

## -86°C Ultra Low Temperature Freezer

### Application

- Offers optimal temperature conditions that needed in the medical and laboratory fields.
- Suitable for scientific research institutes, metal processing, biological engineering, blood stations, hospitals, health and epidemic prevention systems, university laboratories, military enterprises, etc.

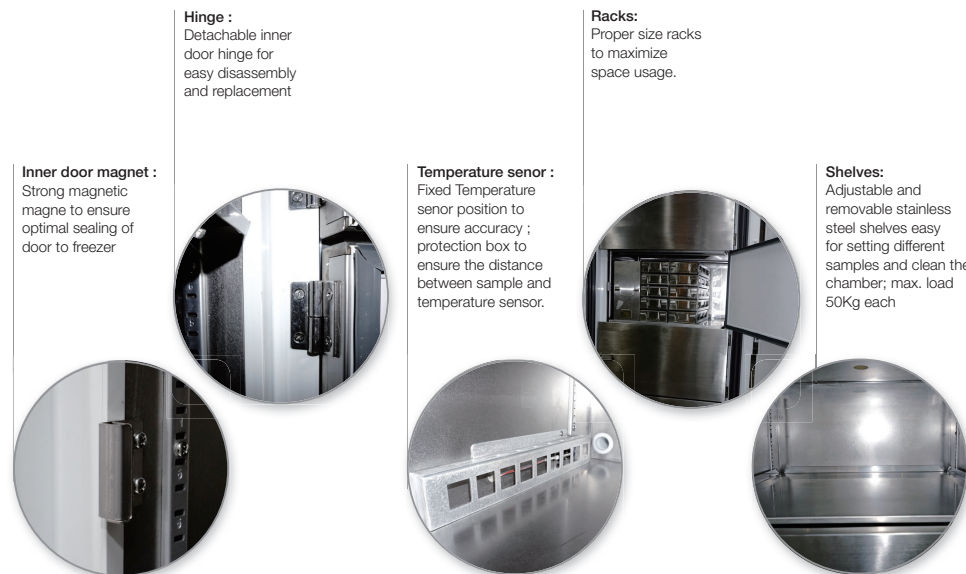
### Limits of Authority Management

- According to the needs of equipment management, different user permission of the freezer controller can be allocated to three levels: administrator, operator and visitor.

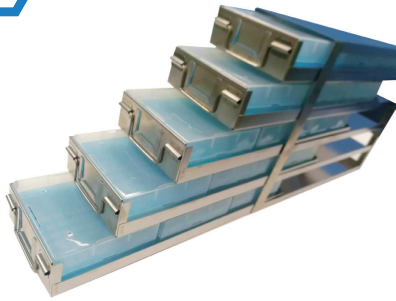


### Technical Features

- The frame consists of white coated antibacterial sheet steel, to ensure durable and corrosion resistant.
- Freezer inner side is made of SS304, allowing the perfect and easy cleaning.
- Easily to install or uninstall shelves, and the height of shelves can be adjusted in order to fit different size storage.
- 126mm Non HCFC polyurethane insulation foam, independent inner door and multi-layer sealing gasket can minimize the loss of refrigeration capacity.
- Fixable castors are designed for easily relocation.
- User friendly touch screen offers at a glance any control and command function, also allowing a quick access to any recorded data and working status.
- Already passed CE and RoHS certification.

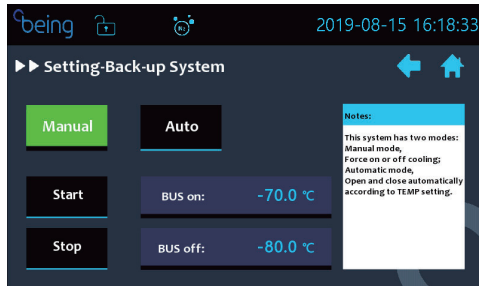


Options



Standard racks & boxes, one-stop equipment

Extra interior chamber temperature probe



LN<sub>2</sub>/CO<sub>2</sub> backup system  
Easy temperatures set to start or stop backup system

Manual and Auto models available

Chart recorder  
≥7 days' data can be stored



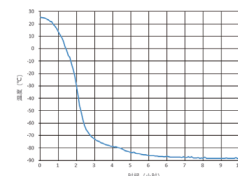
Voltage stabilizer



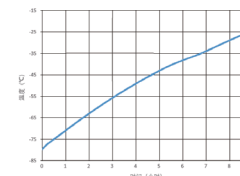
Power input  
160V-250V  
  
Power output  
220V ~ ±4%  
  
Over voltage  
246V±4V  
  
Action ≤6S

Technical Specifications

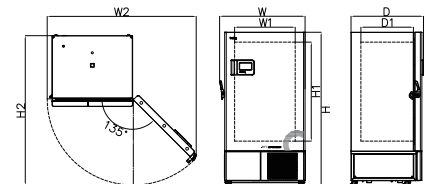
Model	BDW-86L390	BDW-86L490	BDW-86L650	BDW-86L770
Temperature range [°C]	-50 ~ -86			
Nominal capacity [Liters]	390	490	650	770
Exterior dimensions [mm] W x D x H	909 x 797 x 1990	909 x 929 x 1990	1091 x 929 x 1990	1091 x 1053 x 1990
Interior dimensions [mm] W1 x D1 x H1	589 x 505 x 1310	589 x 637 x 1310	780 x 637 x 1310	780 x 760 x 1310
Door opening [mm] W2 x H2	589 x 1310	589 x 1310	780 x 1310	780 x 1310
Insulation thickness [mm]	126			
Exterior finishing	White plastic coated galvanised steel			
Interior finishing	Stainless steel			
Inner door	4			
Shelves	3			
Levels	4			
Racks (boxes)	16 (240)	16 (320)	20 (400)	20 (500)
Ring latch hole	Yes			
Mechanical lock	Yes			
Data logger	Yes			
Battery	Yes			
Interior chamber temperature probe	Yes			
Vent port	Yes			
Gasket heating	Yes			
Controller type	Touch screen			
Refrigerant type	Non HCFC			
Voltage/Frequency [V / Hz]	AC220 / 50			
Power [W]	1500			1800
Net Weight [kg]	318	332	410	490
High condenser temperature alarm	Yes			
Power failure alarm	Yes			
Temperature sensor failure alarm	Yes			
Low battery alarm	Yes			
High / Low temperature alarm	Yes			
Door open alarm	Yes			
Sound pressure [dB]	≤ 53			
Cooling time [h]	≤ 6			≤ 8
Temperature uniformity [°C]	≤ 6			
Certification	CE / RoHS			



Temperature Decrease Curve



Temperature Rise After Power Off



Outline & Door Opening Dimension



# -86°C Chest Ultra Low Temperature Freezer

## Application

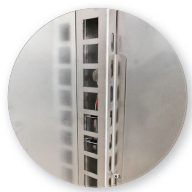
- Offers optimal temperature conditions that needed in the medical and laboratory fields.
- Suitable for scientific research institutes, metal processing, biological engineering, blood stations, hospitals, health and epidemic prevention systems, university laboratories, military enterprises, etc.

## Limits of Authority Management

- According to the needs of equipment management, different user permission of the freezer controller can be allocated to three levels: administrator, operator and visitor.



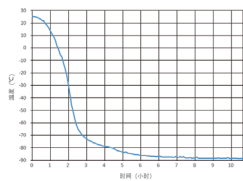
Side installed door opening air spring, can limit the door opening range, in order to convenient the operation of different height operator. When the door was closed, it moving slowly to avoid safety risk of extrusion and collision.



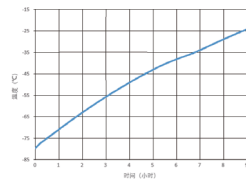
The position of temperature sensor was fixed, and installed with protection cage to keep distance between storage and chamber wall, in order to ensure the measurement accuracy.



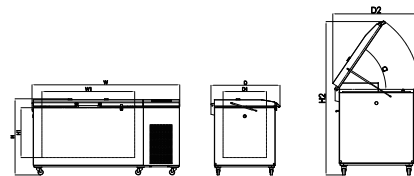
Equipped with mechanical lock, to ensure the safety of storage.



Temperature Decrease Curve



Temperature Rise After Power Off



Outline & Door Opening Dimension

## Technical Features

- The frame consists of white coated antibacterial sheet steel, to ensure durable and corrosion resistant.
- Freezer inner side is made of SS304, allowing the perfect and easy cleaning.
- Easily to install or uninstall shelves, and the height of shelves can be adjusted in order to fit different size storage.
- 126mm Non HCFC polyurethane insulation foaming and multi-layer sealing gasket can minimize the loss of refrigeration capacity.
- PU Castors silent and fixable, convenient to move and relocate.
- User friendly touch screen offers at a glance any control and command function, also allowing a quick access to any recorded data and working status.
- Good temperature uniformity.

## Technical Specifications

Model	BDW-86W480	BDW-86W650
Temperature range [°C]	-50 - -86	
Nominal capacity [Liters]	480	650
Exterior dimensions [mm] W x D x H	2050 x 956 x 1135	2050 x 1147 x 1135
Interior dimensions [mm] W1 x D1 x H1	1310 x 589 x 637	1310 x 780 x 637
Door opening [mm] W2 x H2	956 x 1135	1147 x 1135
Insulation thickness [mm]	126	
Exterior finishing	White plastic coated galvanised steel	
Interior finishing	Stainless steel	
Mechanical lock	Yes	
Data logger	Yes	
Battery	Yes	
Interior chamber temperature probe	Yes	
Vent port	Yes	
Gasket heating	Yes	
Controller type	Touch screen	
Refrigerant type	Non HCFC	
Voltage/Frequency [V/Hz]	AC220/50	
Power [W]	1130	
Net Weight [kg]	350	420
High condenser temperature alarm	Yes	
Power failure alarm	Yes	
Temperature sensor failure alarm	Yes	
Low battery alarm	Yes	
High / Low temperature alarm	Yes	
Door open alarm	Yes	
Sound pressure [dBA]	≤53	
Cooling time [h]	≤5	
Temperature uniformity [°C]	≤3	

# -40°C Low Temperature Freezer

## Applications

Medical, Reagents, Biological, Vaccine, Suitable for Medical, Electronics, Chemicals, R&D, University Research, Food Process.



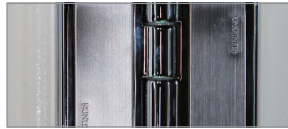
BDW-40L320



BDW-40L260



Magnetic door seal to ensure optimal sealing of door to fridge.



With sturdy aluminum alloy hinge.



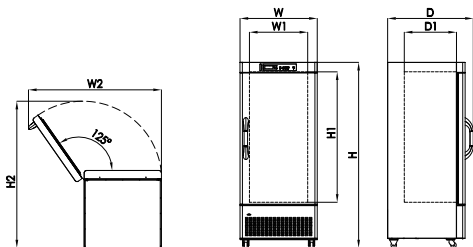
Independent inner doors to minimize cold air leakage.



Temperature sensor with protective cover to prevent contact with fridge or product.



Strong Magnet to ensure independent inner doors are fully sealed.



Outline & Door Opening Dimension

## Cooling System

- With stable and consistent internal cabinet temperature, Fast temp recovery after opening and closing the door.
- Temp. Range: - 30°C - - 40°C
- With 80mm thick polyurethane foam insulation.
- Evaporator copper tube embedded in foam layer to prevent corrosion and to ensure heat transferring efficiency.
- Special designed compact finned condenser for better efficiency.
- Independent inner door to minimize leakage of cold air, ensuring uniform temperature within the refrigerator.

## Safety

- Magnetic sealed door automatically closes to ensure and heightens the refrigeration performance and operational reliability.
- Password protected control setting to prevent any unnecessary perating parameters from being modified Sturdy and durable overall frame structure.
- Antibacterial powdered inner and outer surface.
- Refrigeration system uses highly efficient and environmental friendly fluorine-free refrigerant.
- Controller equipped with rechargeable backup battery, which an display the main information such as alarm and internal temperature of the cabinet when the main power is cut off.
- Built-in mechanical lock to ensure safety of stored items.
- Built-in Castors for easy relocation when needed.
- Safe mode activates in the event of temperature sensor failure, ensuring the safe storage of items in the box.

## Temperature control and safety monitoring

- Temp. Accuracy 0.1°C
- Alarm mode: buzzer and flashing lights.
- Digital temperature display.
- High and Low temp. alarm.
- Alarm when doors are opened after an extended period of time.
- Power failure alarm.
- Record displays Date, Time, Min and Max Temp.
- Controller displays real-time temperature and alarm codes for easy use.

## Easy Operation

- Standard testing ports on right side for easy access to external test tools.
- Castors wheels for ease of maneuvering.
- Door frame can be heated to reduce condensation.
- Adjustable shelvings.
- Dip-treated shelf, effective in preventing rust and corrosion.
- Buzzer alarm can also be set to mute if required.
- Backup battery is charged while the refrigerator is in operation and its reusable characteristics minimize the adverse effects on the environment.
- Displays real time operating status of refrigerator on larges creen of the controller for easy of reading.

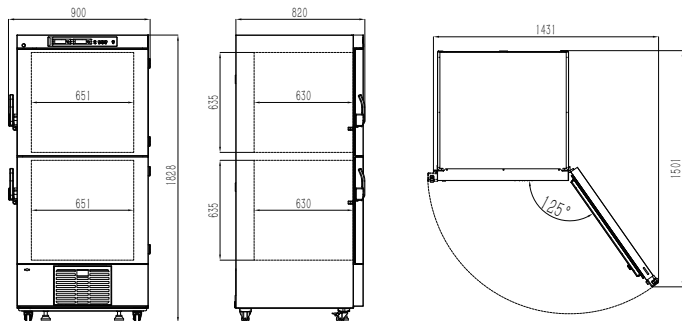
## Technical Specifications

Model	BDW-40L260	BDW-40L320
Temperature range [°C]	-30 - -40	
Effective volume [Liters]	260	320
Exterior dimensions W x D x H [mm]	673 x 747 x 1630	673 x 747 x 1886
Interior dimensions W1 x D1 x H1 [mm]	508 x 455 x 1137	508 x 455 x 1393
Door opening W2 x H2 [mm]	1159 x 1158	1159 x 1158
Insulation thickness [mm]	80	
Exterior finishing	White plastic coated galvanised steel	
Interior finishing	White plastic coated galvanised steel	
Inner doors	4	5
Shelves	3	4
Levels	4	5
Mechanical lock	Yes	
Battery	Yes	
Interior chamber temperature probe	Yes	
Gasket heating	Yes	
Controller type	Digital screen	
Refrigerant type	HC	
Voltage/Frequency [V / Hz]	AC220 / 50	
Power [W]	300	
Net Weight [kg]	98.5	113
Power failure alarm	Yes	
Temperature sensor failure alarm	Yes	
High / Low temperature alarm	Yes	
Door open alarm	Yes	
Temperature resolution [°C]	0.1	
Temperature uniformity [°C]	≤6	
Cooling Time [h]	≤4.1	
Certification	CE / RoHS	

# -20°C - -40°C Low Temperature Freezer

## Applications

Medical, Reagents, Biological, Vaccine, Suitable for Medical, Electronics, Chemicals, R&D, University Research, Food Process.



Outline & Door Opening Dimension

## Cooling System

- Temperature Range : -20°C - -40°C .
- Microprocessing controller, LED display, temperature adjustment and display accuracy is 0.1°C .
- The outer door adopts unique sealing structure, which can ensure the freezer with good sealing and heat preservation performance.
- The upper and lower storage spaces with two completely independent cooling system, temperature control and display.
- Compressors are efficient and reliable.

## Safety

- Build-in back-up battery to display temperature and alarm information for up to 8 hours, if AC power is failure.
- With high/low temperature alarm, sensor failure alarm, power failure alarm, door ajar alarm. Two ways of alarm: visual and audible.
- The handle has a padlock hole that can be used to provide an extra protection of security for storage.
- Button on the control panel can be locked to avoid setting parameters being changed due to misoperation.
- With compressor delay start protection function when power off restart.

## Technical Specifications

Model	BDW-40L530D
Temperature Range [°C]	-20 - -40
Effective Capacity [Liters]	265 × 2
Insulation Thickness [mm]	95
Exterior dimensions W x D x H [mm]	900 x 820 x 1828
Up chamber Interior dimensions W1 x D1 x H1 [mm]	651 x 630 x 635
Down chamber Interior dimensions W1 x D1 x H1 [mm]	651 x 630 x 635
Door opening W2 x H2 [mm]	1431 x 1501
Exterior Finishing	White Plastic Coated Galvanised Steel
Interior Finishing	
Levels	3 × 2
Drawers	3 × 3 × 2
Mechanical Lock	Yes
Battery	Yes
Temperature Sensor in Chamber	Yes
Gasket Heating	Yes
Controller Type	Digital Screen
Refrigerant	HC
Voltage/Frequency [V / Hz]	AC220 / 50
Rated Power [W]	340
Net Weight [kg]	160
Power Failure Alarm	Yes
Temperature Sensor Failure Alarm	Yes
High/Low Temperature Alarm	Yes
Door Ajar Alarm	Yes
Temperature Resolution [°C]	0.1
Temperature Uniformity [°C]	≤6
Pull Down Time [h]	≤4.1

- Efficient and environmentally friendly HC refrigerant is used.
- Build-in mechanical lock to ensure the safety of storage.
- Safe mode will be ran automatically in case of sensor failure to ensure the temperature for storage.

## Easy Operation

- Door frame can be heated to avoid condensation.
- Standard testing ports for easy access to external test tools.
- Buzzing alarm can also be set to mute if required.
- Standard drawer, easy to storage and management.
- The bottom is provided with leveling feet to ensure the levelness of the freezer body during installation.
- In case of failure, the control screen displays real-time temperature and corresponding alarm code, which is convenient for trouble shooting.
- The specially designed handle can balance the pressure difference between inside and outside the chamber while pulling, to ensure outer door can be opened easily and smoothly.

# -25°C Low Temperature Freezer

## Applications

Medical, Reagents, Biological, Vaccine, Blood Samples; Suitable for Medical, Electronics, Chemicals, R&D, University Research, Food Process.



BDW-25L320



BDW-25L260



Magnetic door seal to ensure optimal sealing of door to fridge.



With sturdy aluminum alloy hinge.



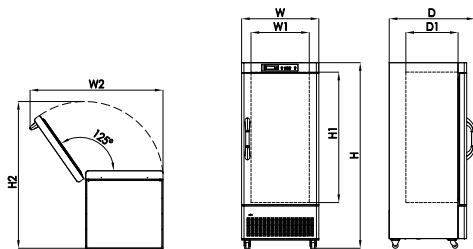
Independent inner doors to minimize cold air leakage.



Temperature sensor with protective cover to prevent contact with fridge or product.



Strong Magnet to ensure independent inner doors are fully sealed.



Outline & Door Opening Dimension

## Cooling System

- With stable and consistent internal cabinet temperature, Fast temp recovery after opening and closing the door.
- Temp. Range: -10°C - -25°C
- With 80mm thick polyurethane foam insulation.
- Evaporator copper tube embedded in foam layer to prevent corrosion and to ensure heat transferring efficiency.
- Special designed compact finned condenser for better efficiency.
- Independent inner door to minimize leakage of cold air, ensuring uniform temperature within the refrigerator.

## Safety

- Magnetic sealed door automatically closes to ensure and heightens the refrigeration performance and operational reliability.
- Password protected control setting to prevent any unnecessary operating parameters from being modified Sturdy and durable overall frame structure.
- Antibacterial powdered inner and outer surface.
- Refrigeration system uses highly efficient and environmental friendly fluorine-free refrigerant.
- Controller equipped with rechargeable backup battery, which can display the main information such as alarm and internal temperature of the cabinet when the main power is cut off.
- Built-in mechanical lock to ensure safety of stored items.
- Built-in Castors for easy relocation when needed.
- Safe mode activates in the event of temperature sensor failure, ensuring the safe storage of items in the box.

## Temperature control and safety monitoring

- Temp. Accuracy 0.1°C
- Alarm mode: buzzer and flashing lights.
- Digital temperature display.
- High and Low temp. alarm
- Alarm when doors are opened after an extended period of time
- Power failure alarm.
- Record displays Date, Time, Min and Max Temp.
- Controller displays real-time temperature and alarm codes for easy use.

## Easy Operation

- Standard testing ports on right side for easy access to external test tools.
- Castors wheels for ease of maneuvering.
- Door frame can be heated to reduce condensation.
- Adjustable shelvings.
- Dip-treated shelf, effective in preventing rust and corrosion.
- Buzzer alarm can also be set to mute if required.
- Backup battery is charged while the refrigerator is in operation and its reusable characteristics minimize the adverse effects on the environment.
- Displays real time operating status of refrigerator on large screen of the controller for easy of reading.

## Technical Specifications

Model	BDW-25L260	BDW-25L320
Temperature range [°C]	-10 - -25	
Effective volume [Liters]	260	320
Exterior dimensions W x D x H [mm]	673 x 747 x 1630	673 x 747 x 1886
Interior dimensions W1 x D1 x H1 [mm]	508 x 455 x 1137	508 x 455 x 1393
Door opening W2 x H2 [mm]	1159 x 1158	1159 x 1158
Insulation thickness [mm]	80	
Exterior finishing	White plastic coated galvanised steel	
Interior finishing	White plastic coated galvanised steel	
Inner doors	4	5
Shelves	3	4
Levels	4	5
Mechanical lock	Yes	
Battery	Yes	
Interior chamber temperature probe	Yes	
Controller type	Digital screen	
Refrigerant type	HC	
Voltage/Frequency [V / Hz]	AC220 / 50	
Power [W]	280	
Net Weight [kg]	98.5	113
Power failure alarm	Yes	
Temperature sensor failure alarm	Yes	
High / Low temperature alarm	Yes	
Door open alarm	Yes	
Temperature resolution [°C]	0.1	
Temperature uniformity [°C]	≤4	
Cooling Time [h]	≤2.6	
Certification	CE / RoHS	

# 2°C - 8°C Refrigerator

## Applications

Medical, Reagents, Biological, Vaccine, Blood Samples; Suitable for Medical, Electronics, Chemicals, R&D, University Research, Food Process.



Wide double layer window for easy observation



BYC-5L60



BYC-5L656  
BYC-5L1000



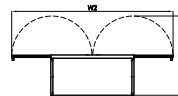
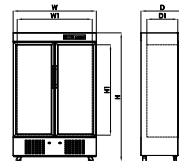
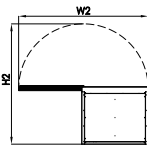
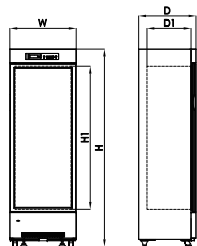
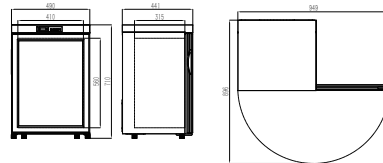
BYC-5L230  
BYC-5L310



Adjustable shelves



Strong mechanical convention to ensure better temperature uniformity



Outline & Door Opening Dimension

## Cooling System

- With stable and consistent internal cabinet temperature, Fast temp recovery after opening and closing the door.
- Temp. Range: 2 - 8°C
- With 50-60mm thick polyurethane foam insulation.
- Evaporator copper tube embedded in foam layer to prevent corrosion and to ensure heat transferring efficiency.
- Special designed compact finned condenser for better efficiency.
- Independent inner door to minimize leakage of cold air, ensuring uniform temperature within the refrigerator.

## Safety

- Magnetic sealed door automatically closes to ensure and heightens the refrigeration performance and operational reliability.
- Password protected control setting to prevent any unnecessary operating parameters from being modified
- Sturdy and durable overall frame structure.
- Antibacterial powdered inner and outer surface.
- Refrigeration system uses highly efficient and environmental friendly fluorine-free refrigerant.
- Controller equipped with rechargeable backup battery, which displays the main information such as alarm and internal temperature of the cabinet when the main power is cut off.
- Built-in mechanical lock to ensure safety of stored items.
- Built-in Castors for easy relocation when needed.
- Safe mode activates in the event of temperature sensor failure, ensuring the safe storage of items in the box.

## Temperature control and safety monitoring

- Temperature stability  $\pm 1.5^{\circ}\text{C}$
- Temp. Accuracy  $0.1^{\circ}\text{C}$
- Alarm mode: buzzer and flashing lights.
- Digital temperature display.
- High and Low temp. alarm.
- Alarm when doors are opened after an extended period of time.
- Power failure alarm.
- Record displays Date, Time, Min and Max Temp.
- Controller displays real-time temperature and alarm codes for easy use.

## Easy Operation

- Writable tag on each level.
- Wide double layer window for easy observation.
- LED lamp power switch together with control panel.
- Standard testing ports on right side for easy access to external test tools.
- Castors wheels for ease of maneuvering.
- Adjustable shelvings.
- Dip-treated shelf, effective in preventing rust and corrosion.
- Buzzer alarm can also be set to mute if required.
- Backup battery is charged while the refrigerator is in operation and its reusable characteristics minimize the adverse effects on the environment.
- Displays real time operating status of refrigerator on large screen of the controller for easy of reading.

## Technical Specifications

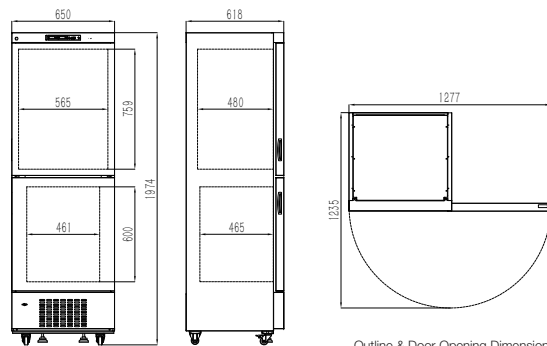
Model	BYC-5L60	BYC-5L230	BYC-5L310	BYC-5L656	BYC-5L1000
Temperature range [°C]	2 - 8				
Effective volume [Liters]	60	230	310	656	1000
Exterior dimensions W x D x H [mm]	490 x 441 x 710	625 x 594 x 1707	640 x 553 x 1880	1220 x 642 x 1885	1220 x 872 x 1885
Interior dimensions W1 x D1 x H1 [mm]	410 x 315 x 560	534 x 406 x 1150	540 x 425 x 1380	1100 x 454 x 1325	1100 x 684 x 1325
Door opening W2 x H2 [mm]	949x 896	1219 x 1152	1250 x 1160	2367 x 1160	2367 x 1390
Insulation thickness [mm]	40	45	50	60	
Exterior finishing	White plastic coated galvanised steel				
Interior finishing	White plastic coated galvanised steel				
Shelves	2	4	5	10	10
Levels	3	4	5	10	10
Mechanical lock	Yes				
Battery	Yes				
Interior chamber temperature probe	Yes				
Controller type	LED				
Refrigerant type	HC				
Voltage/Frequency [V / Hz]	AC220 / 50				
Power [W]	72	140	215	310	310
Net Weight [kg]	33	73	92.5	158	207
Power failure alarm	Yes				
Temperature sensor failure alarm	Yes				
High / Low temperature alarm	Yes				
Door ajar alarm	Yes				
Temperature resolution [°C]	0.1				
Temperature uniformity [°C]	≤2				
Cooling Time [h]	≤0.8				
Certification	-	-	-	CE / RoHS	

# 2°C - 8°C / -10°C - -25°C Refrigerator

## Application

Suitable for pharmacy, pharmaceutical factory, hospital, clinic, disease control and prevention center, it is a professional equipment for refrigerating medicine.

Suitable for hospital, disease control and prevention center, electronics, chemicals, R&D, laboratory, food processing. Can be used for electronics, chemicals, R&D, laboratory of university, food processing. Also can be used to store biological product, reagent, vaccine, etc.



Outline & Door Opening Dimension

## Cooling System

- Temperature Range: 2°C - 8°C , -10°C --25°C .
- Microprocessing controller, LED display, temperature adjustment and display accuracy is 0.1°C .
- The outer door adopts unique sealing structure, which can ensure the freezer with good sealing and heat preservation performance.
- The upper and lower storage spaces with two completely independent cooling system, temperature control and display.
- The refrigerator adopts fan motor with more safe and can keep lubrication permanently, so it can be used longer.
- The forced air cooling circulation of the refrigerator can keep the temperature inside the chamber stable and unified, also can make the temperature quickly recover after outer door closed.
- Compressors are efficient and reliable.

## Safety

- Build-in back-up battery to display temperature and alarm information for up to 8 hours, if AC power is failure.
- With high/low temperature alarm, sensor failure alarm, power failure alarm, door ajar alarm. Two ways of alarm: visual and audible.
- Button on the control panel can be locked to avoid setting parameters being changed due to misoperation.

- With compressor delay start protection function when power off restart.
- Efficient and environmentally friendly HC refrigerant is used.
- Build-in mechanical lock to ensure the safety of storage.
- Safe mode will be ran automatically in case of sensor failure to ensure the temperature for storage.

## Easy Operation

- Buzzing alarm can also be set to mute if required.
- Standard testing ports for easy access to external test tools.
- Standard drawer and basket, easy to storage and management.
- The freezer has two storage spaces with different temperature ranges, up and down.
- The bottom is provided with leveling feet to ensure the levelness of the freezer body during installation.
- In case of failure, the control screen displays real-time temperature and corresponding alarm code, which is convenient for trouble shooting.

## Technical Specifications

Model	BDW-25L300RF
Temperature Range [°C]	R: 2 - 8; F: -10 - -25
Effective Capacity [Liters]	R: 200; F: 100
Exterior Dimensions [mm] W x D x H	650 x 618 x 1974
Interior Dimensions [mm] W1 x D1 x H1	R: 565 x 480 x 759 F: 461 x 465 x 600
Door Opening [mm] W2 x H2	1277 x 1235
Insulation Thickness [mm]	40 / 90
Exterior Finishing	White Plastic Coated Galvanised Steel
Interior Finishing	Blister
Shelves	2
Drawers	3
Levels	6
Mechanical Lock	Yes
Battery	Yes
Temperature Sensor in Chamber	Yes
Controller Type	Digital Screen
Refrigerant	HC
Voltage/Frequency [V / Hz]	AC220 / 50
Rated Power [W]	330
Net Weight [kg]	100
Power Failure Alarm	Yes
Temperature Sensor Failure Alarm	Yes
High/Low Temperature Alarm	Yes
Door Ajar Alarm	Yes
Temperature Resolution [°C]	0.1
Temperature Uniformity [°C]	≤2 / ≤4
Pull Down Time [h]	≤0.8 / ≤2.6