

-40°C Biomedical Freezer

Model: **MDF-40U450**

> Overview

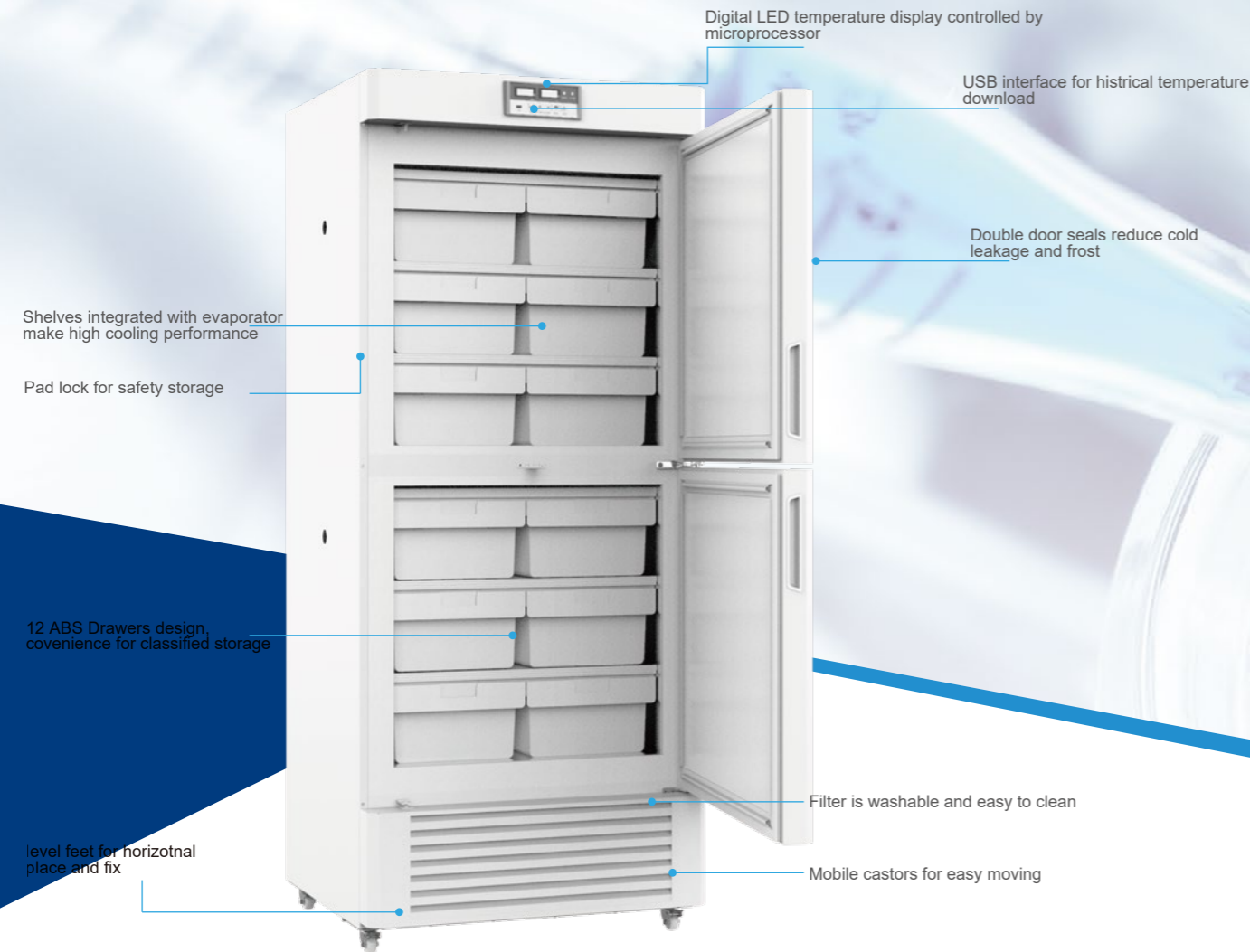
Refrigeration System

Reliable compressor and fan, ensure fast cooling, energy-saving and long time running
 The evaporator is intergrated with shelves and distribute in 6 compartments, ensures uniform temperature
 Two reliable compressors control upper and lower compartment seperately to ensure better cooling performance
 Environment friendly refrigerant CFC-free and HFCF-free

Cabinet Construction

Powder coated steel exterior, Aluminum plate interior with round corner design easy to clean-up
 Superior engineered frame for maximum rigidity
 Self-closing door with magnetic closure
 High thickness Non-CFC foamed insulation, energy saving
 Doorlock prevents unauthorized access to the freezer
 Low noise design creates a comfortable and quiet working environment
 Independent compartments with ABS drawers are convenient to classify and store different samples

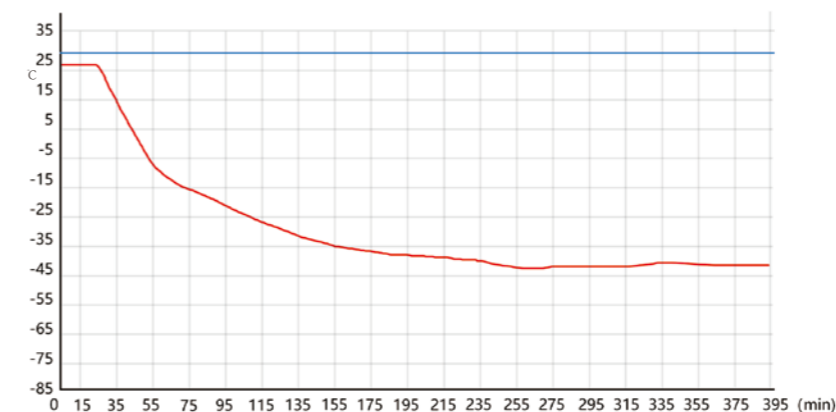
> Scope of Application



> Features

- High-precision digital microprocessor temperature control system with digital
- LED temperature display 0.1°C accuracy.
- Temperature setting range is -20°C ~-40°C
- The digital display show freezer work condition and alarm code, easy to know freezer status
- Audibale and visible alarm system for safe storage:
 High temperature alarm, Low temperature alarm, Sensor failure alarm, Door ajar alarm, Power failure alarm, Low battery alarm, Hot condensor alarm;
- 3 sensors available for cooling, real time display and amabinet temperature display
- Build-in USB interface enable users to download the historical temperature data
- Optional for the remote alarm contact

> Mappings



> Specification

Model		MDF-40U90	MDF-40U270	MDF-40U450	MDF-40U525
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Capacity (L)	90	270	450	525
	Temperature Range (°C)	-20~ -40	-20~ -40	-20~ -40	-20~ -40
	Cooling Performance(°C)	-40	-40	-40	-40
	Temperature ambient(°C)	10~32	10~32	10~32	10~32
	Temperature Control	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED digital display	LED digital display	2 LED digital displays	2 LED digital displays
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual	Manual
	Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free
	Noise (dB)	40	40	40	40
Functions	High/low Temperature Alarm	Y	Y	Y	Y
	Power Failure Alarm	N	N	Y	Y
	Sensor Error Alarm	Y	Y	Y	Y
	Low Battery Alarm	N	N	Y	Y
	Door Ajar Alarm	Y	Y	Y	Y
Electrical Data	Power (W)	370	575	840	345
	Power consumption(KWh/24h)	1.69	2.86	5	6.7
	Rated current (A)	1.68	2.7	2.7	3.4
	Voltage/Frequency(V/Hz)	220~240V 50/60Hz 110V 60Hz	220~240V 50/60Hz 110V 60Hz	220~240V 50/60Hz 110V 60Hz	220~240V 50/60Hz
Accessories	Door	1 foaming door	1 foaming door	2 foaming door	2 foaming door
	Door Lock	Y	Y	Y	Y
	Caster	2	2	4	4
	Foot	2	2	N/A	2
	Shelf/Drawer	2/3	7/7	4/12	4/18
	Test Hole	Y	Y	Y	Y
	Remote Alarm Contact	N	N	Y	Y
	USB	N	N	Y	N
Dimensions	Net/Gross Weight (kg)	54/59	94/102	143/156	160/180
	Internal Dimension (W/D/H, mm)	500×485×532	500×460×123	(650×570×627) ×2	(651×631.5×635)×2
	External Dimension(W/D/H, mm)	700×669×854	700×640×1792	810×735×1960	900×818.5×1828
	Packing Dimension(W/D/H, mm)	745×712×927	760×740×1910	895×850×2025	997×912×1982
	Container Load (20'/40'/40'H)	42/90/90	21/45/45	12/26/26	12/24/24

-40 °C Chest Freezer



> Features

- Fit with high efficiency compressor to achieve reliable cooling performance; can reach to -45 °C the lowest.
- Microprocessor control with digital display, temperature accuracy 0.1°C
- High-density and ultra-thick insulation, high efficiency and energy saving
- CFC-free refrigerant, environment friendly;
- Wide voltage design, available from 192~242V

> Safety

- Multiple audible and visual alarms including high/low temperature alarm, sensor error alarm;
- Multiple protections for the freezer: password protection on the display board prevents unauthorized access;
- Power-on delay protection and frequent start protection extend the service life of the compressor;
- Safety door lock avoids unauthorized access to the samples;

> Ergonomic Design

- Standard access port for external probes;
- Fit with castors for easy moving
- Baskets come as standard for convenient storage of samples;

	Model	MDF-40C100	MDF-40C200	MDF-40C300	MDF-40C400	MDF-40C500
Technical Data	Cabinet Type	Chest	Chest	Chest	Chest	Chest
	Capacity (L)	100	190	285	370	470
	Climate Class	ST	ST	ST	ST	ST
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual	Manual	Manual
	Refrigerant	CFC-Free	CFC-Free	CFC-Free	CFC-Free	CFC-Free
	Door	Single	Single	Single	Single	Single
	Inner Door	N/A	N/A	N/A	N/A	N/A
	Noise (dB)	40	40	40	40	40
Performance	Temperature Range (°C)	-10~-40	-10~-40	-10~-40	-10~-40	-10~-40
	Cooling Performance(°C)	-40	-40	-40	-40	-40
Control	Temperature Control	Electronic controller	Electronic controller	Electronic controller	Electronic controller	Electronic controller
	Display	LED	LED	LED	LED	LED
Electrical Data	Voltage/Frequency(V/Hz)	220-240V 50/60Hz 110V 60Hz	220-240V 50/60Hz 110V 60Hz	220-240V 50/60Hz 110V 60Hz	220-240V 50/60Hz 110V 60Hz	220-240V 50/60Hz 110V 60Hz
	Power (W)	120	150	160	200	200
Dimensions	Net/Gross Weight (kg)	32/40	65/78	75/88	85/98	110/125
	Internal Dimension (W/D/H, mm)	520×345×615	760×485×600	1080×485×600	1340×485×600	1710×485×625
	External Dimension(W/D/H, mm)	700×600×850	940×765×850	1270×765×850	1530×765×850	1900×775×890
	Packing Dimension(W/D/H, mm)	745×580×890	990×775×890	1320×775×890	1580×775×890	1950×785×930
	Container Load (20'/40'/40'H)	62/128/192	34/72/108	24/54/81	20/44/66	20/44/66
Functions	High/Low Temperature Alarm	Y	Y	Y	Y	Y
	Sensor Error Alarm	Y	Y	Y	Y	Y
Accessories	Door Lock	N/A	Y	Y	Y	Y
	Foot	4	4	4	4	4
	Basket	1	2	2	2	2
	Test Hole	Optional	Optional	Optional	Optional	Optional
Others	Certificate	CE, ISO9001	CE, ISO9001	CE, ISO9001	CE, ISO9001	CE, ISO9001