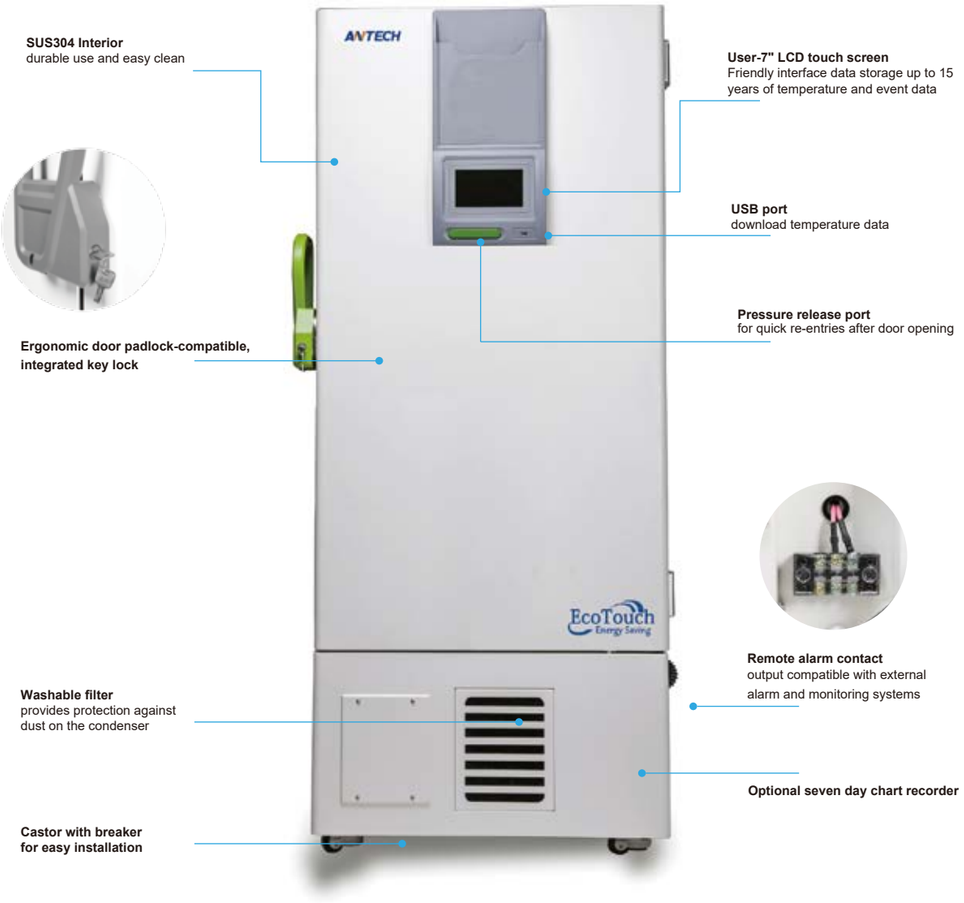
-86℃ ULT Freezer

EcoTouch Series ULT freezer



The -86℃ ULT freezer is specially designed for a stable ultra low temperature storage condition, to store germs, erythrocytes, leucocytes, viruses and many other biological materials. Installations can be found in research institutes, pharmacy industry, clinical labs, blood banks and laboratories in electronic & chemical plants.

A SMART Freezer

- 7” touch screen, easy observation & convenient operation
- Checking history temperature curve and alarm record on screen
- Self-diagnostic, automatic check & alarm for key components
- Optional USB port, download data conveniently





A GREEN Freezer

- Non greenhouse gas is used, an environmental friendly freezer.
- Hydrocarbon two compressor cascade cooling system for super low power consumption.

Power consumption of traditional freezer & energy-saving freezer





A USER-FRIENDLY Freezer

- SUS304 interior for easy cleaning & rust free
- Document groove to put paper, create a stylish lab
- Optional electric lock for safety and convenient administration
- Maximum sample storage capacity with an optimum footprint
- Special noise reduction design, a real quite lab partner



▲Insulated inner door with latch



▲SS304 inner door latch



▲SS304 inner cabinet, figure marked strip and sensor



▲Protection against Wall



▲Washable filter



▲Heavy-duty caster with lock



▲Testing port



▲7-day circular chart recorder is Optional

Optimal Capacity

Model	Capacity(L)	2ml Vial	2" box *	Rack Type	Rack Qty	Total Rack Qty
SQ-90012	338	19200	192	4x4	12	12
SQ-90013	408	28800	288	5x4	8	16
				4x4	8	
SQ-90014	588	40000	400	5x5	16	16
SQ-90015	728	50400	504	5x4	18	24
				6x4	6	
SQ-90016	838	60000	600	5x5	24	24

* Notes: calculated based on 100-well box.

Specification

	Model	SQ-90012	SQ-90013	SQ-90014	SQ-90015	SQ-90016
Technical Data	Type	Upright	Upright	Upright	Upright	Upright
	Capacity（L/cu ft)	338/11.93	408/14.41	588/20.76	728\25.70	838/29.59
	Inner doors	2 pcs, SUS304 forming door	2 pcs, SUS304 forming door	2 pcs, SUS304 forming door	2 pcs, SUS304 forming door	2 pcs, SUS304 forming door
	Shelves	3 pcs, SUS304	3 pcs, SUS304	3 pcs, SUS304	3 pcs, SUS304	3, made in SUS304
	Inner chamber material	SUS304	SUS304	SUS304	SUS304	SUS304
	Cooling type	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Refrigerant	Hydrocarbon, CFC Free, Non greehouse	Hydrocarbon, CFC Free, Non greehouse	Hydrocarbon, CFC Free, Non greehouse gas	Hydrocarbon, CFC Free, Non greehouse gas	Hydrocarbon, CFC Free, Non greehouse gas
	Noise level (dB)	50	50	51	52	53
Temperature	Ambient temperature（℃）	10~32℃	10~32℃	10~32℃	10~32℃	10~32℃
	Temperature range（℃）	-40~-86℃	-40~-86℃	-40~-86℃	-40~-86℃	-40~-86℃
Cooling & Controller	Cooling System	Two compressor cascade system	Two compressor cascade system	Two compressor cascade system	Two compressor cascade system	Two compressor cascade system
	Compressor Brand	SECOP	SECOP	SECOP	SECOP	SECOP
	Sensor	PT100	PT100	PT100	PT100	PT100
	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display & Control	7" Touch Screen	7" Touch Screen	7" Touch Screen	7" Touch Screen	7" Touch Screen
Electronic parameter	Voltage/Frequency	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
	Power (W)	870	845	815	935	890
	Power Consumption (kWh/24h)	6.75	11.6	12	13.28	13.86
Vials load	2ml Vials (pcs)	19200	28800	40000	50000	60000
Size & Weight	Internal (W*D*H) mm	854×1072×1907	606×575×1180	606×738×1310	963×558×1350	894×718×1310
	External (W*D*H) mm	488×607×1140	891×992×1945	891×1155×1995	1248×975×1995	1179×1135×1995
	Packing (W*D*H) mm	935×1070×2128	954×955×2094	970×1138×2185	1320×970×2185	1212×1098×2185
	Net/Gross weight (kg)	286/306	292/317	335/363.5	380/400	397/430
Alarm System	High/low temperature	√	√	√	√	√
	Power off failure	√	√	√	√	√
	Abnormal voltage	√	√	√	√	√
	Sensor error	√	√	√	√	√
	Filter screen check	√	√	√	√	√
	Controller failure	√	√	√	√	√
	Low battery	√	√	√	√	√
	Condenser malfunction	√	√	√	√	√
	High ambient temperature	√	√	√	√	√
	Door ajar	√	√	√	√	√
Accessories	Caster	4	4	4	4	4
	Test hole/Diameter	1/25mm	1/25mm	1/25mm	1/25mm	1/25mm
	Remote alarm contact	√	√	√	√	√
	RS232/485 port	√	√	√	√	√
	USB Port	Y	Y	Y	Y	Y
	Temperature recorder	Optional	Optional	Optional	Optional	Optional
	Freezer racks	Optional	Optional	Optional	Optional	Optional
	CO2 backup system	Optional	Optional	Optional	Optional	Optional
	LN2 backup system	Optional	Optional	Optional	Optional	Optional