



**Life Science Product  
-86°C Ultra Low Temperature Freezer**



# -86°C Ultra Low Temperature Freezer

7" Touch screen  
Front USB for data logging  
Vent port enables fast sample access

Double door  
Silent hinge  
Non HCFC polyurethane insulation

Muti layer gasket

Single hand openable

Gasket heating

Height- adjustable shelves

Enhanced heat transfer

Cascade refrigeration system

Easy-clean filter

High efficient oil separate

Leveling caster

Mechanical lock

Ring latch hole

Remote alarm  
Remote communication  
Simultaneous restart constraint  
Power switch  
Fuse  
Backup system power





- cold rolled plate with powder coated painting to ensure anti-corrosion and durability
- SS304 inner chamber for easy clean.
- Adjustable and removable stainless steel shelves easy for setting different samples and clean the chamber
- With 126mm thick polyurethane foam insulation to minimize temperature lose
- Independent inner doors to minimize cold air leakage
- Magnetic door seal to ensure optimal sealing of door to fridge
- Castors wheels for easy relocation when needed
- Touch screen for easy operation, user rights setting to ensure safety of sample

**Hinge :**  
Detachable inner door hinge for easy disassembly and replacement

**Inner door magnet :**  
Strong magnetic magne to ensure optimal sealing of door to freezer

**Temperature sensor :**  
Fixed Temperature sensor position to ensure accuracy ; protection box to ensure the distance between sample and temperature sensor.

**Racks:**  
Proper size racks to maximize space usage.

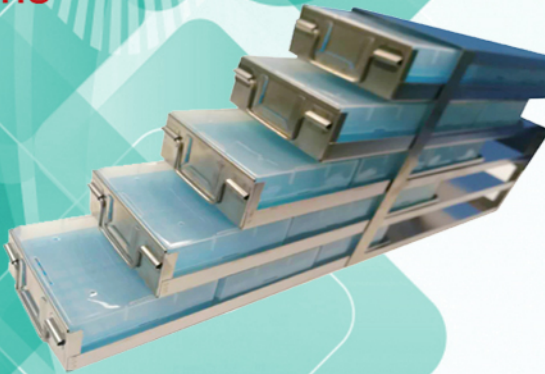
**Shelves:**  
Adjustable and removable stainless steel shelves easy for setting different samples and clean the chamber; max. load 50Kg each



Model	Nominal Capacity		Certification	Power	Inner Doors	Interior Dimensions (W x D x H)mm	Exterior Dimensions (W x D x H)mm	Weight (Kg)
	Liters	2" tube boxes						
Kamelie-86L490	490	240	CE	AC220-240V 60Hz	2,4	589 x 505 x 1310	909 x 797 x 1990	293
Kamelie-86L590	590	320	CE	AC220-240V 60Hz	2,4	589 x 637 x 1310	900 x 929 x 1990	325
Kamelie-86L790	790	400	CE	AC220-240V 60Hz	2,4	780 x 637 x 1310	1091 x 929 x 1990	354

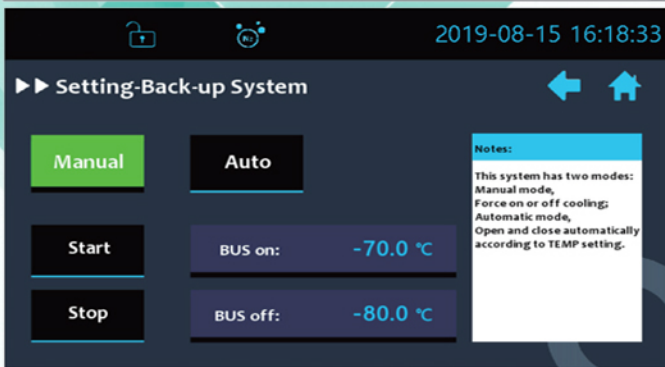


## Options



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	Kamelie-86L158	Kamelie-86L258
Capacity	158	258
Voltage	220-240V, 60Hz	
Inside Material	304 Stainless Steel	
Inside Size	460*460*510	570*485*800
Outside Size	700*730*1260	810*730*1600
Compressor Brand	Secop(Germany brand)	
Controller Brand	KELD	
Fan Motor Brand	EBM(Germany brand)	
Foam Thick	About 120mm	
Temperature	-40°C ~ -86°C accuracy 0.1, can adjustment	
Alarm	1.high temperature alarm 2.low temperature alarm 3.sensor fault alarm	
Style	Upright	

## Technical Specifications

Model	Kamelie-86L490	Kamelie-86L590	Kamelie-86L790
Temperature range [ °C ]	-50 ~ -86		
Nominal capacity [ Liters ]	490	590	790
Exterior dimensions [ mm ] W x D x H	909 x 797 x 1990	900 x 929 x 1990	1091 x 929 x 1990
Interior dimensions [ mm ] W x D x H	589 x 505 x 1310	589 x 637 x 1310	780 x 637 x 1310
Door opening [ mm ] W x H	589 x 1310	589 x 1310	780 x 1310
Insulation thickness [ mm ]	126		
Exterior finishing	White plastic coated galvanised steel		
Interior finishing	Stainless steel		
Inner door	2 / 4		
Shelves	3		
Levels	4		
Racks	16 ( 240 )	16 ( 320 )	20 ( 400 )
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 ]	AC220V-240V, 60Hz		
Power [ W ]	1300		
Weight [ kg ]	283	325	354
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 ]	≤ 8		
Minimal temperature [ °C ]	-86		
Temperature uniformity [ °C ]	≤ 6		