

PHARMACEUTICAL & LABORATORY



ETS BIO FREEZE SDN. BHD. (717189-H)



















ETS BIO Freeze Sdn Bhd is a high tech company specializes in design, manufacturing, develop latest technologies of Medical Blood Bank refrigerator, Pharmaceutical refrigerator and freezer, Vaccine Ice-lined storage unit, with more than 28 years of experience. The company is successfully presided perfect quality assurance system and certified by ISO13485, GDPMD, Local manufacturing and import license for medical devices.

What We Are Doing

- Refrigerators & freezers Pharmaceutical, Laboratory, Combined Refrigerator-Freezer, Ultra-low Temperature, Low Temperature, Chest Freezers, Blast Freezers, Ice-Lined Refrigerators, Upright Freezers
- Blood Banks, Incubators, Shake Incubators, Growth Chambers, Oven, Portable Freezer & Combined Refrigerator-Freezer, Ice Flakes Maker
- ✓ Mortuary Freezers, S/S Body Trolley, Autopsy Table
- Cold Room
- ✓ Accessories Remote alarm monitoring system, Digital Thermometer, Temperature Recorder, Temperature Controller
- ✓ Cold-chain Logistics Solution
- ✓ After-sale Service & Repair, Electric Safety Test (EST), Planned & Preventive Maintenance (PPM), Temperature Calibration
- Loaner units
- OEM Service







Certificate of Conformity – Good Distribution Practice For Medical Device (GDPMD)



Establishment License by MDA As Manufacturer

 Establishment License by MDA – Authorized Representative, Importer, Distributor

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Digital Thermometer & Data Logger

<u>Model</u>	Description
BT-3 Digital Thermometer & Hygrometer	 Function and features: Display Indoor and outdoor temperature simultaneously Max./Min. temperature value memory Max./Min. temperature value recovery function Measuring range: Indoor temperature -30°C to +50°C / Outdoor temperature -50°C to +70°C Dimension: H110mm x L100mm
DS-1 Digital Thermometer	 Function and features: Double sensors, internal and external Clock display Temperature measuring range: -50°C to +70°C Accuracy: ±1.0°C Dimension: L115mm x 30mm x 27.2mm
THL-2 Temperature & Humidity USB Data Logger	 Function and features: Compatible with computers using Windows Instant and manual start Overall temperature range: -35°C to +70°C Dimension: L101mm x 25mm x 23mm Weight: 172g Logging rate: Selectable sampling interval from 2 seconds up to 24 hours
SSN-22 Portable USB Temperature Humidity Data Logger	 Function and features: USB interface directly communicate with PC for setup and data download User can set access password for data logger Overall temperature range: -35°C to +80°C Humidity measurement range: 0 100% RH Dimension (mm): L123 x 37 x 23 / Weight: 90g
RC-4HC Mini Temperature & Humidity Data Logger	 Function and features: Communication interface: USB interface Overall temperature range: -30°C to +60°C Humidity measuring range: 0 99% RH Dimension: L84mm x 44mm x 20mm / Weight: 35g Record interval: 10s 24hour adjustable

Temperature Recorder & Accessories

Temperature Recorder

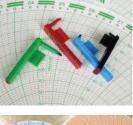


Function and features:

- Case dimension (mm): 144 x 144
- Ambient temperature: -15°C to +60°C
- Highly reliable, precise and economic
- Absence of mercury not hazardous
- Suitable for many uses in all industries
- Power supply: One (1) alkaline battery

Chart Pen

Chart Papers







LED Digital Temperature Controller

Smart Touch Screen Controller



Size: L135mm x H31mm

- ✓ Equipped with tamper-resistant touchpad and a digital temperature display to the nearest 0.1°C.
- ✓ User-friendly Temperature settings and alarm set points can be programmed quickly and easily.
- ✓ During power failure, battery back-up system supplies power to the monitor for at least 24 hours.
- ✓ The audio and visual alarms will be triggered when:
 - a) Hi & Low temperature
 - b) A. C. failure
 - c) Battery failure
 - d) Door opened for more than 2 minutes
 - e) Compressor failure
 - f) Condenser is overheated
- ✓ Compressor delay start-up, to protect compressor restart current surging
- \checkmark Auto defrost and sensor error
- ✓ Remote alarm contact provided for off-site monitoring
- Password protection Lock-temperature function protects against tampering of set temperatures/values
- \checkmark Off-set function for calibration use.
- ✓ Two (2) sensor probes available



Temperature setting range +2°C to +6°C

- ✓ Password protection
- ✓ 7" full touch screen controller
- ✓ Self diagnostic error code real time alarm indication
- ✓ Hi & Low temperature alarm setting
- ✓ Power failure alarm visual and audio
- ✓ Door open sensor alarm setting 0 to 60 minutes
- \checkmark High condenser temperature sensor detection
- \checkmark Defrost temperature interval time 0 to 24 hours
- Defrost duration 0 to 60 minutes
- ✓ External sensor access port
- ✓ Auto data acquisition with trend graph
- ✓ Build in standard remote alarm dry contact out put
- Sensor 1 to 5 calibration mode (build in with 5nos of sensor)
- ✓ Ambient temperature sensor
- \checkmark Door fan switch control
- ✓ Graphical log running hours log
- ✓ Adjustable shelves or drawers
- ✓ RS 485 Output able to link up 32 units
- ✓ Dual compressor independent control maintain -80°C when one compressor down
- ✓ 72 hours DC backup battery
- ✓ CFC Freeze
- ✓ 220V to 240V 50Hz Single phase





Blood Bank Refrigerators MBR Series by ETS incorporates the latest in cabinet, refrigeration, temperature control and alarm monitoring features. The MBR series are designed to provide convenience, safe and reliable performance for optimal storage temperature environments necessary for wide range of life science, laboratory, pharmacy, biological, medical, clinical and industrial applications.

Features:

- ✓ User-friendly design
- \checkmark Precise microcomputer temperature control
- \checkmark Roll-out drawers
- Heated glass door \checkmark
- \checkmark Forced-air circulation for enhanced temperature stability
- \checkmark Easy-to-read LCD temperature display
- Visual and audible alarm alerts \checkmark



MBR 70E





MBR 200E



MBR 100E

MBR 300E/ 600E / 700E

Model	MBR 70E	MBR 100E	MBR 200E	MBR 300E	MBR 600E	MBR 700E
Dim. Ext (mm) W x D x H	530 x 450 x 680	530 x 605 x 1350	660 x 600 x 1500	660 x 700 x 1800	720 x 810 x 2070	800 x 800 x 2070
Dim. Int (mm) W x D x H	360 x 230 x 570	420 x 400 x 700	560 x 450 x 900	495 x 590 x 1200	615 x 680 x 1440	710 x 660 x 1510
Capacity	70L	100L	200L	300L	600L	700L
450ml bags # units	20 bags	60 bags	90 bags	120 bags	300 bags	360 bags
Roll-our Drawers	Tray 1pc.	2nos.	3nos.	4nos.	6nos.	6nos.
Int. Chamber			Stainles	ss Steel		
Ext. Chamber	Epoxy powder coated	Stainless Steel		Ероху ром	der coated	
Temp. Controller	Тс	ouchscreen / Large LC	D display with digital	microprocessor accu	racy ±1°C c/w 5 prob	es
Temp. Fluctuation			±1.0°C increment of	f temperature 0.1°C		
Insulation	60mm					
Internal Air Circulation			Force	ed-air		
Refrigerant			R134a C	CFC Free		
Condenser Fan Motor			1 no. air	r-cooled		
Defrost System			Auto Cycl	e Defrost		
Comp. Recip. Hermetic	1/5 HP / 100W	1/4 HP / 120W	1/4 HP / 120W	1/3 HP / 200W	1/2 HP / 300W	1/2 HP / 300W
Light		L	ED light with door sw	itch (Manual ON/OFF	=)	
Door		Swin	g-out heated glass do	oor (self-closing with	lock)	
Door Lock / Castor	1 no. / Nil	1 no. / 4 nos.	1 no. /4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.
Access Port		1 r	no. 30mm each (for te	emperature calibratio	on)	
Drainage			Auto evaporation	n for drain water		
Remote Alarm	Hi/Low, Power Failure					
Power Voltage	240Vac 50Hz Single Phase (60Hz for others)					
Backup Alarm Buzzle	DC 1.5V with power failure audible alarm 72 hours					
Temperature Recorder			7 days 24-hour Rou	und Chart Recorder		
* Accessories (Optional)			Door Fai	n Switch		
Safety Features & Certification		ISO 13485, Electric	Safety Test (EST) IEC	61010-1 (2010), GDP	MD, ISO IEC 17025	





Blood Bank Refrigerators MBR Series by ETS incorporates the latest in cabinet, refrigeration, temperature control and alarm monitoring features. The MBR series are designed to provide convenience, safe and reliable performance for optimal storage temperature environments necessary for wide range of life science, laboratory, pharmacy, biological, medical, clinical and industrial applications.

Features:

- \checkmark User-friendly design
- \checkmark Precise microcomputer temperature control
- Roll-out drawers \checkmark
- ✓ Heated glass door
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LCD temperature display
- Visual and audible alarm alerts \checkmark





MBR 1050E / 1400E

MBR 1600E

Model	MBR 1050E	MBR 1400E	MBR 1600E-3			
Dim. Ext (mm) W x D x H	1230 x 810 x 2070	1540 x 850 x 2070	1880 x 800 x 2070			
Dim. Int (mm) W x D x H	1130 x 680 x 1440	1390 x 710 x 1440	1755 x 650 x 1430			
Capacity	1,050L	1,400L	1,600L			
450ml bags # units	600 bags	720 bags	900 bags			
Roll-out Drawers	12 nos.	12 nos. 12 nos				
Int. Chamber		Stainless Steel				
Ext. Chamber		Epoxy powder coated				
Temp. Controller	Touchscreen / Large LCD d	isplay with digital microprocessor accu	iracy ±1°C c/w 5 probes			
Temp. Fluctuation	±1	1.0°C increment of temperature 0.1°C				
Insulation		60mm				
Internal Air Circulation	Forced-air					
Refrigerant	R134a CFC Free R407c CFC Free					
Condenser Fan Motor	1 no. air-cooled					
Defrost System		Auto Cycle Defrost				
Comp. Recip. Hermetic	1/2 HP	3/4 HP	3/4 HP			
Light	LED	light with door switch (Manual ON/OF	F)			
Door	Swing-o	ut heated glass door (self-closing with	lock)			
Door Lock / Castor	2 nos. / 4 nos.	2 nos / 4 nos	3 nos. / 4 nos.			
Access Port	1 no.	30mm each (for temperature calibratio	on)			
Drainage		Auto evaporation for drain water				
Remote Alarm		Hi/Low, Power Failure				
Power Voltage	240Vac 50Hz Single Phase (60Hz for others)					
Backup Alarm Buzzle	DC 1.5V with power failure audible alarm 72 hours					
Temperature Recorder	7	days 24-hour Round Chart Recorder				
* Accessories (Optional)		Door Fan Switch				
Safety Features & Certification	ISO 13485, Electric Saf	ety Test (EST) IEC 61010-1 (2010), GDF	PMD, ISO IEC 17025			

** Capacity may vary according to the loading preferences and contents.



Features:

- ✓ User-friendly design
- Precise microcomputer temperature control
- Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- ✓ Low-noise compressor







VC 200E



VC 70E

VC 100E

VC 300E

Model	VC 48	VC 70E	VC 100E	VC 200E	VC 300E	
Dim. Ext (mm) W x D x H	530 x 450 x 680	480 x 500 x 900	530 x 605 x 1350	660 x 600 x 1500	600 x 700 x 1800	
Dim. Int (mm) W x D x H	360 x 230 x 570	360 x 410 x 510	420 x 400 x 700	560 x 450 x 900	495 x 590 x 1200	
Capacity	48L	70L	100L	200L	345L	
Int. Chamber		Stainle	ss Steel		Stainless Steel / Epoxy	
Ext. Chamber			Epoxy powder coated			
Shelves	1no	3nos	3nos	3nos	4nos	
Temp. Controller		Ten	np adjustable, LED disj	olay		
Temp Fluctuation			±1.0°C			
Internal Air Circulation			Forced-air			
Refrigerant			R134a CFC Free			
Glass Door		1	no. Heated Glass Doc	or		
Door Lock / Castor	1 no. / Nil	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	
Comp. Recip. Hermetic	100W	200W	200W	200W	200W	
Power Voltage		230Vac 50I	Hz Single Phase (60Hz	for others)		
Standard LED Alarm System						
- Hi/Low Alarm	\checkmark	\checkmark	V	V	V	
- Remote Alarm Contact		V	V	V	V	
- Power Failure			V	V	V	
- 72-hour DC backup			V	V	V	
* Accessories (Optional)			Door Fan Switch			
Safety Features & Certification	ISO 1348	5, Electric Safety Tes	st (EST) IEC 61010-1 (2	2010), GDPMD, ISO IEC	C 17025	
• Ontional: VC 18 MOO						

• Optional: VC 48 MOQ



- ✓ User-friendly design
- Precise microcomputer temperature control
- Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- ✓ Visual and audible alarm alerts
- Low-noise compressor



VC 500E / 600E / 700E / 800E

Model	VC 500E	VC 600E	VC 700E	VC 800E			
Dim. Ext (mm) W x D x H	640 x 800 x 2070	700 x 800 x 2070	800 x 800 x 2070	800 x 810 x 2245			
Dim. Int (mm) W x D x H	540 x 650 x 1430	600 x 600 x 1510	710 x 660 x 1510	710 x 670 x 1670			
Capacity	500L	600L	700L	800L			
Int. & Ext. Chamber		Epoxy pow	der coated				
Shelves (hold 50kg)	5pcs	5pcs	5pcs	5pcs			
Temp. Controller		Temp adjustab	le, LED display				
Temp Fluctuation		±1.	0°C				
Internal Air Circulation		Force	ed-air				
Refrigerant		R134a C	CFC Free				
Glass Door		1 no. Heated	d Glass Door				
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.			
Comp. Recip. Hermetic	250W	400W	400W	400W			
Power Voltage		230Vac 50Hz Single Pl	nase (60Hz for others)				
Standard LED Alarm System							
- Hi/Low Alarm	V	\checkmark	V	٧			
- Remote Alarm Contact	\checkmark	\checkmark	\checkmark	V			
- Power Failure	\checkmark	\checkmark	\checkmark	V			
- 72-hour DC backup	\checkmark	v v v v					
* Accessories (Optional)		Door Fa	n Switch				
Safety Features & Certification	ISO 13485, E	lectric Safety Test (EST) IEC	61010-1 (2010), GDPMD, I	SO IEC 17025			



- ✓ User-friendly design
- Precise microcomputer temperature control
- Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- Low-noise compressor



VC 1050E / 1200E / 1400E



VC 1600E-3 / 1800E-3 / VC 2400E-3

Model	VC 1050E	VC 1200E	VC 1400E	VC 1600E-3	VC 1800E-3	VC 2400E-3
Dim. Ext (mm) W x D x H	1260 x 800 x 2070	1440 x 800 x 2070	1540 x 850 x 2070	1880 x 800 x 2070	2060 x 810 x 2070	2200 X 790 X 2070
Dim. Int (mm) W x D x H	1150 x 650 x 1430	1315 x 650 x 1430	1390 x 710 x 1440	1755 x 650 x 1430	1935 x 650 x 1430	2050 X 660 X 1430
Capacity	1,050L	1,200L	1,400L	1,600L	1,800L	2,400L
Int. & Ext. Chamber			Epoxy pow	der coated		
Temp. Controller			Temp adjustat	ole, LED display		
Temp Fluctuation			±1.	0°C		
Internal Air Circulation			Force	ed-air		
Refrigerant			R134a (CFC Free		
Glass Door			Heated Glass	Double Door		
Door Lock / Castor	2 nos. / 4 nos.	2 nos. / 4 nos.	2 nos. / 4 nos.	3 nos. / 6 nos.	3 nos. / 6 nos.	3 nos. / 6 nos.
Comp. Recip. Hermetic	470W	470W	500W	550W	550W	780W
Power Voltage			230Vac 50Hz Single P	hase (60Hz for others)		
Standard LED Alarm System						
- Hi/Low Alarm	V	V	V	V	V	V
- Remote Alarm Contact	V	V	V	V	V	V
- Power Failure	V	V	V	V	V	V
- 72-hour DC backup	V	V	V	V	V	V
* Accessories (Optional)	Door Fan Switch					
Safety Features & Certification		ISO 13485, Electr	ic Safety Test (EST) IEC	61010-1 (2010), GDPN	1D, ISO IEC 17025	



Features:

- ✓ User-friendly design
- Precise microcomputer temperature control
- Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- Low-noise compressor





VC 70

VC 300 / 500 / 600 / 800

Model	VC 70	VC 300	VC 500	VC 600	VC 800			
Dim. Ext (mm) W x D x H	530 x 450 x 680	590 x 650 x 1660	640 x 800 x 2070	700 x 800 x 2070	790 x 810 x 2245			
Dim. Int (mm) W x D x H	360 x 230 x 570	490 x 550 x 1200	540 x 650 x 1430	640 x 640 x 1430	660 x 720 x 1670			
Capacity	70L	300L	500L	600L	800L			
Int. & Ext. Chamber			Epoxy powder coated					
Shelves (hold 50kg)	1pc	4pcs	5pcs	5pcs	5pcs			
Temp. Controller		Ter	np adjustable, LED disp	lay				
Temp Fluctuation			±1.0°C					
Internal Air Circulation			Forced-air					
Refrigerant			R134a CFC Free					
Glass Door		S	ingle Heated Glass Doc	r				
Door Lock / Castor	1 no. / Nil	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.			
Comp. Recip. Hermetic	1/3 HP	1/4 HP	1/2 HP	1/2 HP	1/2 HP			
Power Voltage		230Vac 50	Hz Single Phase (60Hz	for others)				
Standard LED Alarm System								
- Hi/Low Alarm	V	V	V	V	V			
- Remote Alarm Contact		\checkmark	\checkmark	\checkmark	V			
- Power Failure		V	V	V	V			
- 72-hour DC backup		√ √ √ √						
* Accessories (Optional)			Door Fan Switch					
Safety Features & Certification	ISO 13	3485, Electric Safety Te	st (EST) IEC 61010-1 (2	010), GDPMD, ISO IEC	17025			

• Touchscreen controller optional item



Features:

- ✓ User-friendly design
- Precise microcomputer temperature control
- ✓ Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- ✓ Low-noise compressor



VC 1000 / 1200 / 1400





VC 1800-2

VC 1600-3 / 1800-3

Model	VC 1000	VC 1200	VC 1400	VC 1800-2	VC 1600-3	VC 1800-3
Dim. Ext. (mm) W x D x H	1260 x 800 x 2070	1440 x 800 x 2070	1540 x 850 x 2070	1630 x 790 x 2245	1878 x 800 x 2070	2055 x 810 x 2070
Dim. Int. (mm) W x D x H	1150 x 650 x 1430	1315 x 650 x 1430	1390 x 710 x 1440	1485 x 720 x 1670	1760 x 690 x 1430	1955 x 710 x 1430
Capacity	1,050L	1,200L	1,400L	1,800L	1,600L	1,800L
Int. & Ext. Chamber			Epoxy powe	der coated		
Temp. Controller			Temp adjustab	le, LED display		
Temp Fluctuation			±1.0)°C		
Internal Air Circulation			Force	d-air		
Refrigerant			R134a C	FC Free		
Glass Door		Heated Glass Double Door				ass 3-Door
No. of Shelves	10pcs	10pcs	10pcs	10pcs	15pcs	15pcs
Light	1pc	1рс	1рс	1рс	2pcs	2pcs
Door Lock / Castor	2 nos./4 nos.	2 nos./4 nos.	2 nos./4 nos.	2 nos./4 nos.	3 nos./4 nos.	3 nos./4 nos.
Comp. Recip. Hermetic	1/3 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP
Power Voltage			230Vac 50Hz Single Ph	ase (60Hz for others)		
Standard LED Alarm System						
- Hi/Low Alarm	V	V	V	V	V	V
- Remote Alarm Contact	V	V	V	V	V	V
- Power Failure	V	V	V	V	V	V
- 72-hour DC backup	V	V	V	V	V	V
*Accessories (Optional)		LCD Digital Display	, USB Data Logger, Dra	wer(s), Chart Recorder	, Fan door switch	
Safety Features & Certification		ISO 13485, Electri	c Safety Test (EST) IEC	61010-1 (2010), GDPM	D, ISO IEC 17025	





- ✓ User-friendly design
- Precise microcomputer temperature control
- Standard alarms and safety features
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts







Model	VC 1000-SC	VC 1000-PT	VC 1500-PT			
Dim. Ext (mm) W x D x H	1200 x 770 x 2045	1260 x 800 x 2070	1880 x 800 x 2070			
Dim. Int (mm) W x D x H	1095 x 626 x 1393	1100 x 650 x 1430	1500 x 650 x 1430			
Capacity	1,000L	1,000L	1,500L			
Int. & Ext. Chamber		Epoxy coated mild steel				
Temp. Controller		Temp adjustable, LED display				
Internal Air Circulation		Forced-air				
Refrigerant		R134a CFC Free				
Glass Door		Heated Glass 3- Door				
Shelves	10pcs	10pcs	15pcs			
Door (Self-closing)	Sliding Door 2pcs	4 Heated Glass Door (Pass-through)	6 Heated Glass Door (Pass-through)			
Door Lock / Castor	2 nos. / 4 nos.	2 nos. / 4 nos.	3 nos. / 4 nos.			
Comp. Recip. Hermetic	280W	280W	340W			
Power Voltage	230)Vac 50Hz Single Phase (60Hz for othe	ers)			
Standard LED Alarm System						
- Hi/Low Alarm	V	\checkmark	\checkmark			
- Delay Start-up	V	\checkmark	\checkmark			
- Auto Defrost	V	\checkmark	\checkmark			
- 24-hour DC backup	V	\checkmark	\checkmark			
* Accessories (Optional)	Door Fan Switch					
Safety Features & Certification	ISO 13485, Electric Sa	afety Test (EST) IEC 61010-1 (2010), GI	DPMD, ISO IEC 17025			



Our Low Temperature Freezers are designed and fabricated to provide reliable, frozen environments as low as -25°C to ensure safe storage of various samples/enzymes/culture media used in biological, life science, and other research applications. Unit sizes vary from 500L to 1,500L and complete with standard LED alarm system, door locks, heated glass door(s) and swivel castors.

- User-friendly design and easy-to-manage layout
- Precise microcomputer temperature control
- Auto-defrost
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- Low-noise compressor
- ✓ Large temperature ranges for storing goods: from 0°C to -25°C









VF 25U-1000

VF 25U-1500

Model	VF 25U-500	VF 25U-1000	VF25U-1500		
Dim. Ext (mm) W x D x H	640 x 800 x 2070	640 x 800 x 2070 1260 x 800 x 2070			
Dim. Int (mm) W x D x H	540 x 650 x 1430	1100 x 650 x 1430	1320 x 650 x 1430		
Capacity	500L	1,050L	1,500L		
Int. & Ext. Chamber		Epoxy coated mild steel			
Temp. Controller		Temp adjustable, LED display			
Internal Air Circulation		Forced-air			
Refrigerant	R404a CFC Free				
Glass Door	Heated Glass				
No. of Shelve(s)	4 nos.	8 nos.	12 nos.		
Door Lock / Castor	1 no. / 4 nos.	2 nos. / 4 nos.	3 nos. / 4 nos.		
Comp. Recip. Hermetic	550W	550W	650W		
Power Voltage	23	0Vac 50Hz Single Phase (60Hz for othe	rs)		
Standard LED Alarm System					
- Hi/Low Alarm		\checkmark	\checkmark		
- Delay Start-up	\checkmark	\checkmark	V		
- Auto Defrost	√ √ √				
* Accessories (Optional)	Door Fan Switch				
Safety Features & Certification	ISO 13485, Electric S	afety Test (EST) IEC 61010-1 (2010), GE	DPMD, ISO IEC 17025		



Our Low Temperature Freezers are designed and fabricated to provide specialized cold storage environment/long-term preservation for enzymes, vaccines, biological tissues and organs, reagents, as well as other temperature-sensitive materials at stable low temperatures range from -10°C to -40°C. We offer various unit sizes, ranging from 50L to 800L, includes digital temperature touch screen display, standard LED alarm system, inner doors for added security, and swivel castors. Suitable for scientific research institutions, hospitals, laboratories, sanitation and anti-epidemic station, electronics, chemical industry, machinery industry, fishery industry, etc.

Features:

- User-friendly design and easy-tomanage layout
- Precise microcomputer temperature control
- ✓ Auto-defrost
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- ✓ Visual and audible alarm alerts
- ✓ Low-noise compressor
- ✓ Large temperature ranges for storing goods: from -10°C to -40°C



VF 40U-50 / 100







VF 40U-280(D)

Model	VF40U-50	VF40U-100	VF40U-200	VF40U-280(D)		
Dim. Ext (mm) W x D x H	540 x 620 x 1115	460 x 460 x 510	700 x 655 x 1545	700 x 696 x 1743		
Dim. Int (mm) W x D x H	361 x 429 x 406	720 x 735 x 1260	506 x 466 x 1005	506 x 466 x 1203		
Capacity	50L	100L	200L	280L		
Internal Chamber	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel		
External Chamber	Epoxy Mild Steel	Epoxy Mild Steel	Epoxy Mild Steel	Epoxy Mild Steel		
Temp. Controller		Temp adjustat	ole, LED display			
Internal Air Circulation		Dir	ect			
Refrigerant		R404a 0	CFC Free			
Shelves	1 no	2 nos.	3 nos.	4 nos.		
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.		
Comp. Recip. Hermetic	260W	280W	280W	280W		
Power Voltage	230Vac 50Hz Single Phase (60Hz for others)					
Standard LED Alarm System						
- Hi/Low Alarm	\checkmark	\checkmark	\checkmark	\checkmark		
- Power Failure	V	\checkmark	V	V		
Safety Features & Certification	ISO 13485,	Electric Safety Test (EST) IEC	61010-1 (2010), GDPMD, ISO	D IEC 17025		

• Temperature-60°C optional



Our Low Temperature Freezers are designed and fabricated to provide specialized cold storage environment/long-term preservation for enzymes, vaccines, biological tissues and organs, reagents, as well as other temperature-sensitive materials at stable low temperatures range from -10°C to -40°C. We offer various unit sizes, ranging from 50L to 800L, includes digital temperature touch screen display, standard LED alarm system, inner doors for added security, and swivel castors. Suitable for scientific research institutions, hospitals, laboratories, sanitation and anti-epidemic station, electronics, chemical industry, machining industry, fishery industry, etc.

- User-friendly design and easy-to-manage layout
- Precise microcomputer temperature control
- ✓ Auto-defrost
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- Low-noise compressor
- Large temperature ranges for storing goods: from -10°C to -40°C







VF 40U-400 / 500

VF 40U-600/700

VF 40U-800

Model	VF 40U-400	VF 40U-500	VF 40U-600	VF 40U-700	VF 40U-800	
Dim. Ext (mm) W x D x H	850 x 960 x 1950	740 x 800 x 2070	940 x 980 x 1920	1155 x 970 x 1860	1155 x 980 x 2025	
Dim. Int (mm) W x D x H	550 x 630 x 1140	540 x 650 x 1430	700 x 680 x 1255	780 x 770 x 1180	910 x 775 x 1364	
Capacity	400L	500L	600L	700L	800L	
Internal Chamber	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	
External Chamber	Epoxy Mild Steel	Epoxy Mild Steel	Epoxy Mild Steel	Epoxy Mild Steel	Epoxy Mild Steel	
Temp. Controller	Temp adjustable, LED display					
Internal Air Circulation	Direct					
Refrigerant			R404a CFC Free			
Drawer / Shelves	4pcs. Shelves (5 Compartments)	3pcs. Shelves (4 Compartments)	10 nos. Drawers (6- small + 4-large)	10 nos. Drawers (6- small + 4-large)	10 nos. Drawers (6- small + 4-large)	
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	
Comp. Recip. Hermetic	430W	430W	430W	430W	430W	
Power Voltage	230Vac 50Hz Single Phase (60Hz for others)					
Standard LED Alarm System						
- Hi/Low Alarm	\checkmark	\checkmark	\checkmark	\checkmark	V	
Safety Features & Certification	ISO	13485, Electric Safety T	est (EST) IEC 61010-1 (2	2010), GDPMD, ISO IEC 1	17025	



-10°C to -25°C (Manual Defrost)

Our Low Temperature Upright Freezers are designed and fabricated to provide reliable, frozen environments as low as -25°Cto ensure safe storage of various samples/enzymes/culture media used in biological, life science, and other research applications. Units are complete with digital temperature touch screen display, standard LED alarm system, inner doors for added security, and swivel castors.

Features:

- User-friendly design and easy-to-manage layout
- Precise microcomputer temperature control
- Direct cooling with Manual Defrost
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- Low-noise compressor
- ✓ Large temperature ranges for storing goods: from -10°C to -25°C



VF 25U-280(M) / 400 (M)





VF 25U-500(M)

VF 25U-700(M)

Model	VF 25U-280(M)	VF 25U-400(M)	VF 25U-500(M)	VF U25-700(M)		
Dim. Ext (mm) W x D x H	810 x 730 x 1600	850 x 960 x 1950	800 x 720 x 1840	940 x 950 x 1920		
Dim. Int (mm) W x D x H	630 x 676 x 855	550 x 630 x 1140	640 x 450 x 1400	650 x 700 x 1520		
Capacity	280L	400L	500L	700L		
Internal Chamber		Stainle	ss Steel			
External Chamber		Epoxy Powder C	oated Mild Steel			
Temp. Controller		Large LC	D Display			
Door Lock	1 no.	1 no.	1 no.	1 no.		
Castor	4 nos.	4 nos.	4 nos.	4 nos.		
Internal Cooling	Direct					
Shelves	3 nos.	3 nos.	3 nos.	4 nos.		
Refrigerant		CFC Free		R404a (HCFC)		
Insulation Foaming	60mm	60mm	60mm	60mm		
Power Voltage		230Vac 50Hz Single P	hase (60Hz for others)			
Standard LED Alarm System						
- Hi/Low Alarm	V	V	V	V		
- Power Failure	\checkmark	\checkmark	V	\checkmark		
- Low Battery	V	V	V			
- Door Ajar	V	V	V	V		
- Dirty Condenser	V	V	V	V		
Safety Features & Certification	ISO 13485,	Electric Safety Test (EST) IEC	61010-1 (2010), GDPMD, IS	O IEC 17025		

Defrost (M) – Manual Defrost



Ultra-Low Temperature Freezer

-10°C to -86°C

Our Ultra Low Temperature Freezers are designed to preserve biological samples/specimens at stable temperatures from -10°C to as low as -86°C. These ULT Freezers are available in both upright and chest-types, and come in various sizes to fit all your research application needs. Applications can be found in blood banks, hospitals, epidemic prevention services, research institutes, laboratories in electronic and chemical plants, biological engineering institutes and marine fishery companies.

- Easy to operate
- Precise microcomputer temperature control
- ✓ Auto-defrost
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- High efficiency refrigeration system with double compressors
- Low-noise compressor
- ✓ Large temperature ranges for storing goods: from -10°C to -86°C







VF 86U-188

VF 86U-588/700 (VIP)

VF 86U-500/600

Model	VF 86U-188	VF 86U-588 (VIP)	VF 86U-700 (VIP)	VF 86U-500	VF 86U-600		
Dim. Ext (mm) W x D x H	830 x 810 x 1607.5	1100 x 871 x 1994.5	1218 x 970 x 1994.5	930 x 1000 x 1980	960 x 970 x 1920		
Dim. Int (mm) W x D x H	465 x 465 x 830	606 x 738 x 1310	963 x 558 x 1350	570 x 710 x 1225	700 x 680 x 1255		
Capacity	188L	588L	700L	500L	600L		
Internal & External Chamber		Stainless Steel, S	SUS-304 / Epoxy Coate	d Mild Steel			
Temp. Controller	Digital display mic	roprocessor, increment calibration mo	0.1°C with compressor de, auto defrost high &		ature offset for		
Temp. Pull Down Rate		Ambient +25	°C to -86°C approx. 3 to	5 hours			
Internal Air Circulation			Direct				
Refrigerant		(CFC-Free Mixed Gas				
Insulation Foaming	100mm	100mm	100mm	100mm	100mm		
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.		
Adjustable Shelves	2pcs	3pcs	3pcs	3 pcs	3pcs		
Inner Door	1 no.	2 nos.	4 nos	4 nos	4 nos		
Comp. Recip. Hermetic	2 x 1/2 HP	2 x 3/4 HP	2 x 3/4 HP	2 x 3/4 HP	2 x 3/4 HP		
Power Voltage		220Vac 50H	z Single Phase (60Hz for	others)			
Standard LED Alarm System							
- Hi/Low Alarm	V	\checkmark	V	V	V		
- Power Failure	V	V	V	V	V		
- Low Battery	V	V	V	V	V		
- Door Ajar	V	V	V	V	V		
- Condenser Dirty Alarm	V	\checkmark	V	V	V		
- High Ambient Temp. Alarm	\checkmark						
* Accessories (Optional)			Door Fan Switch				
Safety Features & Certification	ISO 134	485, Electric Safety Test	(EST) IEC 61010-1 (201	0), GDPMD, ISO IEC 17	025		

Ultra-Low Temperature Freezer

Our Ultra Low Temperature Freezers are designed to preserve biological samples/specimens at stable temperatures from - 10°C to as low as -86°C. These ULT Freezers are available in both upright and chest-types, and come in various sizes to fit all your research application needs. Applications can be found in blood banks, hospitals, epidemic prevention services, research institutes, laboratories in electronic and chemical plants, biological engineering institutes and marine fishery companies.

Features:

- Easy to operate
- Precise microcomputer temperature control
- Auto-defrost
- Forced-air circulation for enhanced temperature stability
- Easy-to-read LED temperature display
- Visual and audible alarm alerts
- High efficiency refrigeration system with double compressors
- Low-noise compressor
- ✓ Large temperature ranges for storing goods: from -10°C to -86°C





VF 86H-120/250/350



VF 86H-500

Model	VF 86H-50	VF 86H-120	VF 86H-250	VF 86H-350	VF 86H-500	
Dim. Ext (mm) W x D x H	670 x 670 x 1025	1270 x 790 x 990	1510 x 895 x1095	1810 x 885 x 1095	2115 x 895 x 1095	
Dim. Int (mm) W x D x H	410 x 410 x 385	540 x 400 x 590	780 x 500 x 690	1080 x 500 x 660	1380 x 500 x 690	
Capacity	50L	120L	250L	350L	500L	
Internal & External Chamber		Stainless St	eel / Epoxy Coated M	ild Steel		
Temp. Controller	Digital display micr	oprocessor, increment calibration mo	0.1°C with compresso de, auto defrost high a	· · · ·	erature offset for	
Temp. Pull Down Rate		Ambient +25	°C to -86°C approx. 3	to 5 hours		
Internal Air Circulation	Direct					
Refrigerant		(CFC-Free Mixed Gas			
Insulation Foaming	100mm	100mm	100mm	150mm	150mm	
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	
Comp. Recip. Hermetic	2 x 3/4 HP	2 x 3/4 HP	2 x 3/4 HP	2 x 3/4 HP	2 x 3/4 HP	
Power Voltage		220Vac 50H	z Single Phase (60Hz fo	or others)		
Standard LED Alarm System						
- Hi/Low Alarm	V	\checkmark	\checkmark	\checkmark	\checkmark	
- Power Failure	V	\checkmark	V	V	V	
- Low Battery	V	\checkmark	V	V	V	
- Door Ajar	V	V	V	V	V	
- Condenser Dirty Alarm	V	\checkmark	V	V	V	
 High Ambient Temp. Alarm 	v v v v v					
* Accessories (Optional)	Door Fan Switch					
Safety Features & Certification	ISO 134	185, Electric Safety Test	(EST) IEC 61010-1 (20	10), GDPMD, ISO IEC 1	17025	



Features: ✓ Precis

 \checkmark

 \checkmark

control

✓ Auto-defrost

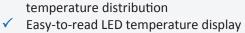
We offer wide range of sizes for Low Temperature Chest Freezer, all complete with product features most requested by the laboratory and medical industry. We offer quality selection to meet the specific needs of research laboratories, hospitals, pharmacies, veterinary offices, medical clinics, and other facilities with high demands for stable, low temperature storage.



VF 25H-100 / 200



VF 25H-300



Forced-air circulation for enhanced

Precise microcomputer temperature

- ✓ Visual and audible alarm alerts
- ✓ Low-noise compressor

Simple to operate

✓ Large temperature ranges for storing goods: from 0°C to -25°C



VF 25H-560



VF 25H-300(S) / 500(S) / 1500(S)

Model	VF 25H-100	VF 25H-200	VF 25H-300	VF 25H-560	VF 25H-300(S)	VF 25H-500(S)	VF 25H-1500(S)
Dim. Ext (mm) W x D x H	570 x 550 x 845	940 x 550 x 845	1055 x 750 x 835	1655 x 750 x 835	1760 x 710 x 865	2160 x 760 x 855	2950 x 1065 x 865
Dim. Int (mm) W x D x H	430 x 360 x 690	840 x 450 x 700	930 x 530 x 700	1530 x 530 x 700	1000 x 430 x 710	1350 x 520 x 710	2185 x 915 x 710
Capacity	100L	200L	300L	560L	300L	500L	1,500L
Internal Chamber		Alum	inium			Stainless Steel	
External Chamber	Mild Steel					Stainless Steel	
Input Power	100W	100W	300W	380W	300W	380W	1200W
Door Lock	1 no.	1 no.	1 no.	1 no.	1 no.	1 no.	1 no.
Temp. Controller	Digital	Digital	Digital	Digital	Digital	Digital	Digital
Castor	Nil	4 nos.	4 nos.	4 nos.	4 nos.	4 nos.	4 nos.
Internal Air Circulation	Direct						
Refrigerant CFC				R134a			
Power Voltage	220Vac 50Hz Single Phase (60Hz for others)						
Alarm System							
- Hi/Low Alarm	v	v	V	V	V	V	V
Safety Features & Certification		ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025					



We offer wide range of sizes for Low Temperature Chest Freezer, all complete with product features most requested by the laboratory and medical industry. We offer quality selection to meet the specific needs of research laboratories, hospitals, pharmacies, veterinary offices, medical clinics, and other facilities with high demands for stable, low temperature storage. Used for the refrigeration of blood plasma, reagent, vaccines, biological products and other various products which require cryopreservation, etc.

- Precise microcomputer temperature control
- Simple to operate
- Optimized evaporation system and condensation system, strong cooling, low energy consumption.
- Visual and audible alarm alerts
- Low-noise compressor
- Large temperature ranges for storing goods: from -10°C to -40°C







VF 40H-200/300





VF40H-400 VF40H-520 Model VF40H-100 VF40H-300 VF40H-200 875 x 735 x 1480 1145 x 710 x 838 1684 x 730 x 838 1855 x 890 x 1005 Dim. Ext (mm) W x D x H 720 x 735 x 1260 570 x 800 x 485 1220 x 600 x 695 460 x 460 x 510 985 x 504 x 661 1170 x 520 x 661 Dim. Int (mm) W x D x H 100L 200L 300L 400L 520L Capacity **Internal Chamber** Stainless Steel **External Chamber Epoxy Coated Mild Steel Temp.** Controller Temp adjustable, LED digital microprocessor PID **Temperature Fluctuation** ±2.0°C **Cooling System Direct Cooling Wall** R134a/R404aCFC-free **Refrigerant CFC** 1 no. / 4 nos. **Door Lock / Castor** 1 no. / 4 nos. Basket 1pc 1pc 1pc 2pcs 2pcs 260W 260W 400W 430W 430W **Comp. Recip. Hermetic Power Voltage** 230Vac 50Hz Single Phase (60Hz for others) Alarm System ٧ ٧ ٧ ٧ **Hi/Low Alarm** ٧ **Power Failure** Optional **Remote Alarm Contact** Optional Safety Features & ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025 Certification



Our Stability Chambers (Incubators) are designed to keep drugs, cells, plants, tissue, fungal cultures and other samples which require accurate temperature control and consistent uniformity. Ideal for a variety of applications, e.g. plant and insect studies, fermentation studies, bacterial culturing, water pollution testing and enzyme digestion studies.

Features:

- Precise microcomputer temperature control
- ✓ Simple to operate
- Optimized evaporation system and condensation system, strong cooling, low energy consumption.
- Visual and audible alarm alerts
- Low-noise compressor
- ✓ Large temperature ranges: from +4°C to +60°C







VI 300 / 500 / 600



VI 1000

VI 1500

Model	VI 100	VI 300	VI 500	VI 600	VI 1000	VI 1500
Dim. Ext (mm) W x D x H	570 x 670 x 1135	590 x 650 x 1660	640 x 800 x 2070	700 x 800 x 2070	1200 x 810 x 2070	1880 x 800 x 2070
Dim. Int (mm) W x D x H	540 x 520 x 550	490 x 550 x 870	540 x 650 x 1430	640 x 640 x 1430	1130 x 680 x 1430	1780 x 650 x 1430
Capacity	100L	300L	500L	600L	1,000L	1,500L
Int. & Ext. Chambers	Stainless Steel		E	poxy Coated Mild Stee	2	
Temp. Controller		T	emp adjustable, LED di	gital microprocessor P	ID	
Temp/ Fluctuation			±0.1°C PI	D Control		
Internal Air Circulation			Force	ed-air		
Refrigerant			R134a/R40	07 CFC Free		
Comp. Recip. Hermetic	100W	200W	250W	280W	400W	500W
Door Lock / Castor	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	1 no. / 4 nos.	3 nos. / 4 nos.
No. of Shelve(s)	2 nos.	4 nos.	5 nos.	5 nos.	10 nos.	15 nos.
Power Voltage			230Vac 50Hz Single P	hase (60Hz for others)		
Access Port 60mm			1 1	า0.		
Alarm System						
- Hi/Low Alarm	V	V	V	V	V	V
- Power Failure	V	V	V	V	V	V
- Remote Alarm Contact	V	V	V	V	V	V
- 72-hour Display & Backup	V	V	V	V	V	V
Safety Features & Certification		ISO 13485, Electr	ic Safety Test (EST) IEC	61010-1 (2010), GDPN	1D, ISO IEC 17025	



Laboratory Combined Refrigerator – Freezer (for Blood Bank & Pharmacy)

-10°C to -40°C (Freezer) | +2°C to +8°C (Refrigerator)

In line with the growing emphasis on proper storage of laboratory and pharmaceutical materials, our Laboratory Combined Refrigerator-Freezer is the combo which combines high performance refrigeration control and monitoring systems with energy efficient and cost-effective chamber design.

Features:

- Precise microcomputer temperature control
- ✓ Simple to operate
- Forced-air circulation for enhanced temperature distribution and uniformity
- Combined refrigerator-freezer for space saving
- ✓ Visual and audible alarm alerts
- ✓ Low-noise compressor





VC F-180

VC F-400

Model	VCF-180	VCF-400			
Overall Dim. Ext (mm) W x D x H	570 x 670 x 1450	750 x 790 x 2070			
Overall Capacity	185L	465L			
Int. Chamber / Ext. Chamber	Stainless Steel 304	Stainless Steel 304 /Epoxy Coated Mild Steel			
Temp. Controller	Temp adjustable, LED digital microprocessor PID				
<u>Refrigerator</u>					
Dim. Int (mm) W x D x H	470 x 520 x 550	610 x 610 x 900			
 Capacity 	135L	335L			
Temp. Accuracy	±1	°C			
 Temp. Control 	Forced-air circulation Auto Defrost +	-2°C to +8°C with 3 Drawers/Shelves			
 Refrigerant 	R134a C	CFC-free			
<u>Freezer</u>					
Dim. Int (mm) W x D x H	470 x 520 x 200	610 x 610 x 350			
 Capacity 	50L	130L			
Temp. Accuracy	±2°C				
Temp. Control	Direct Cooling -10°C to -25°C	Direct Cooling -10°C to -40°C			
Refrigerant	R404a/R50	07 CFC-free			
Door	Freezer – 1 no. solid door & Refri	gerator - 1 no. heated glass door			
Door Lock / Castor	2 nos. / 4 nos.	2 nos. / 4 nos.			
PVC Shelves	2 nos.	4 nos.			
Compressor	1/3 HP Semi-hermetic	3/4 HP Semi-hermetic			
Condenser	Air cooled f	in and tube			
Drainage	Hot pipe evap	poration type			
Power Voltage	240Vac 50Hz Single Phase (60Hz for others)				
Alarm System					
- Hi/Low Alarm	V	V			
- Power Failure	√	v			
- Remote Alarm Contact	V	V			
Safety Features & Certification	ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025				



The cold rooms are specifically designed to provide controlled temperature environments for numerous applications which require bigger capacity or space, including packaging of food & beverages or medicines, stability storage, biological research, shelf life testing, etc. The cold rooms/walk-in chillers can be made-to-order in accordance to your requirements.

- Can be customized according to your requirement(s) to suit varying capacities, applications, temperature, etc.
- ✓ Cold room, freezer or combination models
- Modular construction makes installation fast and easy
- ✓ Visual and audible alarm alerts
- Low-noise



Model	VC CT-1	VC FR-1			
Capacity	Option	Option			
Dim. (ft) W x D x H	10 x 10 x 9	10 x 10 x 9			
Int. & Ext. Chamber	Epoxy Coate	d Mild Steel			
Temp. Range	0°C to 8°C (temp adjustabl	e) -20°C (temp adjustable)			
Temperature Controller	LED Digital display microprocessor, increment 0.1°C with compressor delay start-up temperature offset for calibration mode, auto defrost				
Insulation Foaming	3 inches	4 inches			
Door Lock	1 no.	1 no.			
Internal Cooling	Forced-air	Circulation			
Refrigerant	R134a	R404a			
Door Lock	1 nos.	1 nos.			
Power Voltage	220/415Vac 50H	Iz Single/3 Phase			
Alarm System	1pc	1pc			
Optional Item	Internal & external stainless steel, temperature recorder round chart				
Safety Features & Certification	ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025				



Features:

easy

maintenance

by stainless steel

 \checkmark

 \checkmark

 \checkmark

 \checkmark

Blast Freezer -10°C to -45°C / -10°C to -75°C

For long-term and hygienic foodstuffs preservation, some food must be blast frozen to -18°C or -40°C (low temperature). "Frozen" means to transfer the fluid inside food to ice crystal. Therefore, preserving foodstuffs in low temperature environment which penetrate the foodstuffs and make the centre of foodstuffs low down to -40°C rapidly, that is blast freeze. Blast freezer can freeze foodstuffs in high speed, creating smaller ice crystals and will not damage food. No matter raw, cooked or semi-finished foodstuffs can be preserved perfectly by blast freezer, after defrosting; foodstuffs can maintain the original delicacy and fresh without quality doubt.

Intuitive touch control panel – Easy to use

Visual and audible alarm alerts

Modular construction makes installation fast and

Easy to remove shelf support for simple cleaning and

Both internal and external chamber are constructed





VF 45B-350 / VF 75B-500



VF 45B-2100



Stainless Steel Cart

/F	45B-180	



VF 45B-850



VF 45B-4000

Model	VF 45B-180	VF 45B-350	VF 45B-850	VF 45B-2100	VF 45B-4000	VF 75B-500	
Dim. Ext (mm) W x D x H	880 x 850 x 1015	880 x 850 x 1645	1000 x 1100 x 2350	1360 x 1110 x 2060	2900 x 1650 x 2200	1040 x 940 x 2380	
Dim. Int (mm) W x D x H	560 x 450 x 900	660 x 400 x 960	800 x 900 x 1420	1100 x 1400 x 1450	2080 x 1400 x 1450	530 x 710 x 1450	
Stainless Steel Trays	5pcs	10pcs	20pcs	20pcs	Double Carts 40	10pcs	
Capacity	180L	350L	850L	2100L	4000L	500L	
Stainless Steel Tray Dia.			400mm x 600mm			400 x 600 x 25	
Int. & Ext. Chamber		Stainless Steel					
Temp Range		-10°C to -45°C / -10°C to -75°C (temp adjustable) -10°C to -75°C					
Temp Fluctuation			±1°C	C to 2°C			
Internal Air Circulation			For	ced-air			
Refrigerant			R50	7 HCFC			
Comp Reci Hermatic	1500W	2500W	3000W	3500W	5 HP x 2	2 HP	
Door Lock / Castor(s)	1 no. / 4pcs	1 no. / 4 pcs	1 no. / 4pcs	2 nos. / 4pcs	2 nos. / Nil	Single Swing out solid door with lock	
Temp Pull Down Rate	Ambient +25°C to -86°C approx. 40 mins						
Standard LED Alarm	Hi/Low Alarm						
Power Voltage	230Vac 50Hz Single or 415Vac 3 Phase (60Hz for others)						
Fan Door Switch	Built-in						
Safety Features & Certification		ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025					

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The Ice-lined Refrigerators operate within temperature range of 0°C to +8°C come with highly efficient backup system up to 48 hours. Ideal for safe and proper storage of medical supplies.

Features:

- More accuracy and more reliable with microprocessor control and digital display, power ON/OFF indicator
- Lockable design to prevent unauthorized access
- Ambient temperature range from +5°C to +43°C
- ✓ Long hold-over time (up to 86 hours) in case of power failure
- ✓ CFC free insulation and refrigerant





VC 120/220/300-IL

Model	VC 120-IL	VC 220-IL	VC 300-IL	VC 500-IL	
Dim. Ext (mm) W x D x H	810 x 765 x 885	1160 x 765 x 885	1530 x 765 x 885	1850 x 890 x 1005	
Dim. Int (mm) W x D x H	610 x 470 x 600	960 x 470 x 600	1330 x 470 x 600	1220 x 600 x 695	
Capacity	120L	220L	300L	500L	
Temp. Controller	LED Dig	ital Microprocessor / Auto d	lefrost, Delay start-up, Offse	t mode	
Backup Time		Hold 48 hours wh	en power cuts off		
Internal Chamber		Stainles	ss Steel		
External Chamber		Epoxy Coated Mild S	teel / Stainless Steel		
Temp. Range	Ambient +5	°C to +40°C	+2°C to +8°C		
Temp. Fluctuation	±1°C				
Internal Circulation	Gra	vity	Direct Cooling		
Insulation Foaming		100	mm		
Condenser	Tube ar	nd tube	Air-cooled fin and tube	Remote air-cooled Fin and tube	
Basket/Castor	1 no. / 4 nos.	2 nos. / 4 nos.	2 nos. / 4 nos.	4 nos. / 6 nos.	
Door		Lid 1 n	o Solid		
Refrigerant		R13	34a		
Power Voltage		240Vac 50Hz	Single-phase		
Standard LED Alarm System					
- Hi/Low Alarm	\checkmark	\checkmark	\checkmark	\checkmark	
- Power Failure				\checkmark	
Safety Features & Certification	ISO 13485,	Electric Safety Test (EST) IEC	61010-1 (2010), GDPMD, IS	O IEC 17025	



Our Ice Flakes Makers are designed to produce ice flakes with the capacity ranging from 30kg/24hrs to 200kg/24hrs with rapid cooling speed. The Ice Flakes Makers can be applied in hospitals, supermarket/hypermarket chain stores, hotels, fishing refrigeration, medical applications, chemical products, food processing, vegetable preservation industries, etc.

- Constructed by high quality stainless steel, they are anticorrosive and durable
- Easy to operate Ice-making process is fully computerized
- Compact and space saving
- ✓ CFC free refrigerant



Model	IM 50	IM 70	IM 85			
Dia. Ext (mm) W x D x H	543 x 380 x 722	611 x 548 x 883	611 x 548 x 883			
Storage Tank (kg)	15	15	25			
Capacity (kg/24hrs)	50	70	85			
Int. & Ext. Chamber	Stainless Steel					
Refrigerant		R134a CFC-free				
Input Power	280W	280W	420W			
Weight	40kg	40kg	57kg			
Power Voltage	230Vac 50Hz Single Phase (60Hz for others)					
Safety Features & Certification	ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025					

Model	IM 100	IM 130	IM 150	IM 200	IM 300		
Dia. Ext (mm) W x D x H	611 x 548 x 883	611 x 635 x 945	611 x 635 x 945	641 x 680 x 1102	641 x 680 x 1102		
Storage Tank (kg)	25	35	35	55	55		
Capacity (kg/24hrs)	100	130	150	200	300		
Int. & Ext. Chamber			Stainless Steel				
Refrigerant	R134a CFC-free						
Input Power	420W	680W	680W	1370W	1370W		
Weight	57kg	85kg	85kg	100kg	100kg		
Power Voltage	230Vac 50Hz Single Phase (60Hz for others)						
Safety Features & Certification	ISC	13485, Electric Safety T	est (EST) IEC 61010-1 (2	010), GDPMD, ISO IEC 1	7025		



ETS Compressor Portable Freezer (DC)

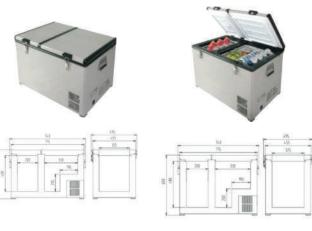




VF PF-12DC

VF PF-35DC

These portable freezers are lightweight. They double as great bar fridge, or an extra cooler to frozen or chilled keep samples/specimens/plasma in the vehicle while you are on the go. The entire portable freezers are built using an impact resistant polypropylene exterior that offers outstanding protection. Simply set the temperature and the electronic temperature controller does the rest.



ETS Combined Refrigerator/Freezer (DC)

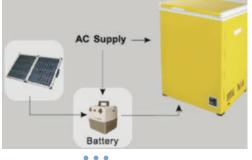
VF PF-60DC

VF PF-80DC

The Combined Refrigerator/Freezers are in a league of their own. With two independently controlled compartments, the configuration is up to you. Choose from the typical setup of fridge/freezer, or set both compartments at the same temperature to create a larger refrigerator or freezer.

Model	VF PF-12DC	VF PF-35DC	VF PF-60DC	VF PF-80DC			
Dim. Ext (mm) W x D x H	190 x 505 x 385	355 x 630 x 415	740 x 495 x 520	740 x 495 x 600			
Dim. Int (mm) W x D x H	125 x 370 x 300	250 x 496.5 x 303.5	200 x 325 x 400 / 330 x 325 x 400	200 x 325 x 480 / 330 x 325 x 480			
Capacity	15L	35L	60L	80L			
Internal Chamber		ABS					
External Chamber	Epoxy Coated Mild Steel						
Temperature Control / Range	LED Digital Display / +10°C to -22°C						
Temperature Fluctuation	±1.0°C						
Internal Cooling System	Direct Cooling Wall						
Refrigerant	R134a CFC-free						
Power Voltage	12VAC/DC or 24VAC/DC						
Display	Digital (use DC battery)						
Net Weight (KG)	8 16 29 31.5						
Hold Temperature w/o DC supply at +2°C to +8°C		Up to 3 to	o 4 hours				
Safety Features & Certification	ISO 13485, Electric Safety Test (EST) IEC 61010-1 (2010), GDPMD, ISO IEC 17025						





- Environmental friendly
 rechargeable by
 solar power
- Convenient



The mortuary refrigerators are developed for the storage of corpses for a short or long period. The units are made of stainless steel for long lasting use. Hydraulic trolley, stainless steel body trolley, autopsy table as well as other accessories to complete the range.

- Chamber construction: Fully made of stainless steel
- Compressor sealed-type compressor with gas aspiration cooling, complete with total protection motor
- ✓ Digital read-out electronic control panel
- CFC free insulation and refrigerant
- Installed with standard LED alarm system



MOT 2B



MOT 2B- SO



MOT 3B



MOT 4B

Model	MOT 2B	MOT 3B	MOT 4B	MOT 2B (Side-open)			
Dim. Ext (mm) W x D x H	2500 x 1070 x 1960	2500 x 1070 x 2590	2580 x 2140 x 1960	2550 x 1120 x 1960			
Dim. Int (mm) W x D x H	2270 x 860 x 1220	2270 x 860 x 1800	2270 x 1720 x 1220	2270 x 860 x 1220			
Door (Swing-out) L x W	2 nos. – 580mm x 860mm	3 nos. – 580mm x 860mm	4 nos. – 580mm x 860mm	2 nos. – 2100mm x 540mm			
Stainless Steel Tray	2 nos. – W610mm x L2130mm	3 nos. – W610mm x L2130mm	4 nos. – W610mm x L2130mm	2 nos. – W600mm x L2130mm			
Int. & Ext. Chamber		Stainle	ss Steel				
Temp. LED Control	Digital display microproces	sor, increment 0.1°C with com mode, auto defros	npressor delay start-up tempe it high & low alarm	rature offset for calibration			
Standard LED Alarm System		Hi/Low alarm (audio & visual)				
Castor (Heavy Duty)	6 nos. 6 nos. 6 nos. 6 nos.						
Door Lock	2 nos.	3 nos.	4 nos.	2 nos.			
Internal Air Circulation	Forced-air circulation						
Refrigerant	R407a CFC Free						
Lighting	2pcs	3pcs	4pcs	2pcs			
Comp. Recip. Hermetic	3/4 HP	1.0HP	2 x 3/4 HP	3/4 HP			
Power Voltage		220Vac 50Hz Single Pl	hase (60Hz for others)				
Safety Features & Certification	ISO 13485	, Electric Safety Test (EST) IEC	61010-1 (2010), GDPMD, ISO	IEC 17025			

Body Trolley with Roller & Cover

This body trolley is specially designed for transportation of body which provides comfort and safety for body preparation rites, and upper roller support can easily be pushed with tray from mortuary compartment smoothly.

Features:

- Mortuary trolley with cover
- Rustproof stainless steel 304
- Can be moved. Body tray in concave
- ✓ Four strong enough stainless steel 304 handles make the operation of removing the cover easily
- Four universal wheels all with brake to keep the table stable

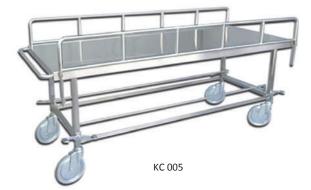


Model	КС 004
Dim. (mm) L x W x H	2000 x 810 x 1300
Deadweight	N/A
Material	Stainless Steel 304
Basins	N/A
Accessories	N/A
Castor	4 nos of 8 inches swivel castor centre direction & total locking system
Safety	With both side rail guards install 6 nos of stainless steel roller for easy load & unload. Front and rear with up and down lifting auto lock. Both sides cover with canvas.

Kapan Trolley

This Kapan trolley is specially designed for transportation of body which provides comfort and safety for body preparation rites, and rail can easily be pulled to ensure that the trolley can go through standard door smoothly.

- ✓ Stainless Steel structure
- Push handles
- ✓ Ø 125mm rolling wheels, two with brakes
- Housing and wheels made of polypropylene.
- Precision ball bearing



Model	КС 005
Dim. (mm) L x W x H	2000 x 810 x 1300
Deadweight	N/A
Material	Stainless Steel 304
Basins	N/A
Accessories	N/A
Castor	4 nos of 8 inches swivel castor centre direction & total locking system
Feature	With rail guards installed on both sides. Wide working area for kapan.



Trolley Body Preparation / Washing Table

Table top tilt manually for easy drainage. The universal wheels are soundless and easy for moving with brake. This Dissecting Table is for embalming, dressing and transferring. The table is constructed of a 304 stainless steel top with a convex surface, tubular stainless steel frame. Table-top can be used as stretcher. The drain, located in the center of the foot end, quickly eliminates fluid from the table.



Model	КС 009			
Dim. (mm) L x W x H	2600 x 855 x 755			
Material	Stainless Steel 304			
Surface	Removable perforated grid plates			
Stand	6 nos			
Sloping table top	Yes			
Spray nozzle				
Strainer	Yes			
Drainage	Yes			
Water Supply	Hot and cold mix-faucet type			

Hydraulic Body Lifting Trolley

Hydraulic lifting trolley with double cross bar for tray with casters. The different surfaces (guides, rollers and smooth surface) meet the needs of any structure and the frame is double-scissor-like, allowing the achievement of the 3rd place on top refrigerators. The hydraulic lifting mechanism can be a hydraulic pump with foot pedal or electric, depending on the model. All models are equipped with safety guards for the wheels and a speed controller so that once you lift the load, if you decide to lower it again, the same is not likely to fall suddenly endangering the operator.

- ✓ Separated movable tray 304 stainless steel.
- 4 firm casters with locks makes your operation more conveniently and all directional casters can let you go through a tight corridor.
- Hydraulic lift function are environmentally and efficiently lifter you can choose with height you want with easier operation.
- Smooth and polished surface with characteristics of easy to clean and beautiful appearance.



Model	HLT 002
Dim. (mm) L x W x H	2400 x 740 x 1580
Made of	Stainless Steel 304
Lifting Height	From 400mm to 1580mm
Hydraulic Powered	Lifting and Lowering
Power	Battery operated with DC charger
Battery	12V DC sealed type
Battery Indication	0V to 15V DC
End Rubber Pumper	Protection against walls
Castor	4pcs with lock
Easy transfer of body	Roller type with stopper
Weight Scale	Yes



MEDILOX Disinfecting Solution







Automatic Injection System

High Level Disinfectant Solution. Sterilizing more than 99.9% of all germs and virus in 30 sec.





Mini Ultra Violet (UV) Sterilizer

These mini sterilizers are useful for hospital, pharmacy, beauty shop, laboratory, clinic, pharmacy and places that need sanitation and sterilization.

They are good in design and small size. They are effective in disinfecting various kinds of germs on the surface of general items by using UV-ray (235.7nm wavelengths). It is very convenient to be used as keeping box for small implements.

- Easy to operate
- No special room preparation required, as the device can be placed at medical sites
- Set up quickly with the preset programs
- ✓ Disinfect high touch non-critical surfaces in minutes



Model	KRS 989B	KRS-A1	KR 100	
Dim. Ext (mm) W x D x H 350 x 215 x 240		485 x 375 x 440	650 x 550 x 810	
Dim. Int (mm) W x D x H	Dim. Int (mm) W x D x H 315 x 190 x 170		580 x 470 x 520	
Internal Chamber		Stainless Steel		
Capacity	10L	48L	140L	
Weight	2.95KG	11.75KG	30KG	
UV Lamp 6W x 1 no.		10W x 1 no.	20W x 1 no.	
Shelf	2 nos.	2 nos.	3 nos.	
Power Supply	100V to 240 V	AC 50Hz/60Hz	240VAC 50Hz	
Power Consumption	8W	10W	350W	
Temperature Control Range	No	No	Ambient +5°C to +60°C PID	
Internal Air Circulation No		No	Forced-air	



Cold-chain Logistics Solution

and logistics, which to maintain a desired low-temperature range. It is used to preserve and to extend the shelf life of A temperature-controlled supply chain solution – using uninterrupted series of refrigerated production, storage and distribution activities, along with associated equipment products, e.g. bio-pharmaceutical supplies, chemicals, pharmaceutical drugs, specimens, agricultural produce, seafood, photographic films, etc.



- Transportation efficiency
- Lower operating costs
- Increase operation efficiency
 - Improved safety
- Real-time inventory control
- Improve/Maintain quality of goods





Low Temperature Freezer -10°C to -25°C

	120A	
	VF SL-120A	
2	lel	
	Model	
WL		

1111								
	Dimensions (mm) W x D x H 1200 x 810 x 2000	Both interior and exterior – Stainless steel	-10°C to 25°C	Air cooling	90mm	1.3kW	-	
	Dimensions (mm) W x D x H	٢	Temperature	Freeze method	Insulated thickness	Freezer Unit	Interior shelf method	

Model	VF SL-120G
Dimensions (mm) W x D x H	1200 x 810 x 2000
Made of	Both interior and exterior – Stainless steel
Temperature	-10°C to -25°C
Freeze method	Air cooling
Insulated thickness	90mm
Freezer Unit	1.3kW
Interior shelf method	Net shelf / Trays on tracks

-

						1	
Model VF SL-68T	680 x 750 x 800	Made of Both interior and exterior – Stainless steel	-10°C to -25°C	Air cooling	90mm	0.6kW	Net shelf
Model	Dimensions (mm) W x D x H	Made of	Temperature	Freeze method	Insulated thickness 90mm	Freezer Unit 0.6kW	Interior shelf method Net shelf

	*						
Model VF SL-68G	680 x 750 x 1100	Both interior and exterior – Stainless steel	-10°C to -25°C	Air cooling	90mm	0.6kW	Net shelf
Model	Dimensions (mm) W x D x H	Made of	Temperature	Freeze method	Insulated thickness	Freezer Unit	Interior shelf method

and the second sec									
VF SL-75A	750 x 810 x 2000	Both interior and exterior – Stainless steel	-10°C to -25°C	Air cooling	90mm	0.8kW	Interior shelf method Net shelf / Trays on tracks		
Model	Dimensions (mm) W x D x H	Made of	Temperature	Freeze method	Insulated thickness	Freezer Unit	Interior shelf method		

Model VF SL-75G	750 x 810 x 2000	Made of Both interior and exterior – Stainless steel	Temperature -10°C to -25°C	Air cooling	90mm	0.8kW	nterior shelf method Net shelf / Trays on tracks	
Model	Dimensions (mm) W x D x H	Made of	Temperature	Freeze method	Insulated thickness	Freezer Unit	Interior shelf method	

Model VF UC-60 (Chiller)	680 x 750 x 800	Both interior and exterior – Stainless steel	+2°C to +14°C	Air cooling	1.3kW	Interior shelf method Net shelf / Trays on tracks				
Model	Dimensions (mm) W x D x H 680 x 750 x 800	Made of	Refrigerator Temperature +2°C to +14°C	Freeze method Air cooling	Freezer Unit 1.3kW	Interior shelf method				

Model VF UCF-185	1500 x 600 x 800	Power Supply 220V 50Hz 60Hz	-10°C to -25°C	268L	98KG	350W	R404a	Air-cooled	2 nos.	
Model	Dimensions (mm) W x D x H	Power Supply	Temperature	Capacity 268L	Net Weight	Compressor Output	Refrigerant R404a	Cooling System Type	Shelf 2 nos.	



DSM 9000 SMS Alarm System

(GSM Auto Dialer for Temperature Alarm Alert High & Low, Power Failure)

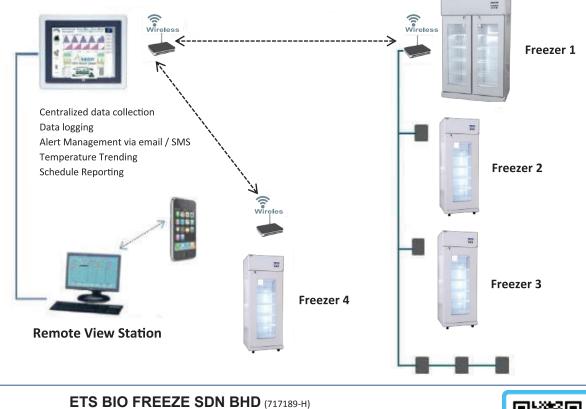
Laboratory Freezer & Refrigerator Connection

Features Include:

- Able to send SMS message when power failure or high/low temperature alarm alert is triggered.
- Max. link-up 7 units freezer(s)/refrigerator(s)
- Use Sim card device
- With external Audio & Visual alarm
- Remote alarm contact
- DC backup battery last for 72-hour
- Able to send max. 8 telephone numbers via SMS



Freezer Data Logging & Monitoring System v1.0





ETS BIO FREEZE SDN BHD (717189-H)

Add: No. 32G & 32-1, Dataran Mestika, Jalan Mawar 17, Taman Mestika, 56100 Kuala Lumpur, Malaysia. Tel: +603 - 4292 2722 / 4288 2722 / +6011-1077 4983 Fax: +603 - 4293 2722 Email: etsbiofr@gmail.com / sales_ets@hotmail.com Website: www.etsbiofreeze.com



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