



VOSTOK FREEZERS

ULTRA-LOW TEMPERATURE FREEZERS FOR MEDICAL & LABORATORY COLD STORAGE

Minus80 Series

ATS' VOSTOK, Minus80 series of ultra-low temperature refrigeration systems are designed and manufactured specifically for the long term storage of medical and laboratory products. ATS' VOSTOK freezers are ideal for biological storage, including vaccines, viruses, germs, blood plasma, skin, bone marrow, sperm, and other biological, pelagic and special test products.

ATS' VOSTOK, Minus80 series includes a wide range of single self-cascade, dual-cascade and double-cooling refrigeration systems. With its optimized evaporator design and state-of-the-art compressor, all Vostok freezers comfortably cool to -86°C.

Features

- » Wide ambient temperature design cools to -86°C under ambient temperature from 10°C to 43°C
- » Wide voltage range, from 187V-242V
- » Removable condenser cover, convenient for maintenance & cleaning
- » Reserved installation hole for circular-chart recorder
- » Protective cover for on/off switch, external alarm port & USB port
- » Removable inner door
- » Adjustable SUS304 shelves
- » Professional double testing hole
- » Adjustable foma wheel, easy for installation, leveling & maneuvering
- » Optional Frozen rack
- » Foamed inner & outer door, forced inner door handle & 3 layers of silicon seals
- » Each component is equipped with noise reducing, high density fire-proof sound-absorbing cotton

Safety & Alarm Systems

- » Perfect alarm system with buzzer sound & lamp flashing alarm functions.
- » Alarms include: High/Low temperature, Power Failure, Abnormal Voltage, Sensor Error, Filter Screen Check, Thermostat Failure, Low Battery, Condenser Clean, High Ambient, Temperature & Door Ajar.
- » Multiple-protection functions including: password protection, frequent start-up protection & refrigerating system operation protection if sensor is faulted.

Refrigeration System

- » Ultra-thick foam layer, dual-sealing design of door, for effective temperature protection.
- » Optimized auto-cascade refrigerating system, state-of-the-art compressor, for excellent refrigerating performance.
- » Optimized evaporator design ensures the most effective flow of refrigerating fluid & temperature uniformity in the cabinet.
- » Unique fluoride-free mixed refrigerant fluid is 100% CFC-Free.
- » Single-compressor system, fewer part for lower failure rate & energy consumption.
- » EBM-Papst noiseless fan for stable performance & lower noise.



Temperature Control Function

- » Micro-computer control, digital temperature display, adjust unit is 0.1°C.
- » Adjustable temperature. Temperature difference of start-up & shutdown can be set.
- » High & low temperature alarm function, alarm temperature can be set as needed.

Humanized Design

- » Food-grade stainless steel liner never get rusty, safe for samples.
- » Heavy duty casters design makes it convenient to move.
- » Safety door design to prevent accidental opening.
- » LED temperature display, convenient & clear to observe.
- » Suitable for using at environmental temperature of 10~30°C
- » Optional digital temperature recorder makes it convenient to record & store performance data at special conditions, equipment with USB connector to copy data for analyzing.
- » Wide voltage range design, suitable for using when the voltage is 187V~242V.

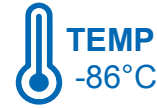
Applications

- » Hospitals
- » Blood Banks
- » Epidemic Prevention/Response Services
- » Research Institutes
- » Biomedical & Chemical Industries
- » Marine Fishery Industries



Dual-Cascade Cooling Systems

Touch Screen with USB Port



Noise Reduction Design

- » Equipped with special damping material between each component that may generate noise.
- » Equipped with high-density fire-retardant cotton.

Handle & Lock

- » Integrated handle lock design
- » One-handed realization of the switch door, can use both the dark lock and the padlock.

Advanced Cooling System

- » Famous brand compressor
- » Double security with two independent cooling system, when one failure another will be start automatically to maintain at least -70°C.
- » CH refrigerant, rapid cooling to short cooling time by 50%.
- » Second generation of VIP insulation panel
- » Inner door ANSI304, In-situ overall foaming of rigid polyurethane
- » 4 layer sealing to keep good insulation



Microcomputer Control

- » Intelligent malfunction diagnosis
- » Recorded Data can be exported easy via USB
- » Temperature curve, alarm information record and search, user management.
- » Automatic alarm.
- » Remote alarm connector.
- » Keyboard lockable (password)
- » Easy to use.

White board

For manual recording

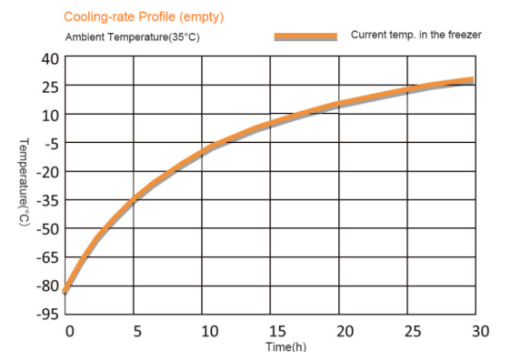
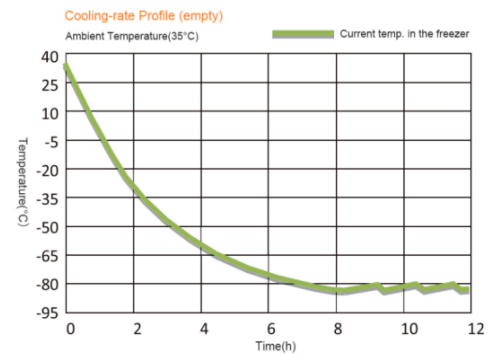
Optimized Design

For maximum storage of Bio samples



AVAILABLE OPTIONS

ITEMS	PART NUMBER
Large Color LCD Paperless Temperature Recorder with USB	ATSM80-UP03
External Hung Type Temperature Recorder	ATSM80-UP05
TR3000 Remote Temperature Recorder Data Logger	ATSM80-UP06
Stainless Steel Rack, 5*5	ATSM80-UP07
Stainless Steel Rack, 4*4	ATSM80-UP08
Stainless Steel Rack, 5*4	ATSM80-UP09
Stainless Steel Rack, 4*3	ATSM80-UP10
Stainless Steel Rack, 5*5	ATSM80-UP11
Stainless Steel Rack, 4*4	ATSM80-UP12
Stainless Steel Rack, 5*4	ATSM80-UP13
Stainless Steel Rack, 4*3	ATSM80-UP14
CO ₂ /LN Standby System	ATSM80-UP15





Dual-Cascade Cooling Systems

Touch Screen with USB Port

PRODUCT SPECIFICATIONS

		PART NUMBER					
		ATSM80-N338L57	ATSM80-N408L62	ATSM80-N580L73	ATSM80-N688L97	ATSM80-N728L85	ATSM80-N838L83
Specifications	Shelf/Drawer QTY	Stainless Steel Shelf/3	Stainless Steel Shelf/3	Stainless Steel Shelf/3	Stainless Steel Shelf/3	Stainless Steel Shelf/3	Stainless Steel Shelf/3
	Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost	Manual	Manual	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC	HC	HC
	Power Consumption (kWh/24h)	12.8	11.6	12	14.7	15.4	15
	Noise (db)	50	50	53	55	53	53
	Ambient Temperature (°C)	10~32	10~32	10~32	10~32	10~32	10~32
	Temperature Range (°C)	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86
Cooling System	Compressor brand/QTY	SECOP/2	SECOP/2	SECOP/2	SECOP/2	SECOP/2	SECOP/2
	Sensor	PTC	PTC	PTC	PTC	PTC	PTC
	Temperature Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD Display	LCD Display	LCD Display	LCD Display	LCD Display	LCD Display
Power	Voltage/Frequency(VHz)	220/50Hz	220/50Hz	220/50Hz	220/50Hz	220/50Hz	220/50Hz
	Power (W)	870W	845W	815W	808W	935W	890W
	Current (A)	6.75A	7A	7A	7A	7A	7A
Material	Inside Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
	Outside Material	Color Sprayed Steel	Color Sprayed Steel	Color Sprayed Steel	Color Sprayed Steel	Color Sprayed Steel	Color Sprayed Steel
	Insulation	PURF	PURF	PURF	PURF	PURF	PURF
Size	Capacity (L/cu.ft)	338/11.93	408/14.40	588/20.76	688/24.29	728/25.70	838/29.59
	NT./GT.(kg)	250/305	292/317	307/368	330/427.5	360/401.5	397/430
	Outer Dimensions L*W*H (in)	33.5*39.4*75.2	34.3*40.6*76.8	46.9*34.3*78.3	53.1*42.1*75.2	49.1*38.2*78.5	45.7*42.1*74.8
	Inner Dimensions L*W*H (in)	19.2*23.9*44.9	23.9*22.6*46.5	23.9*29.1*51.6	39*23.9*44.9	37.9*22*53.1	35.2*28.3*51.6
	CBM	2.14	1.93	2.45	3.31	2.8	3.12
	20GP/40GP/40HQ	12/24/24	12/24/24	12/24/24	8/16/16	8/18/18	8/18/18
Frozen Racks	Racks	12(4X4)	16(5X4,4X4)	16(5X5)	24(4x4)	18(5x4)+6(6x4)	24(5X5)
	Boxes (2 Inches)	192	288	400	384	504	600
	Samples (2ml)	19200	28800	40000	38400	50400	60000
Accessories	Castor	✓	✓	✓	✓	✓	✓
	Inside Door	2	2	2	2	2	2
	Test Hole QTY/Diameter	2/25MM	1/25MM	1/25MM	2/25MM	1/25MM	1/25MM
	USB Port	✓	✓	✓	✓	✓	✓
	Power Failure Backup System (Alarm)	72h	72h	72h	72h	72h	72h
	Remote Alarm Port	✓	✓	✓	✓	✓	✓

For further technical information, please contact
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