MEHROTRA®

Biotech

Smart Technology. Trusted Protection.





Manufacturer of Laboratory Equipment / Custom Solutions

WHAT WE DO?

Mehrotra Biotech Pvt Ltd has been established with an aim to contribute to the enhancement of medical - hospital, pharmaceutical, biotechnological, and general laboratory services through the provision of high - quality innovative solutions, ensuring an improved quality of life and well -being for society at large.

Our primary objective is to deliver customized solutions that precisely align with the unique requirements of our customers. To achieve this, our dedicated functions including engineering, R& D, manufacturing, and customer service are focused on each technology within Mehrotra Biotech's area of expertise:

- We offer solutions and equipment for clean air technology, encompassing both horizontal and vertical laminar flow cabinets, biological safety cabinets, and laminar flow systems.
- Our portfolio includes solutions and equipment for advanced sterilization utilizing Autoclaves, Ovens, and incubators.
- We specialize in solutions and equipment employing biological containment technology, such as containment isolators and sterile isolators.
- Additionally, we provide solutions and equipment utilizing freeze drying and vacuum drying technology, ranging from laboratory freeze dryers to GMP freeze dryers.

By offering these comprehensive solutions, we aim to continually improve and advance the various sectors we serve, ensuring the highest standards of quality, safety, and efficiency in medical and laboratory practices.

"Our aim is to provide tailor-made solutions in strict accordance to the needs of customers."

OUR MISSION

Our mission is to empower individuals and communities through innovative solutions and exceptional service. We are committed to providing high-quality products and services that address the needs of our customers and contribute to advancements in scientific and medical research. Guided by our core values of integrity, collaboration, and social responsibility, we strive to make a positive impact on society, while prioritizing environmental sustainability and community healthcare. Through our dedication to excellence and the expertise of our team, we aim to be a trusted partner in shaping a healthier and more prosperous future for all.

OUR VISION

Our vision is to be a leading innovator and catalyst for positive change, creating solutions that transform lives and shape a better future. With a commitment to excellence, creativity, and social impact, we strive to revolutionize Biomedical research & Pharmaceutical industry through cutting -edge design, forward-thinking strategies, and meaningful collaborations.

OUR CERTIFICATIONS











CDSCO

ISO 13485



-86°C ULTRA LOW TEMPERATURE FREEZER

TARGETED REFRIGERATION

The new generation of ultra-low temperature refrigeration system can ensure fast refrigeration and was awarded with the Second Prize under State Technological Invention Award.

FIVE MAGIC WEAPONS FOR ENERGY SAVING

Imported high-efficiency compressor + separated evaporator + composite heat exchanger + optimized fractional condensation & separation system + high-efficiency thermal insulation system can save energy and reduce power consumption of the freezer by 40%.

LOW NOISE DESIGN

Low-noise direct cooling circuit + suspension frame & sound absorbing compartment & low-noise fan can reduce noise generated by the entire freezer to the largest extent.

THREE-DIMENSIONAL THERMAL INSULATION

The six sides of the cabinet are made from high-efficiency VIP vacuum thermal insulation plate, and the thermal insulation design of the inner door made from foaming material and the outer door system was awarded with multiple patents, which can improve the thermal insulation performance of the freezer.

OPTIONAL ACCESSORY(WIFI/BLUETOOTH PRINTER/MECHANICAL LOCK/SWIPE CARD/FINGERPRINT)

Connect Wi-Fi to upload data to the cloud space, monitor the device, check the status of the refrigerator faster, and ensure the safety of the samples;

Optional Bluetooth printer, real-time export temperature data, temperature graph, setting operation and other data, to understand the freezer operating status;

Optional functions such as card unlocking, fingerprint unlocking, and facial recognition unlocking are available to facilitate quick access to samples.



7" HD Intelligent Screen Control System ·7-inch HD intelligent display touch screen, user-friendly interface and more accurate temperature control, with Bluetooth, Wi -Fi and other functions, more convenient operation and more comprehensive functions.

·Can add multiple user accounts to log in and record usage/operation records.

·The high-precision microcomputer control system and platinum resistor sensors enable users to set.

temperature inside the cabinet within a range from -40 to -86°C.

·Optional functions such as card unlocking, fingerprint unlocking, and facial recognition unlocking are available to facilitate quick access to samples.

Remote alarm contact , RS485

Equipped with RS485 and remote alarm interface to realize remote observation of freezer operation status, real-time reception of product operation information, and ensure the storage safety of samples.



Data Storage



The temperature data recorded by the system can be exported, the operating data of the system settings, the alarm data, and the temperature data can be recorded in 5 minutes, and the data can be recorded for up to 10 years, which can effectively record the running status of the product for you for a long time.

Thermal Insulation System



·2-layer heat insulating foamed door with inner and outer door seal and the insulation design of the outer door system with multiple patents can prevent loss of refrigerating capacity in an effective way;

·The 6 sides of the cabinet are made from high-performance VIP: Vacuum Insulation Panel material, improving thermal insulation performance to a large extent.



Refrigeration System

·The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient.

·The large finned condenser with a space between fins≤2mm, providing effective heat dissipation.

·With twin- compressor, if one is damaged, the other one could keep the temperature at -70°C stably.

·Standard with VIP board for high efficiency cooling performance. Door with hot gas pipe surrounding for defrost.

Supplies for Cryopreservation



Freezer racks/boxes for cryopreservation are optional.



Security System

·The perfect audible & visual alarm system : high and low temperature ,sensor failure ,power failure ,low battery ,door ajar ,main board communication error, high ambient temperature etc.

·Equipped with alarm self-recovery function, it reminds users of unhandled alarm problems in freezer many times.

·The compressor start delay and stopping interval protection can ensure reliable operation.

·The touch screen controller has password protection which can prevent any adjustment of operation without permission.



Human-oriented

·The new designed assisting handle and vacuum release port let the freezer be operated singlehanded to open and close the outer door

·The newly added file box makes recording easier and more convenient

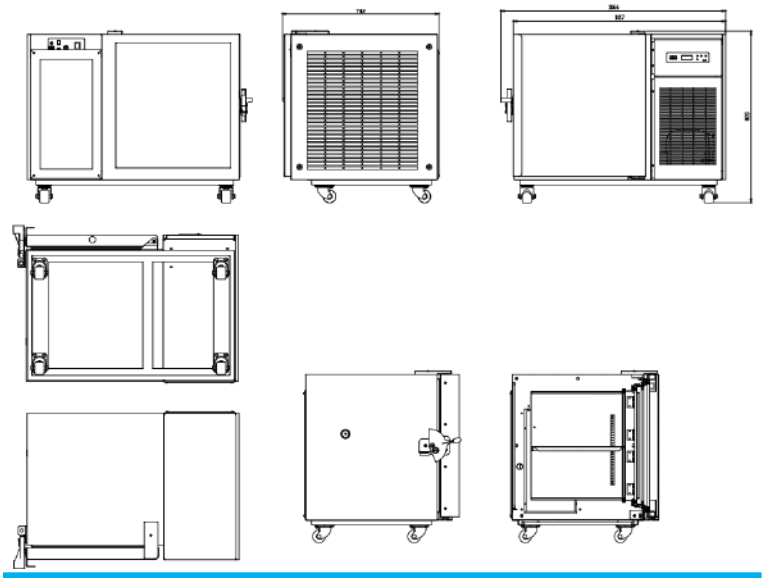
·The liner made from Stainless steel for medical use is low- temperature tolerant and corrosion-resistant, which has a long service life and is easy to clean

·The universal casters and leveling feet design are more convenient for movement and fixation.

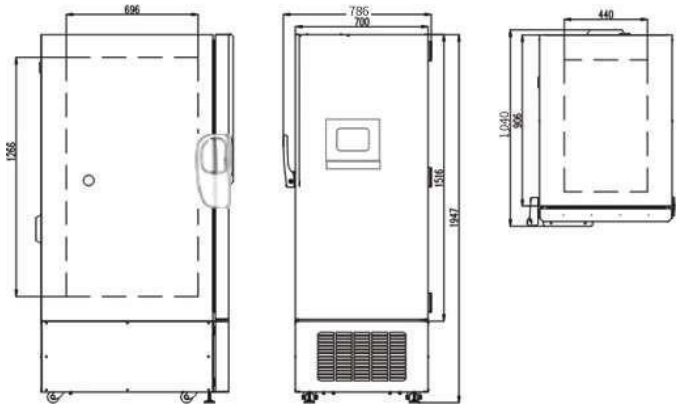
Scope of Application

Suitable for use in blood banks, hospitals, health and disease prevention systems, research institutions, colleges & universities, the electronic industry, biological engineering, laboratories in colleges & universities, military enterprises, deep-sea fishing companies, etc

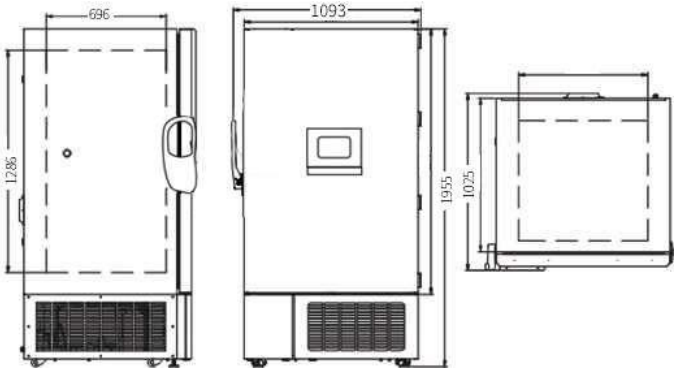
GENERAL ASSEMBLY DRAWINGS



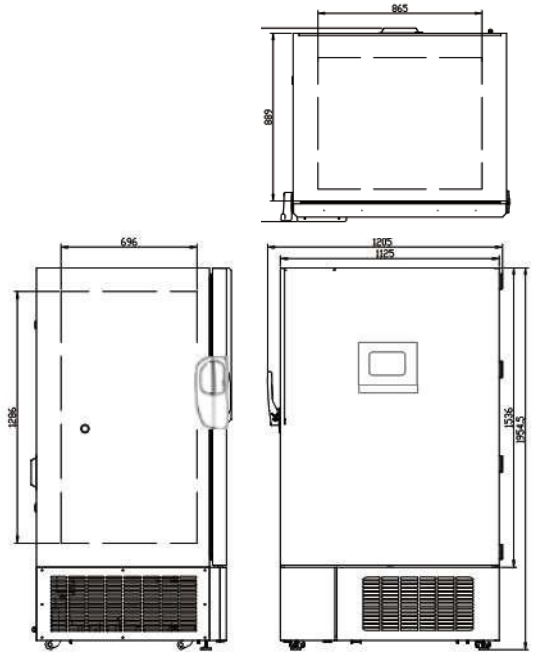
MDF86V100



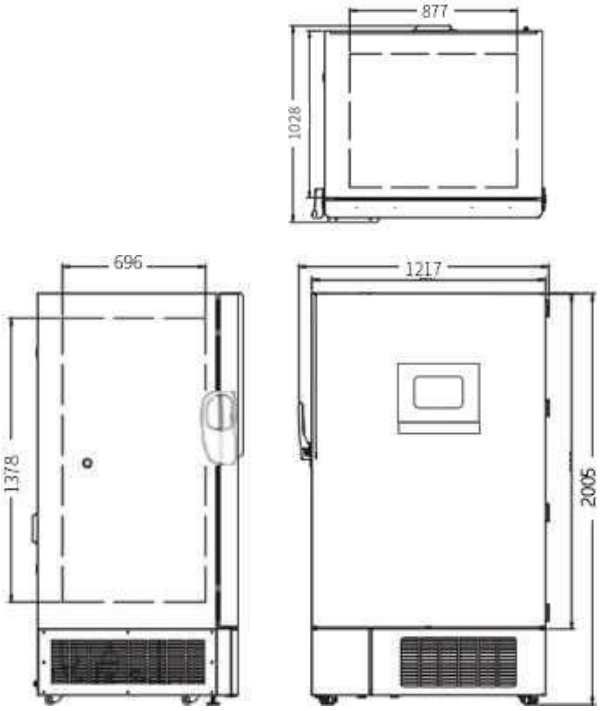
MDF86V528



MDF86V678



MDF86V778



MDF86V858

TECHNICAL SPECIFICATION

MODEL	MDF86V100	MDF86V528	MDF86V678T	MDF86V778T	MDF86V858T
CABINET TYPE	UPRIGHT	UPRIGHT	UPRIGHT	UPRIGHT	UPRIGHT
CAPACITY	100L	528L	678L	778L	858L
INTERNAL SIZE(mm)	450x450x514	585x696x1266	750x696x1286	865x696x1286	877x696x1378
EXTERNAL SIZE(mm)	1066x742x820	931x1040x1947	1093x1025x1955	1205x1025x1955	1220x1028x1994
PACKAGE SIZE	1200x863x991	1035x1165x2158	1203x1155x2171	1320x1155x2171	1330x1155x2176
N W/GW(KG)	145/189	273/317	336/383	359/403	390
PERFORMANCE					
TEMP RANGE	-40°C—86°C				
AMBIENT TEMP	16°C—32°C				
COOLING	-86°C				
CLIMATE CLASS	N				
CONTROLLER	DIGITAL	DIGITAL/MICROPr.	MICROPROCESSOR		
DISPLAY	LED	LED/TFT TOUCH	HD INTELLIGENT TOUCH SCREEN		
REFRIGERATION					
COMPRESSOR	1 No	1/2 NOs	2 NOs		
COOLING METHOD	DIRECT COOLING				
DEFROST MODE	MANUAL				
REFRIGERANT	R290& R170				
INSULATION THICK	130MM				
CONSTRUCTION					
EXT. MATERIAL	COLD ROLLED STEEL SHEET				
INNER MATERIAL	STAINLESS STEEL				
SHELVES	1 NO. SS	3 Nos SS	3 Nos SS		
DOOR LOCK	YES				
PADLOCK	YES				
ACCESS PORT	1 No Ø25MM	2 Nos Ø25MM	3 Nos Ø25MM		
CASTERS	4+(2 LEVELLING FEET)				
DATA LOGGING	USB/RECORD EVERY 5 MIN / 10 YEARS				
BATTERY BACKUP	YES				
ALARM					
TEMPERATURE	HIGH/LOW TEMPERATURE, HIGH AMBIENT TEMPERATURE				
ELECTRICAL	POWER FAILURE, LOW BATTERY				
SYSTEM	SENSOR FAILURE, MAIN BOARD COMMUNICATION ERROR, CONDENSOR OVERHEATING, DOOR AJAR				
ELECTRICAL					
POWER SUPPLY	AC 220-240V/ ~50HZ				
RATED CURRENT	5.57A	10.97A	12.1 A	11.81A	11.46A
ACCESSORIES					
STANDARD	RS485, REMOTE ALARM CONTACT				
OPTIONAL	CHART RECORDER, CO2 BACKUP SYSTEM, Biometric Access System, Bluetooth Printer, Wifi etc				