



Racks for cryoboxes

Complete and temperature-resistant storage systems for the clear easy-to-use samples. Available as an aluminium or stainless steel rack for 5x4 or 6x4 50mm boxes and as a stainless steel drawer rack for 5x4 or 6x4 50mm boxes.

Aluminium cabinet rack 5x4	7790003	Stainless steel cabinet rack 5x4	7790027
Aluminium cabinet rack 6x4	7790014	Stainless steel cabinet rack 6x4	7790028
Aluminium cabinet rack 5x4 + cryobox	7790015	Stainless steel cabinet rack 5x4 + drawers	7790031
Aluminium cabinet rack 6x4 + cryobox	7790025	Stainless steel cabinet rack 6x4 + drawers	7790032
Stainless steel cabinet rack 5x4 + cryobox	7790029	Stainless steel cabinet rack 5x4 + drawers	7790033
Stainless steel cabinet rack 6x4 + cryobox	7790030	Stainless steel cabinet rack 6x4 + drawers	7790036

Cryoboxes

For extra storage and transport of valuable samples with a fixed 5x4 grid. The robust and temperature-resistant construction boxes are available in sets of 56.

Cryoboxes, set of 56

7790038

CO₂ backup system

The CO₂ backup system ensures that the cooling of the stored samples continues for up to 72 hours in the event of a power failure. The CO₂ backup system part of the accessories.

CO₂ backup system

7790048

Stainless steel storage shelves/room inner doors

Additional robust stainless steel shelves for flexible and individual partitioning of the interior. You can also provide the best possible insulation and temperature stability, ensuring efficient cooling and low power consumption.

Stainless steel storage shelf SF-Fq 50

7790049

Room inner doors SF-Fq 50

7790070

Stainless steel storage shelf SF-Fq 70

7790050

Room inner doors SF-Fq 70

7790127

Cover for main switch incl. key lock

Protection against unintended disconnection or manipulation of the main switch.

7790051

4.20mA analogue output

The 4.20mA interface displays the interior temperature as a current value, which for example can be imported into an independent system for recording or checking the internal temperature.

4.20mA analogue output

7790042

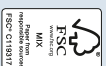
Ultra-low temperature freezers – Medicine Series



Ultra-low temperature freezers

	SUF-Fq 5001 Medicine	SUF-Fq 7001 Medicine
Total gross net capacity	491 / 477 l/316	729 / 702 l/316
External dimensions in mm (d/h)	826 / 1065 / 1986	1026 / 1065 / 1986
Internal dimensions in mm (d/h)	520 / 720 / 1500	720 / 720 / 1500
Energy consumption in kWh/days	288/4/4 kWh	295/7 kWh
Ambient temperature range	+16 °C to -32 °C	+16 °C to -32 °C
Heat output	1188 kWh	1291 kWh
Heat output system	air cooling	air cooling
Refrigerant	R290/R170	R290/R170
Sound power level	47 dB(A)	47 dB(A)
Connection rating	7.0 A / 1600 W	7.0 A / 1600 W
Frequency / Voltage	50 Hz / 230 V	50 Hz / 230 V
Temperature range	-40 °C to -96 °C	-40 °C to -96 °C
Door material	stainless steel	stainless steel
Internal fire material	stainless steel	stainless steel
Type of control	electronic controller	electronic controller
Temperature display	external digital (LAN Ethernet)	external digital (LAN Ethernet)
Interface	yes	yes
Virt. key alarm contact	integrated, USB interface	integrated, USB interface
Door lock type	integrated, auto power failure for 72 hrs	integrated, auto power failure for 72 hrs
Door duration	30 min	30 min
Cooling system	27 °C to -80 °C	27 °C to -80 °C
Warning	-80 °C to -80 °C / 0 °C	-80 °C to -80 °C / 0 °C
Number / maximum number of storage shelves	280 mm / 2160 mm	290 mm / 2220 mm
Shelf material	stainless steel	stainless steel
Shelf loading	50 kg	50 kg
Max. number of shelves per installation	352 / 224	328 / 238
Castors	castors with brakes at the front, fixed castors at the rear	castors with brakes at the front, fixed castors at the rear
Dimensions	yes	yes
Reproducible door seal	2 x Ø 28 mm	2 x Ø 28 mm
Sealor sealthrough	yes	yes
Door hinges	right handed / left, not reversible	right handed / left, not reversible
Door weight	280 / 217 kg	330 / 288 kg
Water cooling also available as	SUF-Fq 5001 version H72	SUF-Fq 7001 version H72

* Average sound pressure level at 1 m distance



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The ultimate way to store safely
Ultra-low temperature freezers
Quality, design and innovation

LIEBHERR

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Safe storage at the lowest temperatures

Leibherr's ultra-low temperature freezers (ULT) set the benchmark in the temperature range -40 °C to -86 °C. In terms of safety, performance and ease of use, they offer all you need for meeting the demanding requirements of laboratories and scientific institutions. For example, its advantages of the low operating costs, sustainable cooling, the large interior with practical features and the numerous safety functions of the ultra-low temperature freezers. Place your trust in our extensive experience as a specialist in cooling and freezing.



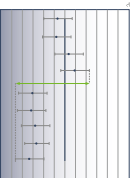
Alarm messages in critical situations

Don't worry about security. Thanks to a three-stage monitoring system, consisting of integrated alarm messages for temperature, door or freeze protection, CO₂ emergency cooling and online monitoring, ensure the very best protection for your stored samples at all times. In the event of a power failure, integrated 12-volt batteries immediately supply the electronics with power. You will also be notified in critical situations so that you can quickly rectify the fault.



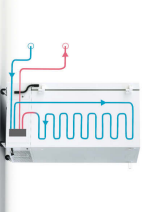
Mechanical key lock

The mechanical key lock protects the stored products from unwanted access. The doors are operable with an ergonomic and undemanding aluminium key handle.



Minimal temperature fluctuations

In order to monitor the quality of the stored samples, minimal temperature fluctuations are very important. The Leibherr ultra-low temperature freezers ensure that the stored samples don't undergo any temperature changes and are protected from frost damage.



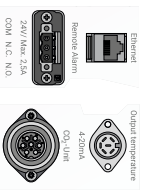
Low heat generation

Compared to other technologies, the efficient compressor system with high efficiency generates significantly less heat. The same costs in the thermal design of the rooms air conditioning system, if heat dissipation via the room air conditioning is not possible, the option with water cooling is also available.



Low energy consumption

The ultra-low freezers are among the most energy-efficient devices with the highest efficiency in research facilities. Leibherr ultra-low temperature freezers are among the most economical models on the market worldwide. In combination with highly insulating vacuum panels, the efficient cooling system allows for efficient operation, optimum energy savings and, as a result, low operating costs.



Indicators

For remote monitoring, all appliances are equipped with a remote alarm system. The temperature and alarm records can also be read via the integrated USB interface. Optionally, a 4-20 mA output enables the integration of a temperature value into existing systems for data recording.

Other advantages at a glance

Active Green

ActiveGreen
State-of-the-art refrigeration technology with climate-neutral refrigerants and lowest energy consumption thanks to, among other things, advanced vacuum heat insulation.



Interior/exterior shelves/inner doors
The interior shelf areas and inner doors are made of rust-proof stainless steel and are therefore easy to clean. This enables optimum hygiene.



Heavy-duty adjustable stainless steel storage shelves
Three storage shelves in the interior which are freely adjustable at intervals of 24 mm, offer flexibility for space-saving storage, tailored to your requirements. Further storage shelves can be added as an option.

Potential-free contact
Potential-free contact for relay-type alarms to an external remote monitoring system – for more safety.



2x sensor feedthrough, 28 mm
Two sensor feedthroughs on the upper left and lower left let you install external monitoring or data recording systems with separate sensors in the interior.

Integrated unloading ramp
No container necessary! The unloading ramp integrated in the packaging helps you easily position the appliance.

Door seal concept
The innovative door seal concept, comprising two durable gaskets, reduces any sealed closure of the door. This also helps to reduce energy consumption. The seals can be replaced separately and without tools.



Detachable stainless steel inner doors
The detachable, rust-proof, stainless steel inner doors prevent cold loss when opened and are also easy to clean.



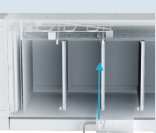
Alarm messages in critical situations
The three-stage monitoring system consisting of integrated alarm notifications for temperature, door or mains electrical faults, upgradeable features such as CO₂ emergency cooling and online monitoring, ensure the very best protection for your stored items. In the event of a power failure, integrated 12-volt batteries immediately supply the electronics with power. Notification is provided in critical situations.



Integrated electronics
The intuitive electronics with an integrated real-time clock has a temperature setting option accurate to 1/10 °C. The control and display panel is resistant to dirt and easy to clean. Flexible parameter adaptations, such as offset and alarm value settings, allow the appliances to be quickly and easily adapted to and qualified for your applications and requirements.

Highly efficient insulation
The combination of GFC-free PU foam with vacuum-insulated panels ensures the best possible insulation for preventing rapid temperature increases.

Pressure compensation valve
When the door is opened, the air exchange creates a vacuum which makes it difficult to open the door repeatedly. With the aid of the heated pressure compensation valve, the vacuum is quickly equalised and the door can easily be opened again after just a few seconds.



SLF-43 5000