

Ultra Low

Temperature Freezers

-40°C to -135°C

Blood Bank Refrigerator Ice Maker



ilShin

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ilShin - 86 °C Ultra Low Temperature Freezer Series

As soon as ilShin entered the market of - 86 °C freezers, a huge revolution took place.

This resulted in a total new approach of thinking about storage of important samples in an ultra low temperature environment.

With a combination of a reliable cooling system together with a unique door sealing system (perfect fit system®) ilShin is the only right answer in every cold storage situation.



Safety and Reliability



Not the - 86 °C Freezer itself, but the samples stored in it are the most important issue for a customer. For this reason ilShin only chooses the most reliable components available in the world. The reliable proven Bristol compressors are used in a unique cascade system with very low pressures and a completely sealed cooling system.

The ilShin Ultra Low Freezer is a very durable and reliable system with an extremely low noise level (around 50 dBA). This low noise level is created by a very efficient and effective use of the cascade compressor system with non CFC refrigerants.

ilShin creates the safest environment for your samples, due to its temperature and power alarms, standard dry contacts and an attractive priced optional CO₂ back-up system.

Performance Features

- Hermetically sealed cooling system with very durable compressors;
- Cold air loss is minimized by insulated inner doors;
- Efficient evaporator with maximum contact with walls for fast cooling down;
- 130 mm polyurethane foamed insulation;
- Heavy-duty casters with built-in adjustable stands (unique!);
- Cabinet with round corners for easy cleaning;
- 3 Built-in access ports;
- Very user-friendly control panel on eye level;
- Easy to clean condenser filter;
- Pressure equalization port allows easy access to cabinet after door closing;
- Quiet running fans and compressors create a very low noise level (+/- 50 dBA);
- Heated door seals (hot gas) prevents ice to build up;
- Light adjustable HDPE shelf with air circulation hole (No wrenched in -120 °C)



Standard Specifications Chest Freezers

Single Stage Refrigeration System :

-10°C to -45°C



DF4514 (shown with optional recorder)

Model no:	DF4507	DF4510	DF4514	DF4517	DF4520	
Capacity	191 liters	295 liters	392 liters	492 liters	593 liters	
Ext Dimensions WxDxH mm	1280x790x1030	1590x790x1030	1880x790x1030	2180x790x1030	2480x790x1030	12
Int Dimensions WxDxH mm	570x500x670	870x500x670	1170x500x670	1470x500x670	1770x500x670	5
Insulation	130 mm Non CFC, foamed					
Electrical	110 V / 60 Hz or 200 / 230 V, 50 / 60Hz				200/230V, 50/60Hz	
Certification						CE
Weight	185 kg	205 kg	230 kg	255 kg	285 kg	
Noise level	In normal operation and ambient condition					
Refrigeration	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1 HP	
2 " Cryo boxes	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	12
3 " Cryo boxes	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	8
Racks / Freezer	12 racks total	18 racks total	24 racks total	30 racks total	36 racks total	1



Standard Specifications Up-Right Freezers

Single Stage Refrigeration System :

-10°C to -40°C

DF3517 (shown with optional recorder)

Model no:	DF3510	DF3514	DF3517	DF3520	DF3524
Capacity	276 liters	369 liters	484 liters	605 liters	730 liters
Ext Dimensions WxDxH mm	920x900x1740	920x900x1979	920x1050x1979	1070x1050x1979	1070x1180x1979
Int Dimensions WxDxH mm	600x480x960	600x480x1280	600x630x1280	750x630x1280	750x760x1280
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 200 / 230 V, 50 / 60 Hz			200 / 230 V, 50 / 60 Hz	
Certification	CE, EM, KFSA certified				
Weight	265 kg	305 kg	350 kg	380 kg	420 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	1 x 1/2 HP	1 x 1/2 HP	1 x 1/2 HP	1 x 1 HP	1 x 1 HP
2 " Cryo boxes	15 boxes / rack	15 boxes / rack	20 boxes / rack	20 boxes / rack	25 boxes / rack
3 " Cryo boxes	9 boxes / rack	9 boxes / rack	12 boxes / rack	12 boxes / rack	15 boxes / rack
Racks / Freezer	12 racks total	16 racks total	16 racks total	20 racks total	20 racks total

Standard Specifications Chest Freezers Cascade Refrigeration System : -40°C to -90°C



DF9010 (shown with optional recorder)

DF9007	DF9010	DF9014	DF9017	DF9020	PF15007
91 liters	295 liters	392 liters	492 liters	593 liters	197 liters
790x790x1030	1590x790x1030	1880x790x1030	2180x790x1030	2480x790x1030	1720x790x1030
500x500x670	870x500x670	1170x500x670	1470x500x670	1770x500x670	830x440x540
In place polyurethane					150mm
110 V / 60 Hz or 200 / 230 V, 50 / 60Hz				200 / 230V, 50 / 60Hz	
EM, KFDA, certified					
211 kg	236 kg	261 kg	286 kg	311 kg	240 kg
of 20 °C all models +/- 50 dBa					+/- 60 dBa
1 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1 HP	1 x 3 HP
12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	12 boxes / rack	9 boxes / rack
8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	8 boxes / rack	6 boxes / rack
18 racks total	18 racks total	24 racks total	30 racks total	36 racks total	15 racks total

*** The model PF 15007 temperature range is -80 °C to -135 °C



Standard Specifications Up-Right Freezers Cascade Refrigeration System : -40°C to -86°C

DF8517 (shown with optional recorder)

Model no:	DF8510	DF8514	DF8517	DF8520	DF8524
Capacity	276 liters	369 liters	484 liters	605 liters	730 liters
Ext Dimensions WxDxH mm	920x900x1740	920x900x1979	920x1050x1979	1070x1050x1979	1070x1180x1979
Int Dimensions WxDxH mm	600x480x960	600x480x1280	600x630x1280	750x630x1280	750x760x1280
Insulation	130 mm Non CFC, foamed in place polyurethane				
Electrical	110 V / 60 Hz or 200 / 230 V, 50 / 60 Hz			200 / 230 V, 50 / 60 Hz	
Certification	CE, EM, KFDA, certified				
Weight	294 kg	334 kg	380 kg	410 kg	450 kg
Noise level	In normal operation and ambient conditions of 20 °C all models +/- 50 dBa				
Refrigeration	2 x 1/2 HP	2 x 1/2 HP	2 x 1/2 HP	2 x 1 HP	2 x 1 HP
2 " Cryo boxes	15 boxes / rack	15 boxes / rack	20 boxes / rack	20 boxes / rack	25 boxes / rack
3 " Cryo boxes	9 boxes / rack	9 boxes / rack	12 boxes / rack	12 boxes / rack	15 boxes / rack
Racks / Freezer	12 racks total	16 racks total	16 racks total	20 racks total	20 racks total

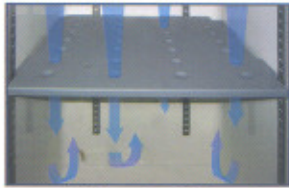
*** Temperature range of -40 °C to -135 °C in a 28 °C ambient environment

***All models have the option for a stainless steel interior. Please add 'S' behind the model number to order stainless steel interior, (for example DF8517S)**



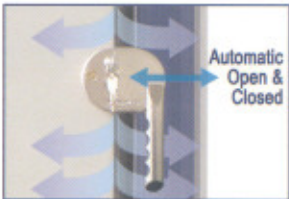
>> Perfect adiabatic System

High pressure polyurethane insulation system (130mm insulation) makes less lost of colds, decrease electric power consumption and long lifetime for freezer



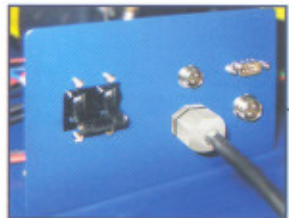
>> Adjustable shelf

This could be adjusted according to the sample features. Shelf air circulation holes made for temperature uniformity between compartments



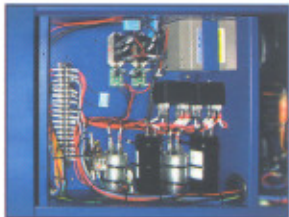
>> Safety door lock device

If a pressure of CO2 exceeds its maximum permissible pressure during using CO2 back-up system, Safety door lock device will help to maintain steady pressure to protect users and their samples from explosion.



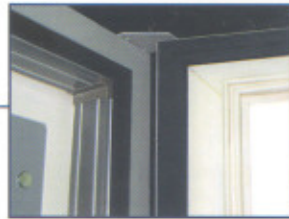
>> RS-232 port / Remote alarm port

By connecting RS-232 port to personal computer, by using remote alarm port, customer can check sample in anywhere



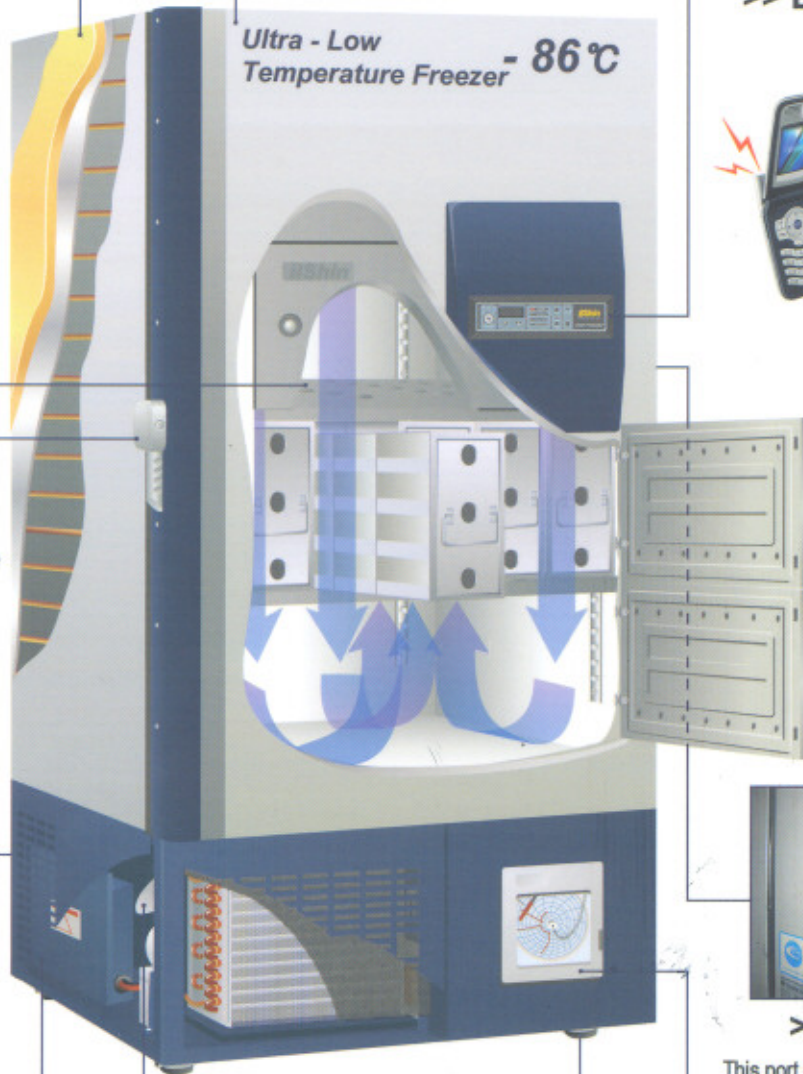
>> Electrical box

Customer can check all deep freezer electrical parts at once



>> Three doors airtight gasket

This is for protecting the samples, blocking the air from outside, increasing efficiency of freezer, decreasing the maintenance expense by using one sealing gasket for chamber, and two sealing gasket in door

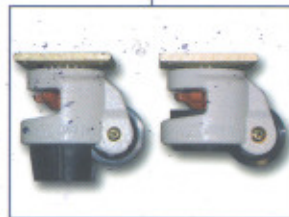


Ultra - Low Temperature Freezer - 86 °C



>> Refrigeration system

High power 1/2~1hp compressor is applied with extra running condenser, so refrigeration system can be used with maximum power. this system helps to concentrate on decreasing of electric power expense and quiet operation(50dB)



>> Status fix/wheel adjustment

There is stable wheel adjustment to make easy movement of freezer



Microprocessor controls monitor



Convenient voltage checking

>> Control Panel

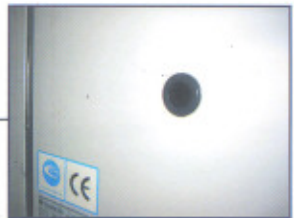
Control Panel is central heating system which helps easily to drive and check the machine at an customer's eye level

>> Dialing System

Model No : DS0119

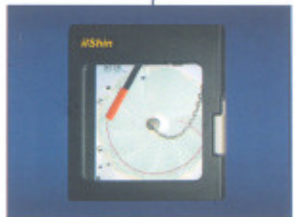


1. Automatic alarm signal and sound when alarm system is working
2. Automatic dial contact to five telephone numbers as per customer's setting
3. 30 seconds voice message recording function
4. 4 hours back-up battery in case of electricity power failure



>> Service Port

This port easily using to input power supply or sensor inside of chamber



>> Recorder

By recording freezer chamber temperature, customer can check operation error

Smart Microprocessor control

- Multi-position key switch on, off and set;
- Battery alarm;
- Condenser temperature alarm;
- Power failure alarm;
- High and Low temperature alarm;
- Bright easy to read digital display;
- Temperature set points;
- Standard dry contacts;



Microprocessor controls monitor



Convenient voltage checking

Service and Maintenance: priority number 1

Products from iShin are backed by well-educated engineers even after sales service. A/S engineers of iShin are working hard to meet the satisfaction of consumers through systematic iShin's training programs

Furthermore, to diminish the time spent on repairs, all iShin products are made detachably by cable housing for users' convenience.



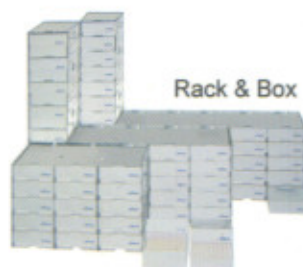
Options and Accessories



Chart Recorder : CH0067



CO₂ Back-up System : LC0070



Rack & Box

Inventory Aluminum Racks, Boxes & Dividers designed for optimizing the space utilization of each Ultra-Low freezer.

Rack Model no:	Boxes size	Total Boxes	For Freezer Model
CR0060	2"	12	Chest Freezer
CR0061	3"	8	
UR0062	2"	15	Upright Freezer DF8510, DF8514
UR0063	3"	9	
UR0064	2"	20	Upright Freezer DF8517, DF8520
UR0065	3"	12	
UR0066	2"	25	Upright Freezer DF8524
UR0067	3"	15	

Box Model no:	Boxes supplied	Divider Model no:	Divider supplied
FB0060	2" fiberboard	DV0049	16mm 49 cell
FB0061	3" fiberboard	DV0064	14mm 64 cell
PP0060	2" plastic, 81 cell divider	DV0081	13mm 81 cell
PP0061	3" plastic, 49 cell divider	DV0100	12mm 100 cell

Model no:	Description
CH0067	Temperature recorder. 7 day circular chart recorder
LC0070	CO ₂ back-up system with battery and temperature display

For further questions about other iShin products, maintenance contracts, cryo boxes and dividers, please contact your local dealer for more details:



Blood Bank Refrigerators [혈액냉장고]



• BB0123



• BB0150

■ Safety Control System

Control System can be workable by keyed lock on/set/off. Automatic Defrosting Apparatus by Time and Warm/Cold Alarm, Remote Alarm, Remote Power & Light S/W are equipped.

■ Defrosting on Door

Heat-treated Pair Glass is used for Door so it can be prevented from the ice-forming phenomena incurred by the temperature difference in/out Chamber and easily performs testing as visualizing inside from the outdoor.

■ Air Circulation System

In order to keep accurate temperature, we can get the optimal result by maintaining inner temperature with Air Circulation System.

- Specifications

	BB0123	BB0150
Capacity	557 Liters	1251 Liters
Temperature Range	Temperature is factory set at 4°C with a range of 0°C to 13°C	
Exterior Dimensions	740(W) x 830(D) x 1910(H) mm	1500(W) x 803(D) x 1910(H) mm
Interior Dimensions	610(W) x 630(D) x 1450(H) mm	1370(W) x 630(D) x 1450(H) mm
Material	All stainless steel interior	
Refrigeration	1/3 Hp. Hermetically sealed compressor	1/2 Hp. Hermetically sealed compressor
Drawers	6 Adjustable solid stainless steel drawers	12 Adjustable solid stainless steel drawers
Door	1 Double-paned temperature glass doors	2 Double-paned temperature glass doors
Interior Light	15 Watt fluorescent interior lights	40 Watt fluorescent interior lights
Certification	KGMP, ISO14001, ISO9001 certified	
Electrical	AC 200 / 230V, 50 / 60Hz	
Noise Level	45 dB	
Weight	119 Kg	173 Kg

Chromatography Chamber [시약냉장고]



• CC0123



• CC0150

■ Practical Inner Design

Most Installed inside can easily fix column and Movable Shelf can be installed according to the equipment location and sample storage in place. It's also easy to use equipment inside since waterproof outlet installed internally. It plays excellent role for Chromatography test where Insert Hole is installed at Chamber side.

■ Heater Outlet [Defrosting System]

Defrosting shall be executed automatically as per input time and it can preserve uniform temperature in Chamber from the instant heat up even when defrosting is in process.

- Specifications

	CC0123	CC0150
Capacity	557 Liters	1251 Liters
Temperature Range	Temperature is factory set at 4°C with a range of 0°C to 13°C	
Exterior Dimensions	740(W) x 830(D) x 1910(H) mm	1500(W) x 803(D) x 1910(H) mm
Interior Dimensions	610(W) x 630(D) x 1450(H) mm	1370(W) x 630(D) x 1450(H) mm
Material	All stainless steel interior	
Refrigeration	1/3 Hp. Hermetically sealed compressor	1/2 Hp. Hermetically sealed compressor
Shelf	4 Adjustable PVC Coated shelves	6 Adjustable PVC Coated shelves
Door	1 Double-paned temperature glass doors	2 Double-paned temperature glass doors
Interior Light	15 Watt fluorescent interior lights	40 Watt fluorescent interior lights
Certification	ISO14001, ISO9001 certified	
Electrical	AC 200 / 230V, 50 / 60Hz	
Noise Level	45 dB	
Weight	119 Kg	173 Kg

Ice Maker (Flake Type)



<< Specifications of Ice Maker : Model No IF300-150

- Cabinet Dimensions : 700W x700D x975H mm
- Bin Storage Dimensions : 600W x300D x500H mm
- Ice Production : 120Kg/Day
- Storage Capacity : 90Kg
- Refrigeration System : 1/3Hp Compressor
- Condenser : Air Cooled Condensing Unit
- Cabinet Material : Blower Molded(High Density Poly Ethylene)
- Electrical Requirements : 200/230 Voltage, 50Hz/60Hz, Single Phase
- Gross Weight : 114Kg



<< One - touch connection system for easy water supply

Customer can use system with convenience by using one-touch control system

>> Automatic System from water supply to ice production

This system can prevent input over-current and over-current of refrigeration system. Also customer can check water inlet and water level



<< Safety system for ice

Safety system to check Ice storage check, with automatic check system, customer can convince iShin Ice Maker's safety more



>> Adiabatic Effects of Bin Storage

Ice which produced at -30 degrees with twin screw shaft mechanism is stored in bin storage which foamed by polyurethan insulation



<< Twin Screw Shaft Mechanism

Flake type ice made by twin screw shaft mechanism maintains their solid particle, so it minimize consumption of ice.

>> Power Freezing System

Ice is produced by a patented method, using a unique freezer-flake mechanism to provide clean, hard bits of ice.



High quality products resulting from superior technology design and manufacturing...



Advanced Design



Internal chamber preparation



Chamber installed into exterior cabinet



Preparation before insulation process



High-pressure urethane insulation process



Door installation



Compressor housing attachment



Finished product packaging

Our technology is constantly developing at all times



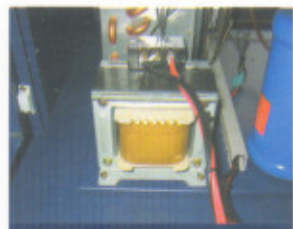
Dual layered air insulated inner doors retain cold air in chamber



Start relays and capacitors minimize electrical load and reduce the energy



Fluid separator prevents oil from compressors from entering system



Automatic voltage compensator protects electrical components from low voltage

Every single product manufactured by ilShin go through rigorous testing



Every single product manufactured by ilShin go through rigorous testing. These tests include temperature test of each compartment, insulation test, pressure test of refrigeration system, high/low pressure test, and overloading/overheating tests with different voltages and cycles.

We design and think in consumer in mind.



For easy cleaning, condenser filter for air cooled condenser is easily accessible by simply opening lower compartment. Filters are detachable for easy cleaning.



A safety net over condense products consumers when cleaning.



A door length handle is also provided for users to open door at any height.

Your local ilShin dealer:

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