Laboratory Refrigerators & Freezers

General Purpose Laboratory Refrigerators.
Pharmacy Refrigerators.
General Purpose Laboratory Freezers.

Selection Guide

Laboratory Refrigerators & Freezers

Description		Operating Temp. Range (℃/℉)	Chamber Volume (L /cu ft)	Door type	Shelve or Drawer	Page
General Purpose Laboratory Refrigerators	CLG-150	2 ~ 10 / 35.6 ~ 50	156 / 5.5	Glass or Solid	Shelve	66
	CLG-300		319 / 11.3			
	CLG-650		636 / 22.5			
	CLG-850		843 / 29.7			
	CLG-1400		1395 / 49.3			
Pharmacy Refrigerators	CLP-650		636 / 22.5		Drawer	66
	CLP-850		843 / 29.7			
	CLP-1400		1395 / 49.3			
General Purpose Laboratory Freezer	FLG-150	-20 ~ -30 / -4 ~ -22	156 / 5.5	Solid	Shelve	66
	FLG-300		319 / 11.3			
	FLG-650		636 / 22.5			

Accessories & Options

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General Applications

General applications	Laboratory Refrigerators & Freezers	
	CLG/CLP series	FLG series
BOD Protocols	•	
Chemical Storage	•	
Chromatography Apparatus and Instrumentation	•	
Clinical	•	•
Culture	•	
Enzymes		•
General Storage	•	•
Life science	•	
Medication	•	•
Pharmaceutical	•	
Pre-Freezing		•
Reagents	•	
Test Samples	•	•
Temperature Sensitive Materials		•
Vaccines	•	•

*General purpose use and storage applications.

Technical Benefits

Safety functions

1) Visual and audible function.
   - High / low temperature.
2) 2 separate over-current fuses for user safety.
3) Door-open warning alarm :
   - 2 min optical signal. After then, intermittent tone alarm.
   - Fan automatically stops when the door is opened to minimize heat loss and protect operator.
   - Door lock equipment.

Optimum control performance

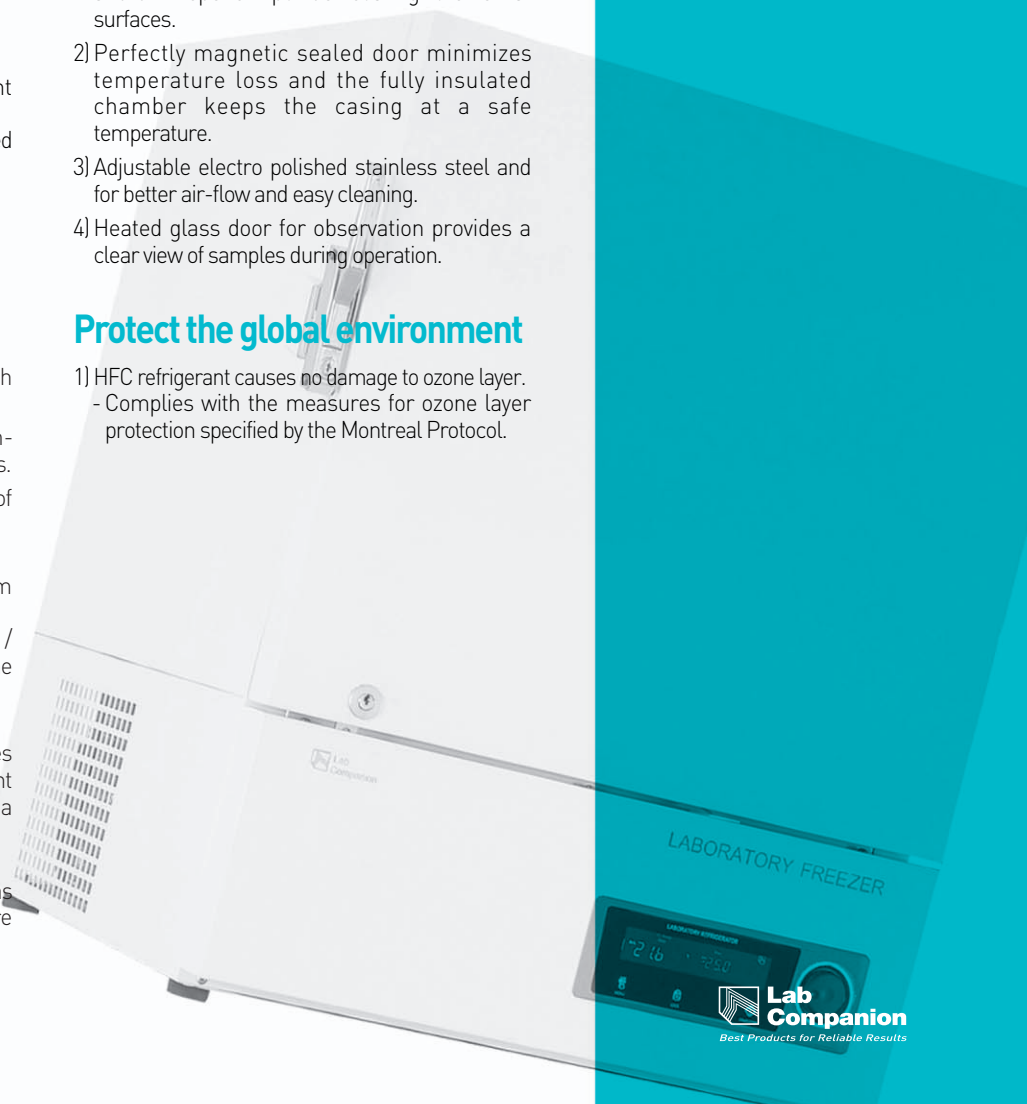
1) Selectable measuring temperature in ℃ or ℉.
2) Optimize CPU logic control system.
   - Optimum control for temperature with economic power consumption control.
3) Operator-friendly controller with the splash-proof/ easy clean keypads and clear VFD displays.
4) Screen lock button prevents accidental reset of parameters.
5) Touch screen type monitor.
   - Wide Color VFD with interactive input system using touches keys and dial knob.
   - Easily recognizable set values; set point (SP) / proportional value (PV) are also displayed on the color VFD controller.
6) Optimizing defrost system.
   - Advanced defrost sensor (dual sensor) manages the defrost cycle by detecting the trace amount of frost build-up to the evaporator and not a conventional defrost cycle.
     (Only for CLG / CLP / FLG-150, 300, 650 series)
   - Unique dual system defrosts initiates only as required so maintaining internal temperature uniformity during operation.
     (Only for CLG / CLP-850, 1400 series)

Ideal construction

1) High quality #304 stainless steel inner chamber and dirt-repellent powder coating to external surfaces.
2) Perfectly magnetic sealed door minimizes temperature loss and the fully insulated chamber keeps the casing at a safe temperature.
3) Adjustable electro polished stainless steel and for better air-flow and easy cleaning.
4) Heated glass door for observation provides a clear view of samples during operation.

Protect the global environment

1) HFC refrigerant causes no damage to ozone layer.
   - Complies with the measures for ozone layer protection specified by the Montreal Protocol.



Lab Companion
Best Products for Reliable Results

Laboratory Refrigerators & Freezers

CE Certification only for the CLG Series.

General Purpose Laboratory Refrigerators
Pharmacy Refrigerators

General Purpose Laboratory Freezers

Laboratory Refrigerators & Freezers

Advanced Safety, cold storage system offer stable refrigerated environments for life science, pharmaceutical, biotechnology, clinical, industrial laboratories, and your valuable products.

Constructional features

- Wide chamber capacity choice.
  - General Purpose Laboratory Refrigerators and Pharmacy Refrigerators up to 1395L.
  - General Purpose Laboratory Freezers up to 636L.
- High quality #304 stainless steel interior.
- Fluorescent lamp system as standard offer.
  - General Purpose Laboratory Refrigerators. (Without 150 series)
  - Pharmacy Refrigerators.
- Heated glass door for observation. (Only glass types)
  - Tempered double-pane glass door which has heat wire built-in glass type door to provide a clear view of samples during operation.
- Magnetic door seal.
  - Provided absorbing impact damage by double-cushion packing when open and closes the door.
  - Foamed magnetic packing ensure perfect chamber seal with door catch.
- Standard offered casters allow for easy transport and installation. (Without 150 series)
- Cable port for external wires. (Only CLG/CLP models-without 150 series)
  - 50mm diameter cable port is standard on the left side of the. We can also provide additional 50 mm diameter cable port. (optional)
- Optional stand for space-saving layout. (150 series only)
  - For use in limited space, for staking up two chambers is available.
- Efficient system with durable materials.
  - The evaporating system for better thermal efficiency with corrosion-resistant materials.
- Optimizing defrost system.
  - Advanced defrost sensor (dual sensor) manages the defrost cycle, not by a timer-defrost cycle, but by detecting the trace amount of frost build-up to the evaporator. (Only for CLG/CLP/FLG-150,300,650 series)
  - Unique dual system defrosts only as required; maintains internal temperature uniformity during process. (Only for CLG/CLP-850, 1400 series)

Operating features

- Optimal CPU logic control system.
  - Optimum control for temperature with economical power consumption.
- Enhanced digital controller designed to simplify operation with touch-screen / jog dial.
- Touch screen type monitor.
  - Colorful and bright VFD display with interactive input system using touch keys.
  - One touch- screen lock button prevent from unintentional value change.
  - Easily recognizable set values ; set point (SP) / proportional value (PV) are also added on the VFD panel.
  - Setting and indication resolution:
    - Temperature: 0.1℃ / ℉.
    - Signal indication of operating status.
- Convenient maintenance - Warning Alarm / monitoring system, Screen and door lock system, etc.
- Recorder. (optional)
  - 6-point dots type recorder with digital display.
  - Temperature recorder, 6 ″ (152 mm) chart, 7-days drive.
  - Thermal Line type recorder.

Safety functions

- Over current protector.
- Warning alarm with visual and audible indicator.
  - Door opening.
  - High / low temperature.
- Vice lock door closing equipment.

Laboratory Refrigerators & Freezers

General Purpose Laboratory Refrigerators

Model		CLG-150	CLG-300	CLG-650	CLG-850	CLG-1400
Chamber volume [L / cu ft]		156 / 5.5	319 / 11.3	636 / 22.5	843 / 29.7	1395 / 49.3
Display		VFD and touch-screen				
Temperature range [℃ / ℉]		2 ~ 10 / 35.6 ~ 50				
Refrigerator [Hp]		1/8	1/6	1/3	1/6×2ea	1/4×2ea
Door type		Heated glass or Solid				
Lighting		-	18W Fluorescent lamp	32W Fluorescent lamp		
Meterial	Interior	Stainless steel #304				
	Exterior	Steel, 1.0 mm, powder coating				
	Insulation	60mm, Polyurethane foam				
Dimensions [W×D×H]	Interior [mm / inch]	550×580×490 / 21.7×22.8×19.3	550×580×1000 / 21.7×22.8×39.4	650×675×1450 / 25.6×26.6×57.1	750×775×1450 / 29.5×30.5×57.1	1425×675×1450 / 56.1×26.6×57.1
	Exterior [mm / inch]	683×791×870 / 26.9×31.1×34.4	670×719×1515 / 26.4×28.3×59.6	770×815×1965 / 30.3×32.1×77.4	870×915×1965 / 34.3×36×77.4	1545×815×1965 /60.8×32.1×77.4
	Net weight [kg / lbs]	100 / 220.4	130 / 286.6	210 / 463.0	260 / 573.2	350 / 771.6
Electrical Requirements [230V, 60Hz]		2.0 A	2.3 A	4.0 A	5.0 A	6.0 A
Cat. No.	Solid door type	**AAAE1001**	**AAAE1011**	**AAAE1021**	**AAAE1031**	**AAHE1041**
	Glass door type	**AAAE1101**	**AAAE1111**	**AAAE1121**	**AAHE1131**	**AAAE1141**
Electrical Requirements [230V, 50Hz]		2.0 A	2.3 A	4.0 A	5.0 A	6.0 A
Cat. No.	Solid door type	**AAHE1002**	**AAHE1012**	**AAHE1022**	**AAAE1032**	**AAHE1042**
	Glass door type	**AAHE1102**	**AAHE1112**	**AAHE1122**	**AAHE1132**	**AAHE1142**

※ Permissible ambient Condition : Temperature 18 to 35℃ (64.4 to 86℉), Maximum relative humidity 85%.
※ Technical data. (according to DIN 12880)

Pharmacy Refrigerators

Model		CLP-650	CLP-850	CLP-1400
Chamber volume [L/cu ft]		636 / 22.5	843 / 29.7	1395 / 49.3
Display		VFD and touch-screen		
Temperature range [℃/℉]		2 ~ 10 / 35.6 ~ 50		
Refrigerator [Hp]		1 / 3	1 / 6×2ea	1 / 4×2ea
Door type		Heated glass or Solid		
Lighting		32W Fluorescent lamp		
Meterial	Interior	Stainless steel #304		
	Exterior	Steel, 1.0 mm, powder coating		
	Insulation	60mm, Polyurethane foam		
Dimensions [W×D×H]	Interior [mm/inch]	650×675×1450 / 25.6×26.6×57.1	750×775×1450 / 29.5×30.5×57.1	1425×675×1450 / 56.1×26.6×57.1
	Exterior [mm/inch]	770×815×1965 / 30.3×32.1×77.4	870×915×1965 / 34.3×36×77.4	1545×815×1965 /60.8×32.1×77.4
	Net weight [kg/lbs]	210 / 463.0	260 / 573.2	350 / 771.6
Electrical Requirements [230V, 60Hz]		4.0 A	5.0 A	6.0 A
Cat. No.	Solid door type	**AAHE3021**	**AAHE3031**	**AAHE3041**
	Glass door type	**AAHE3121**	**AAHE3131**	**AAHE3141**
Electrical Requirements [230V, 50Hz]		4.0 A	5.0 A	6.0 A
Cat. No.	Solid door type	**AAHE3022**	**AAHE3032**	**AAHE3042**
	Glass door type	**AAHE3122**	**AAHE3132**	**AAHE3142**

※ Permissible ambient Condition: Temperature 18 to 35℃ (64.4 to 86℉), Maximum relative humidity 85%.
※ Technical data. (according to DIN 12880)
※ Other size of chamber also available. (156L,300L)

General Purpose Laboratory Freezers

Model		FLG-150	FLG 300	FLG 650
Chamber volume [L / cu ft]		156 / 5.5	319 / 11.3	636 / 22.5
Display		VFD and touch-screen		
Temperature range [℃ / ℉]		-20 ~ -30 / -4 ~ -22		
Refrigerator [Hp]		1 / 2	3 / 4	1
Door type		Solid		
Meterial	Interior	Stainless steel #304		
	Exterior	Steel, 1.0 mm, powder coating		
	Insulation	60mm, Polyurethane foam		
Dimensions [W×D×H]	Interior [mm / inch]	550×580×490 / 21.7×22.8×19.3	550×580×1000 / 21.7×22.8×39.4	650×675×1450 / 25.6×26.6×57.1
	Exterior [mm / inch]	683×791×885 / 26.9×31.1×34.8	670×719×1530 / 26.4×28.3×60.2	770×815×1980 / 30.3×32.1×78
	Net weight [kg / lbs]	100 / 220.4	130 / 286.6	210 / 463.0
Electrical Requirements [230V, 60Hz]		3.5 A	4.0 A	4.3 A
Cat. No.	Solid door type	**AAHE2001**	**AAHE2011**	**AAHE2021**
Electrical Requirements [230V, 50Hz]		3.5 A	4.0 A	4.3 A
Cat. No.	Solid door type	**AAHE2002**	**AAHE2012**	**AAHE2022**

※ Permissible ambient Condition: Temperature 18 to 35℃ (64.4 to 86℉), Maximum relative humidity 85%.
※ Technical data. (according to DIN 12880)

Accessories & Options

for CLG / CLP / FLG

Recorders

Dot type

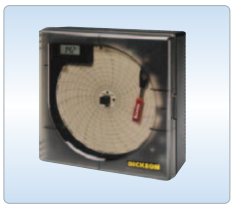
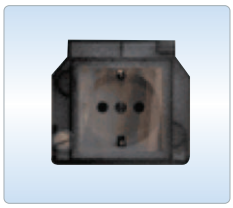


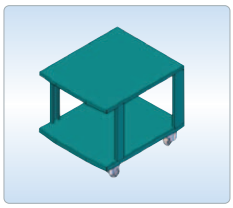
Chart type

Thermal line type

Others

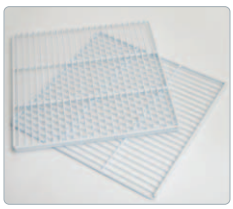


Electric Socket (CLG)



Stand with caster (Only CLG-150/FLG-150)

Shelves



Wire Shelves

Wire Shelves (Slide)

Drawer (Slide)

Include and Maximum Sheleve Quantity

Products	Wire Sheleves		Wire Sheleves (Slide)		Drawer (Slide)	
	Include	Maximum	Include	Maximum	Include	Maximum
CLG-150	2	6	-	4	-	3
CLG-300	3	11	-	7	-	5
CLG-650	3	17	-	11	-	8
CLG-850	3	17	-	11	-	8
CLG-1400	8	34	-	22	-	16
CLP-650	-	17	-	11	6	8
CLP-850	-	17	-	11	6	8
CLP-1400	-	34	-	22	12	16
FLG-150	2	6	-	4	-	3
FLG-300	3	11	-	7	-	5
FLG-650	3	17	-	11	-	8

Sheleves, Drawers, Recoders, others

Cat. No.		Description
Sheleves	AAAE1511	Wire Sheleves for CLG / FLG-150 / 300 (Flat type, Included Shelf Bracket)
	AAAE1512	Wire Sheleves for CLG / CLP / FLG-650, CLG / CLP-1400 (Flat type, Included Shelf Bracket)
	AAAE1513	Wire Sheleves for CLG / CLP-850 (Flat type, Included Shelf Bracket)
	AAAE1514	Wire Sheleves for CLG / FLG-150 / 300 (Slide type, Included Guide Rail)
	AAAE1515	Wire Sheleves for CLG / CLP / FLG-650, CLG / CLP-1400 (Slide type, Included Guide Rail)
	AAAE1516	Wire Sheleves for CLG / CLP-850 (Slide type, Included Guide Rail)
Drawers	AAAE1517	Drawer Sheleves for CLG / FLG-150/300 (Slide type, Included Guide Rail)
	AAAE1518	Drawer Sheleves for CLG / CLP / FLG-650, CLG / CLP-1400 (Slide type, Included Guide Rail)
	AAAE1519	Drawer Sheleves for CLG / CLP-850 (Slide type, Included Guide Rail)
Recorders	AAA8T500	Recorder (6 Point)
	AAAE1501	Recorder (Chart type, 6", 24hr / 7day)
	AAAE1502	Chart Recorder Paper (6", 60 Package)
	AAAE1503	Recorder (Thermal Line type)
Others	AAAE1521	Cable Port for CLG / CLPseries (50mm) - without150 models
	AAAE1532	Electric Socket for CLG / CLP series with 230V Outlet (Korea style) - without150 models