

#### Laboratory refrigerators and freezers







### Laboratory / pharmacy refrigerators & freezers

The Slimline® laboratory refrigerators and freezers offer a wide range of configurations ranging from routine laboratory applications up to high demanding storage protocols for blood banking. Temperature ranges which are available:

#### Laboratory series

- LR serie +1°C / +8°C
- -18°C / -22°C • LF serie
- -30°C / -35°C • LDF serie
- +4°C & -35°C • LRF serie

#### **Blood bank series**

- BB serie • BP serie
- +4°C & -35°C • BBP serie

+4°C

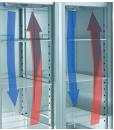
-35°C



### Temperature uniformity and recovery



All temperature configurations (except labmini freezers) offer forced air circulation by internal fans to ensure superior temperature uniformity and fast temperature recovery. Our line is available in several storage capacities: 130 liter (undercounter / benchtop), 610 liter (single door upright) and 1325 liter (double door upright). Additionally we offer our combination fridge / freezer (2 x 286 l).



Superior temperature uniformity by double evaporators for 1400 series

#### Fixed doors are also lighted

The philosophy behind our Refrigerator and Freezer line is to offer the safest environment for your products by using our UltraSafe® temperature control system in combination with the circulating forced air.

### Slimline® performance features

- Only Slimline® uses standard stainless steel interior and exterior on all cabinets
- · Microprocessor control with digital display / controller
- Adjustable temperature set points
- High temperature alarm
- · Low temperature alarm
- Date, time, alarm buzzer
- Infrared data transmission
- · Dry contact for remote alarm
- Door open alarm (optional for 130 series)
- Unique tracebility of alarms with storage history of last 20 alarm events
- Light on/off (in case of glass door)



- Auto switch off fan when door opens
- Automatic defrost cycle and melt water evaporation in heated tray (not for 130 series)
- · Chamber with rounded corners for easy cleaning
- · 60 mm of CFC-free polyurethane foam insulation
- Always pass through standard doors because of Slimline® design: only 80 cm wide and 198 cm high
- Standard fitted with heavy duty double-roll casters for easy transportation (lockable)
- · Easy to mount stainless steel adjustable feet also come standard inside every cabinet
- Flexible storage: you can mix drawers, grids and shelves in one cabinet without any internal modifications



Double-roll casters for easy transportation (lockable) adjustable feet come also with

Easy to mount stainless steel

every cabinet

## Slimline® refrigerators +1°C to +8°C

MODEL No:	LR130 LR130G		
Capacity	130 I	130 l	
Doors	1 stainless steel door	1 glass door (double layer)	
Door locks	1	1	
Air circulation	forced air circula	ition by inner fan	
Defrost	fully automation	c defrost cycle	
Temperature range	+1°C to +8°C (fac	ctory set on +4°C)	
Temperature precision	+/- 0.5 °C	+/- 0.5 °C	
Temperature stability	+/- 1°C	+/ 10C	
Temperature uniformity	+/- 2°C	+/- 2°C	
Microprocessor	adjustable set-point, high alarm, low alarm		
	(audible, visual a	nd remote alarm)	
External dimensions	630 x 567 x 850	630 x 567 x 850	
W x D x H mm			
Internal dimensions	540 x 415 x 460		
W x D x H mm	540 x 270 x 180 in front of compressor compartment		
Shelves	2 stainless steel perforated shelves (max 5)		
W x D mm	507 x 367	507 x 367	
Cabinet material	stainless steel inside and outside		
Insulation	50 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical	220-240V, 50/60* Hz		
Average power	0.22 kWh	0.22 kWh	
consumption			
Net weight	55 kg	55 kg	
Shipping dimensions	65 kg	65 kg	
W x D x H mm	670 x 645 x 1020	670 x 645 x 1020	
Stackable	standard manufactured for stacking		



LR130G



MODEL No:	LR700	LR700G	LR1400	LR1400G
Capacity	610 l	610 l	1325 l	1325 l
Doors	1 stainless steel door	1 glass door	2 stainless steel doors	2 glass doors
		(double layer)		(double layer)
Door locks	1	1	2	2
Air circulation		forced air cir	culation by inner fan	
Defrost		fully auton	natic defrost cycle	
Temperature range		+1°C to +8°C	(factory set on +4°C)	
Temperature precision	+/- 0.5 °C	+/- 0.5 °C	+/- 0.5°C	+/-0.5°C
Temperature stability	+/- 1 °C	+/- 1 °C	+/- 1 °C	+/- 1 °C
Temperature uniformity	+/- 2 °C	+/- 2 °C	+/- 2 °C	+/- 2 °C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm			or alarm
	(audible, visual and remote alarm)			
External dimensions	710x800x1985	710x800x1985	1420x800x1985	1420x800x1985
W x D x H mm				
Internal dimensions	590x675x1380	590x675x1380	1300x675x1380	1300x675x1380
W x D x H mm				
Shelves	3 adjustable grids (max16) 6 adjustable grids (max 32)			ds (max 32)
W x D mm	530x650	530x650	530x650	530x650
Cabinet material	Stainless steel inside and outside			
Insulation	60 mm non-CFC, foamed polyurethane			
Electrical	220-240V, 50/60 Hz			
Average power cons.	0.30 kWh	0.36 kWh	0.38 kWh	0.41 kWh
Net weight	135 kg	145 kg	235 kg	245 kg
Shipping dimensions	150 kg	160 kg	250 kg	260 kg
W x D x H mm	730x840x2040	730x840x2040	1440x840x2040	1440x840x2040
				1

above data is tested with empty units set on  $+4^{\circ}C$  and ambient temperature of +22 °C. \*60Hz version is available on special request

## Slimline® blood bank refrigerators +4°C/



The supreme members of the Slimline® refrigerators are the blood bank refrigerators. All BB series come standard with double layer glass doors with dual bulb light. For convenient storage of blood bags the units are equipped with heavy-duty stainless steel roll-out drawers.

The standard 7-day chart recorder with battery backup, ensures constant temperature recording even during power failures. The independent sensor for the recorder is installed in a buffered solution to display the exact temperature in a blood bag!



The BB series: the answer for safe and efficient storage of blood bags. The series are available in 130 liter (undercounter / benchtop), 610 liter (single door upright) and 1325 liter (double door upright).



MODEL No:	BB130	BB700	BB1400
Capacity	130 l	610 l	1325 l
Doors	1 glass door	1 glass door	2 glass doors
	(double layer)	(double layer)	(double layer)
Lights	single bulb	dual bulb, quick-c	change fluorescent
Door locks	1	1	2
Air circulation	force	ed air circulation by i	nner fan
Defrost		fully automatic defros	st cycle
Temperature range	+2°C	to +6°C (factory set	on +4°C)
Temperature precision	+/- 0.5 °C	+/- 0.5 °C	+/- 0.5°C
Temperature stability	+/- 1 °C	+/- 1 °C	+/- 1 °C
Temperature uniformity	+/- 2 °C	+/- 2 °C	+/- 2 °C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm**		
	(audible, visual and remote alarm)		
Chart recorder	7-day chart recorder	7- day cha	art recorder
	In wall mountable box factory installed in top panel		
External dimensions	630 x 567 x 850	710 x 800 x 1985	1420 x 800 x 1985
W x D x H mm			
Internal dimensions	540 x 415 x 460	590 x 675 x 1380	1300 x 675 x 1380
W x D x H mm			
Drawers	3 roll-out drawers	6 roll-out drawers	12 roll-out drawers
W x D x H mm	475 x 290 x 75	490 x 610 x 150	490 x 610 x 150
Cabinet materia	stainless steel inside and outside		
Insulation	60 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical	220-240V, 50/60*Hz		
Average power	0.22 kWh	0.36 kWh	0.41kWh
consumption			
Net weight	55 kg	190 kg	335 kg
Shipping dimensions	65 kg	200 kg	345 kg
W x D x H mm	670x645x1020	730x840x2040	1440x840x2040

above data is tested with empty units set on +4°C and ambient temperature of +22 °C

\*60Hz version is available on special request

\*\*BB130 door alarm optional



#### Two for one!

Slimline® designed two total independent cooling chambers (+4 °C top and -35°C bottom compartment) in less than 1 m<sup>2</sup> of valuable lab space. The ideal solution when space, dual temperature control and performance are critical.

The LRF300 +4°C & -35°C combination refrigerator / freezer offers 2x286 liters of safe and reliable storage capacity. The inner fans with forced air circulation ensure superior temperature uniformity and fast temperature recovery. The upper chamber standard comes with a double layer glass door where the bottom compartment comes with a stainless steel door. Both chambers have their own independent cooling system, controller and power.

The BBP300 is the combination blood & plasma system and comes with 2 x 3 stainless steel roll-out drawers and standard 2 chart recorders.

MODEL No:	LRF300		BBP300
Capacity	2 x 286 l		2 x 286 l
Doors:	upper:1 glass door (double layer)		
	bottom: 1 st	ainless steel door for	both parts
Lights	sma	Ill top light for upper	part
Door locks	2		2
Air circulation		ed air circulation by i	
Defrost		fully automatic defro	
Temperature range	+4°C	Cupper part / -35ºC l	ower part
Temperature precision	+/- 0.5 °C		+/- 0.5°C
Temperature stability	+/- 1 °C		+/- 1 °C
Temperature uniformity	+/- 2 °C		+/- 2 °C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm		
	2 separate and independent (audible, visual and remote alarm)		
Chart recorder	optional 2 x 7- day chart recorder		
	factory installed in top panel		
External dimensions	710 x 800 x 1985		
W x D x H mm			
Internal dimensions	590 x 675 x 590 (x 2 compartments)		
W x D x H mm			
Drawers			2 x 3 roll-out drawers
W x D x H mm	grids 530 x 650 drawers 490 x 610 x 1		
Cabinet material	stainless steel inside and outside		
Insulation	60 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical	220-240V, 50/60*Hz		
Average power	upper 0.22 kWh		upper 0.22kWh
consumption	bottom 0.35 kWh		bottom 0.35 kWh
Net weight	145 kg		190 kg
Shipping dimensions	160 kg		205 kg
W xD x H mm	730x840x2040		730x840x2040

above data is tested with empty units set on +4°C for upper part and of -35°C for bottom part and ambient temperature of +22°C \*60Hz version is available on special request

## *Slimline*® *freezers -20°C or -35°C*/

MODEL No:	LF130 LDF130		
Capacity	130	130	
Doors	1 stainless steel door	1 stainless steel door	
Door locks	1	1	
Air circulation	static c	cooling	
Defrost	manual defro	sting needed	
Temperature range	-18°C to -22°C (factory set on -20°C)	-30°C to -35°C (factory set on -30°C)	
Temperature precision	+/- 0.5 °C	+/- 0.5 °C	
Temperature stability		+/- 1°C	
Temperature uniformity	+/- 2°C	+/- 2°C	
Microprocessor	adjustable set-point, high alarm, low alarm		
	(audible, visual and remote alarm)		
External dimensions	630 x 567 x 850	630 x 567 x 850	
W x D x H mm			
Internal dimensions	540 x 415 x 460		
W x D x H mm	540 x 270 x 180 in front of compressor compartment		
Shelves	2 stainless steel perforated shelves (max 5)		
W x D mm	507 x 367	507 x 367	
Cabinet material	stainless steel inside and outside		
Insulation	50 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical	220-240V, 50/60* Hz		
Average power	0.29 kWh	0.32 kWh	
consumption			
Net weight	60 kg	61 kg	
Shipping dimensions	65 kg	66 kg	
W x D x H mm	670 x 645 x 1020	670 x 645 x 1020	
Stackable	standard manufactured for stacking		



LF130



MODEL No:	LF700	LF1400		LDF700
Capacity	610 l	1325 l		610 l
Doors	1 stainless steel door	2 stainless steel doors		1 stainless steel door
Door locks	1	2		1
Air circulation		forced air circu	ulation by inner fan	
Defrost		fully automa	atic defrost cycle	
Temperature range	-18°C to -22°C (factory	v set on -20 <sup>o</sup> C)	-30°C to -35°C (	factory set on -30°C)
Temperature precision	+/- 0.5 °C	+/- 0.5 °C		+/-0.5°C
Temperature stability	+/- 1 °C	+/- 1 °C		+/- 1 °C
Temperature uniformity	+/- 2 °C	+/- 2 °C		+/- 2 °C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm			oor alarm
	(audible, visual and remote alarm)			
External dimensions	710 x 800 x 1985	1420 x 800 x 1985		710 x 800 x 1985
W x D x H mm				
Internal dimensions	590 x 675 x 1380	1300 x 675 x 1380		590 x 675 x 1380
W x D x H mm				
Shelves	3 adjustable grids	6 adjustable grids		3 adjustable grids
	(max 16)	(max 32)		(max 16)
W x D mm	530 x 650	530 x 650		530 x 650
Cabinet material	stainless steel inside and outside			
Insulation	60 mm non-CFC, foamed polyurethane			
Electrical	220-240V, 50/60Hz*			
Average power cons.	0.46 kWh	0.62 kWh		0.53 kWh
Net weight	135 kg	240 kg		145 kg
Shipping dimensions	150 kg	250 kg		160 kg
W xD x H mm	730x840x2040	1440x840x2040		730x840x2040

above data is tested with empty units set on -20°C and ambient temperature of +22 °C. \*60Hz version is available on special request

### Slimline® blood plasma freezers -35°C/

The supreme members of the Slimline® freezers are the blood plasma cabinets. For convenient storage of plasma bags the units are equipped with heavy-duty stainless steel roll-out drawers.

The standard 7-day chart recorder with battery backup, ensures constant temperature recording even during power failures. The independent sensor for the recorder is installed in a buffered solution to simulate exact temperature in a plasma bag!





**BP700** 

BP130





The BP series: the answer for safe and efficient storage of plasma bags. The series are available in 130 liter (undercounter / benchtop) and 610 liter (single door upright).

MODEL No:	BP130	BP700	
Capacity	130	610 l	
Doors	1 stainless steel door	1 stainless steel door	
Door locks	1	1	
Air circulation	static cooling	forced air circulation by inner fan	
Defrost	manual defrosting needed	fully automatic defrost cycle	
Temperature range	-30°C to -35°C (fac	ctory set on -35°C)	
Temperature precision	+/- 0.5 °C	+/- 0.5 °C	
Temperature stability		+/- 1°C	
Temperature uniformity	+/- 2°C	+/- 2°C	
Microprocessor	adjustable set-point, high ala	rm, low alarm, door alarm**	
	(audible, visual ar	nd remote alarm)	
Chart recorder	7-day chart recorder	7-day chart recorder	
	In wall mountable box	factory installed in top panel	
External dimensions	630 x 567 x 850	710 x 800 x 1985	
W x D x H mm			
Internal dimensions	540 x 415 x 460	590 x 675 x 1380	
W x D x H mm			
Drawers	3 roll-out drawers	8 roll-out drawers	
W x D x H mm	475 x 290 x 75	490 x 610 x 150	
Cabinet material	stainless steel inside and outside		
Insulation	60 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical	220-240V, 50/60* Hz		
Average power consumption	0.32 kWh	0.53 kWh	
Net weight	64 kg	205 kg	
Shipping dimensions	69 kg	220 kg	
W x D x H mm	670 x 645 x 1020	730 x 840 x 2040	

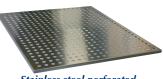
above data is tested with empty units set on -35°C and ambient temperature of +22 °C. \*60Hz version is available on special request

\*\* BP130 door alarm optional

# Slimline® Options & Accessories



Lexan® inner doors possible with separate lock



Stainless steel perforated shelves



Drawer with divider kit DV44

MODEL No:	Description:	For Slimline models
CH0047	4 inch chart recorder, circular, 7-day	LR700(G), LR1400(G); LF700; LF1400;
		LDF700 and LRF300
CH0047b	external 4 inch chart recorder, circular 7-day in a wall mountable box	LR130(G), LDF130 and LF130
CP0047a	recorder paper for CH0047 (0 to +14°C)(52pieces)	LR130(G), BB130, LR700(G), BB700,
		LR1400(G), BB1400 and LRF300 upper part
CP0047b	recorder paper for CH0047 (-50 to +40°C)(52 pieces)	LF130, LDF130, BP130, LF700, LDF700, BP700
		LF1400 and LRF300, BBP300 bottom part
IP0047	red pens for CH0047 (6 pieces)	All slimlines
GR150	additional grid (including pair of guides)	LR700(G), LR1400(G), LF700, LF1400,
	maximum 16 grids in 700 and 32 grids in 1400 series	LDF700 and LRF300
SSPP130	stainless steel perforated shelve LabMini (including pair of guides)	LR130(G), LF130 and LDF130
	Maximum 5 shelves in LabMini cabinets	
SSPP150	stainless steel perforated shelve (including pair of guides)	LR700(G), LR1400(G), LF700, LF1400,
	maximum 16 shelves in 700 and 32 shelves in 1400 series	LDF700 and LRF300
DR130	stainless steel roll-out drawer LabMini (including pair of guides)	LR130(G), LF130 and LDF130
	maximum 3 drawers in LabMini cabinets	
DR150	stainless steel roll-out drawer (including pair of guides)	
	maximum 8 drawers in 700 and 16 drawers in 1400 series	LR700(G), LR1400(G), LF700, LF1400,
DV44	flexible divider kit for DR150 drawer	LRF300 and LDF700
	creating 4 compartments with 2 flexible dividers each	
IN02M	2 separate inner doors of Lexan® material for LabMini	LR130(G), BB130, LF130, LDF130, BP130
IN02	2 separate inner doors of Lexan® material for Slimlines	
IN04	4 separate inner doors of Lexan® material for Slimlines	LR700(G), BB700, LR1400(G), BB1400,
IN06	6 separate inner doors of Lexan® material for Slimlines	LF700, LDF700, BP700 and LF1400
INL100	lock option for Lexan® inner doors	
ST100		
PS050	vapour proof power socket (single)	
PS100	vapour proof power socket (double)	
PT100PS	separate PT100 (installed inside cabinet (buffered solution)	All slimlines
WC200	water cooled condenser option for Slimline Series	
IQOQ200	factory filled in IQ/OQ protocol package Slimline series	-
NRS100	natural refrigerant option Slimline unit	
RA100	compressor/condenser alarm with battery (audible and visual alarm)	
RA200	power failure alarm with battery (audible and visual alarm)	
PR200	heated pressure release valve (2 way) Slimline series	LDF700, BP700 and LRF300 bottom part
	recommended in case of frequent door opening -35°C	

Specials: We are flexible in any kind of special requirements. Please specify model number and exact requirements for: 60 Hz, 110-115 V



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