording system with auto recharging facility.	
<b>Access port</b>	Provision of connecting LN2/CO2 Backup system for maintaining the set temperature during power failure(optional)	
<b>Noise level</b>	<50 db	
<b>Power supply</b>	210-240 V AC, 50-60 Hz +10%	

## ALL-IN-ONE SOLUTION FOR

Cold Chain Solution  
Medical Equipment  
Blood Bank Equipment

Hospital & Scientific Equipment  
Hospital Furniture & Infrastructure  
Commercial Refrigeration



**25+**

Years of Excellence



**400+**

Product Range



**500+**

Service center



**1000+**

Committed Engineers



**1,00,000+**

Satisfied Users

## CERTIFICATION



10 products tested by a WHO-PQS accredited laboratory



ISO 14001: IAF



WHO GMP



BIFMA Certified, BIFMA Level 3



ASTM- Corrosion Free Products



ISO 2409

EN 13523-26,  
ISO 13849-1,  
IP 69, IP 65

& MANY OTHER...

## OUR ESTEEMED CUSTOMERS



& MANY MORE...



Regd office & Factory: 93/1, MIDC Satpur, Nashik- 422007 (IND)

New Delhi office - 05, A-44, VDS Tower, Sector 2, Noida- 201301. UP. India

Customer Care No.+91 91 3030 5959

www.markenworld.com info@markenworld.com

