Heavy-duty laboratory refrigerators




Refrigerators	LKPv 1420 **Laboratory refrigerator**	LKPv 1422 **Laboratory refrigerator**	LKPv 6520 **Laboratory refrigerator**	LKPv 6522 **Laboratory refrigerator**
Total gross/net capacity	1427/1427 l	1427/1427 l	601/601 l	601/601 l
Energy consumption in 24 h*	3.4 kWh	4.1 kWh	2.4 kWh	2.8 kWh
Exterior dim. (w/d/h) in mm	1430/830/2150	1430/830/2150	700/830/2150	700/830/2150
Cooling system	forced-air	forced-air	forced-air	forced-air
Temperature range	-2°C to +16°C	0°C to +16°C	-2°C to +16°C	0°C to +16°C
External finish	white	white	white	white
Door	solid	glass	solid	glass

* Laboratory test procedure according to NF X15-140

Heavy-duty laboratory freezers


Freezers	LGPv 1420 **Laboratory freezer**	LGPv 6520 **Laboratory freezer**
Total gross/net capacity	1427/1427 l	601/601 l
Energy consumption in 24 h*	9.4 kWh	4.9 kWh
Exterior dim. (w/d/h) in mm	1430/830/2150	700/830/2150
Cooling system	forced-air	forced-air
Temperature range	-26°C to -10°C	-35°C to -10°C
External finish	white	white
Door	solid	solid

* Laboratory test procedure according to NF X15-140

Laboratory appliances with spark-free interior





Refrigerators	LKEXv 1800 **Laboratory refrigerator**	FKEX 1800 **Laboratory refrigerator**	FKEX 2600 **Laboratory refrigerator**	FKEX 3600 **Laboratory refrigerator**	FKEX 5000 **Laboratory refrigerator**
Total gross/net capacity	180/157 l	180/174 l	260/246 l	360/335 l	500/433 l
Energy consumption in 24 h*	1.2 kWh	0.8 kWh	0.8 kWh	1.1 kWh	0.8 kWh
Exterior dim. (w/d/h) in mm	600/600/860	600/600/886	600/600/1216	600/600/1590	752/710/1516
Cooling system	forced-air	static	static	static	static
Temperature range	+3°C to +8°C	+2°C to +16°C	+2°C to +16°C	+2°C to +16°C	+2°C to +16°C
External finish	white	white	white	white	white
Door	solid	solid	solid	solid	solid

* Laboratory test procedure according to NF X15-140

www.liebherr.com

Subject to modifications. Printed in Germany by MZA. Dr.-Nr. 6213/4.55/12.07

Laboratory refrigerators and freezers

LIEBHERR

Innovative expertise and drive in the laboratory sector

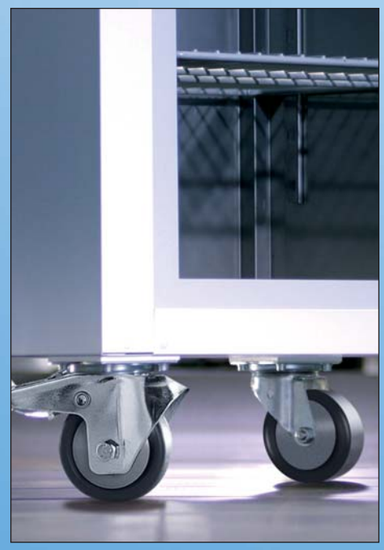
The demands made on refrigerators are particularly high in all the sectors of professional use. Whether the issue is the refrigeration performance, specifying the materials, designing the refrigeration components or evolving the design concepts – all the decisions are directed to ensuring the long-term, trouble-free operation of our appliances for the professional sector.
The most stringent reliability and safety standards apply to appliances in the laboratory and medical sector. Liebherr offers purpose-built laboratory appliances in three temperature ranges for the different areas of use.

Inner liners in 304-grade stainless steel

The inner liners of these laboratory appliances are in corrosion-resistant 304-grade stainless steel. The heavy-duty wire shelves are guided on non-tilting U-shaped trayslides for a high shelf load and improved safety. The trayslides are height-adjustable in small increments and allow versatile use of the interior. The smooth inner liner is exceptionally easy to clean.

Castors

Hygiene is important in laboratories so the larger appliances have castors to allow easy and convenient cleaning underneath.



Complete temperature documentation

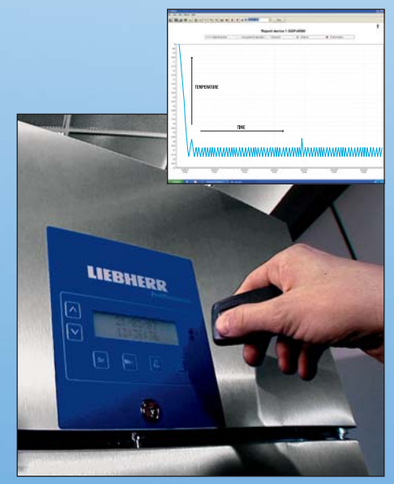
In case of power failure the appliances continue to monitor and save the unit data for up to 72 hours. Under normal operating conditions, temperatures and alarms from the previous 4 days of operation are logged. This data can be transferred to an external computer using either the optional infra-red key or via the RS 485 interface. Dedicated software is supplied to allow full analysis and visualisation of the logged temperatures.

Uniform temperatures

The forced-air systems have air-ducts optimised for uniform distribution and quick temperature recovery.

The ProfiPremium-Line digital controller

The sophisticated controller of the Profi Premium-Line laboratory appliances meets the most exacting requirements. It is equipped with a volt-free contact, an infrared interface and an RS 485 serial interface, and logs the temperature, date and alarm condition every two minutes. To satisfy laboratory hygiene requirements the electronic controller is recessed into the unit cover and is covered with a dirt-resistant, membrane keypad for easy cleaning. In case of power failure, a powerful 12V battery automatically cuts in. Alarm messages are thereby activated visually, audibly and also externally via a relay.



Refrigerators

Laboratory cooling, medicine storage

Equipment

- Forced air cooling
- Electronic controller with text display and real-time clock
- 1 pre-defined cooling program
- Castors, 2 with brake
- Full-length integrated handle, hygienic and robust
- Appliances with glass door (..22) including interior light with separate switch
- Plastic-coated grid shelves and smooth 304-grade stainless steel inner liner

Safety package

- Data logging of the temperature every 2 minutes
- Audible and visual door-open and hi-low temperature alarms
- Back-up battery for 72-hour temperature monitoring/ logging in case of mains failure
- Infrared and RS 485 serial interface options for external temperature data logging
- Volt-free contact for connection to a remote warning system
- Lock

Freezers

Laboratory freezer

Safety in case of power failure

The electronic control system of Liebherr laboratory appliances is equipped with a powerful 12V battery. In case of power failure, the electronic control system switches to drawing power from the battery. Optical and acoustic alarms are activated. In addition the volt-free alarm contact is activated which can be connected to an external warning system. The internal temperature continues to be registered for up to 72 hours. The electronic controller logs the temperature, date and alarm conditions of the laboratory appliances every two minutes.

	LKPv 1420 **Laboratory refrigerator**	LKPv 1422 **Laboratory refrigerator**	LKPv 6520 **Laboratory refrigerator**	LKPv 6522 **Laboratory refrigerator**	LGPv 1420 **Laboratory freezer**	LGPv 6520 **Laboratory freezer**
Total gross/net capacity	1427/1427 l	1427/1427 l	601/601 l	601/601 l	1427/1427 l	601/601 l
Energy consumption in 24 h*	3.4 kWh	4.1 kWh	2.4 kWh	2.8 kWh	9.4 kWh	4.9 kWh
Exterior dim. (w/d/h) in mm	1430/830/2150	1430/830/2150	700/830/2150	700/830/2150	1430/830/2150	700/830/2150
Cooling system	forced-air	forced-air	forced-air	forced-air	forced-air	forced-air
Defrosting method	automatic	automatic	automatic	automatic	automatic	automatic
Temperature range	-2°C to +16°C	0°C to +16°C	-2°C to +16°C	0°C to +16°C	-26°C to -10°C	-35°C to -10°C
Exterior finish	white	white	white	white	white	white
Door	solid door	glass door	solid door	glass door	solid door	solid door
Inner liner	304-grade stainless steel	304-grade stainless steel	304-grade stainless steel	304-grade stainless steel	304-grade stainless steel	304-grade stainless steel
Storage shelves	grid shelves, plastic-coated	grid shelves, plastic-coated	grid shelves, plastic-coated	grid shelves, plastic-coated	grid shelves, plastic-coatedt	grid shelves, plastic-coated

* Laboratory test procedure according to NF X15-140

with forced-air cooling

Laboratory cooling, medicine storage

Equipment
- Forced-air cooling
- Electronic controller with digital temperature display
- Defrost water collection tray
- Door handle
- Height-adjustable glass shelves
- Moulded commercial-grade polystyrol inner liner: robust and hygienic
- Spark-free warning labels in accordance with the ATEX EU Directive

Safety package
- Audio/visual hi-lo alarms
- Safety thermostat to prevent product temperature dropping below the required storage parameters in case of a fault thus enhancing inventory protection
- Serial interface (RS 485) for external temperature data logging
- Volt-free contact for remote alarm
- Min-max temperature recording
- Alarm log saves 3 alarms with date, duration and max. temperature

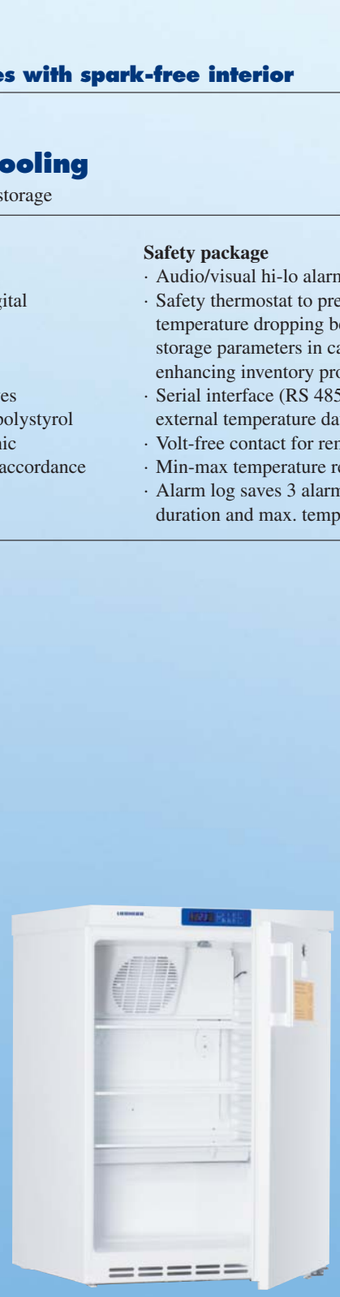
with static cooling

Laboratory cooling, medicine storage

Equipment
- Static cooling
- Moulded commercial-grade polystyrol inner liner
- Height-adjustable glass shelves
- Defrost water collection tray
- External thermostat
- Spark-free warning labels in accordance with the ATEX EU Directive
- Lock
- Door handle

Spark-free interior

The interior of the appliances is spark-free in compliance with ATEX Directive 94/9/EC zone II.



	LKEXv 1800 Laboratory refrigerator	FKEX 1800 Laboratory refrigerator	FKEX 2600 Laboratory refrigerator	FKEX 3600 Laboratory refrigerator	FKEX 5000 Laboratory refrigerator
Total gross/net capacity	180/157 l	180/174 l	260/246 l	360/335 l	500/433 l
Energy consumption in 24 h*	1.2 kWh	0.8 kWh	0.8 kWh	1.1 kWh	0.8 kWh
Exterior dim. (w/d/h) in mm	600/600/860	600/600/886	600/600/1216	600/600/1590	752/710/1516
Cooling system	forced-air	static	static	static	static
Temperature range	+3°C to +8°C	+2°C to +16°C	+2°C to +16°C	+2°C to +16°C	+2°C to +16°C
Exterior finish	white	white	white	white	white
Door	solid door	solid door	solid door	solid door	solid door
Inner liner	white moulded commercial-grade polystyrol	white moulded commercial-grade polystyrol	white moulded commercial-grade polystyrol	white moulded commercial-grade polystyrol	white moulded commercial-grade polystyrol
Storage shelves	glass	glass	glass	glass	glass

* Laboratory test procedure according to NF X15-140