

Temperature range: -50°C~-90°C

Application scope: For the storage of biological macromolecules, cells, tissues and organs, etc. (human organs and tissues, whole blood, plasma, serum, biological fluids or processed biological samples DNA, RNA, protein, etc.)



MDF-U792VX

MDF-C590VX

## Alphavita VX Series ULT Freezer



Dual cooling system



Warm-keeping design

Provide samples with safe and stable low-temperature storage environment

VX series (3 models)

MDF-U692VX

MDF-U792VX

MDF-C590VX(chest model)



## Twin-Guard System

- Designed for sample storage preservation, equipped with the new Double-cooling system, realizing that the lowest temperature inside reaches -90 °C under the operation of the dual system, and the lowest temperature inside reaches -80 °C under the operation of the single system;
- Original import compressor, auto-cascade cooling system using mixed refrigerants, stabilizing the -90 °C temperature cycle and increasing the cooling speed by 35%.



## Safety Design

- Dual cooling system design enables stable at -80°C (MDF-C590VX: -75°C) to ensure sample safety, despite one cooling system suffers an unexpected failure.
- Standard expansion tank to absorb system pressure in case of excessive pressure caused by extremely high ambient temperature or any other reasons, to maintain normal compressor operation and ensure samples safety.
- Core parameters protection with password to avoid losses caused by mis-operation.



## User-friendly Design

- Ergonomically designed door handle, padlock optional, providing a good user experience, standard electronic lock, optional card unlocking and fingerprint unlocking function;
- Finless condenser, free of condenser filter cleaning.
- Controller with delay start function enables off-peak start for 0~30 min, significantly reduces the load on the circuit from simultaneous start-up.



## Sealed Chamber Design

- Quadruple-pane door gasket are distributed on different layers to form a vacuum protection to prevent cold air leakage. Wholly foamed inner door with thickness ≥30mm to reduce the frosting.





Smart storage within your reach  
13inch super-large touch panel



Double protection & safe preservation  
-90°C dual cooling system



## Sample Management

- Complete sample management function.
- Reasonable planning of storage space, effectively improving preservation efficiency.
- Convenient sample operation: Support sample attribute editing, sample in/out management, sample moving, sample organizing, etc.;
- Smart sample statistics function, which summarizes the information of samples in and out of the storage, number and type of samples.



## Operation Record

- Query the data curve and data list of chamber temperature and ambient temperature;
- With data export function to monitor the operation status of core components;
- Query historical alarm and operation records.



## MDF-C590VX chest design

- Compared with the vertical design, the cooling speed is increased by 26%, the temperature uniformity is increased by 57%, and the middle and lower floors are always kept at the set temperature during the in/out operation, only the upper floor temperature fluctuates, and it takes less than 10 minutes for the temperature back to -75°C.)

Product Name	Model	Temperature range (°C)	External dimensions (mm)	Internal dimensions (mm)	Power (W)	Capacity (L)	Net weight (kg)
ULT Freezer	MDF-U692VX	-50~-90	1030×875×1990	770×600×1280	1374	603	359
	MDF-U792VX	-50~-90	1030×875×1990	890×600×1380	1477	705	375
	MDF-C590VX	-50~-90	2020×948×1076	1200×640×740	1338	580	335