Scientific and Healthcare 2025

Next-level cooling solutions

LIEBHERR

Refrigeration and freezing

Best results without fail

Reliable refrigeration of temperature-sensitive substances poses enormous challenges for the research and healthcare sectors. To help you overcome every one of them, Liebherr offers high-quality refrigerators and freezers combined with innovative monitoring solutions and a comprehensive range of services.

For example, the network connection of refrigerators and freezers with SmartMonitoring guarantees maximum reassurance and a significant reduction in workload. This support is further enhanced by our high-quality service – from planning and installation to ongoing support.

And, in terms of sustainability, we can boast more than 70 years of expertise and a passion for professional refrigeration and freezing – with unsurpassed energy efficiency, natural refrigerant and extremely long-lasting appliances.

The quality that characterises Liebherr pays off in many ways. On the following pages, you can find out how research and healthcare can benefit from our complete solutions.

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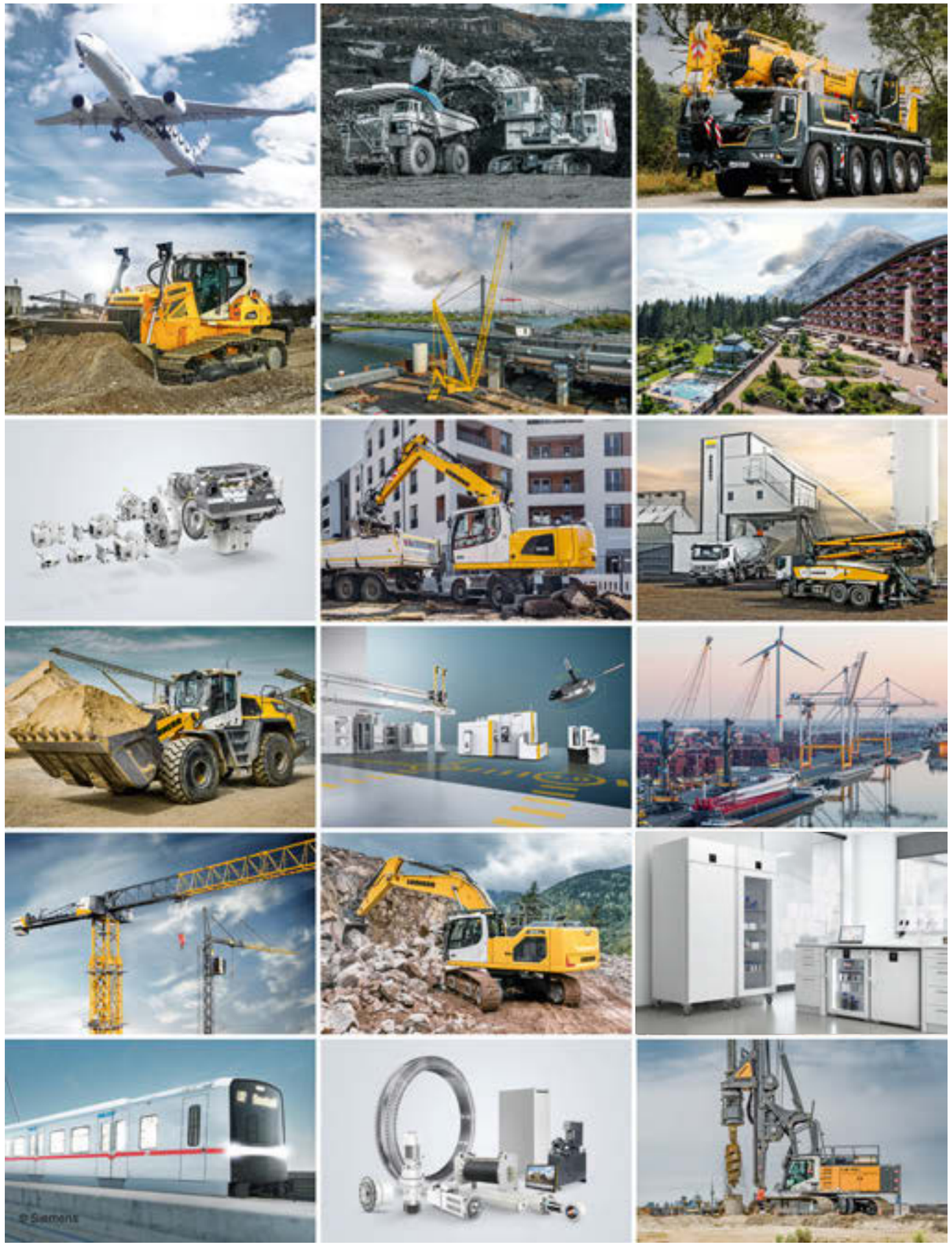
If the masculine form is used in the wording, it is solely for the sake of readability and without any intention to discriminate. It is meant here as a gender-neutral term and refers to all gender identities.



The Liebherr Group

Liebherr-Hausgeraete GmbH

For seven decade, Liebherr-Hausgeraete GmbH has been specialising in the manufacture of innovative refrigerators and freezers. The company employs more than 6,800 staff worldwide and develops and produces a wide range of refrigerators and freezers for domestic and professional use. Thanks to their freshness technologies and high-quality materials, the consumer appliances from the premium manufacturer impress with their energy efficiency, elegant design and long service life. In professional use, refrigerators and freezers from Liebherr stand for maximum safety with intelligent features and exceptional quality. With an annual production of around 2 million appliances, Liebherr-Hausgeraete is one of the leading European manufacturers in the premium class, combining quality, design, and innovation.

Global and independent: The Liebherr Group, more than 75 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 50,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit

Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the company founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified product programme

Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product programme includes earthmoving machinery, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value

Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. For Liebherr, customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

Quality is in our DNA

Our work is driven by the high demands of our customers worldwide. For 70 years, we have been offering high-quality appliances for private and commercial use, meeting these high demands, proving their durability, and delivering value for the investment.

Specialists in refrigeration and freezing

With outstanding quality, pioneering technologies as well as aesthetic yet user-friendly design, Liebherr sets new standards again and again. How do we do it? By specialising in what we do: developing and manufacturing outstanding refrigerators and freezers, especially for professional use. Research, laboratories and medicine are just some of the areas for whose special requirements our appliances are explicitly designed – with a clear mission: to make your demanding day-to-day work easier with maximum precision and safety.

German Engineering

Cleverly built for maximum safety

Sensitive samples, research materials and preparations leave no room for error when it comes to refrigeration. Reliability is crucial, and that's exactly what Liebherr stands for. Liebherr professional appliances have been specifically developed to meet the challenging requirements of the research, laboratory and medical sectors. With clever design details, high-quality materials and innovative technologies, they provide maximum safety and ease of use.

Tested down to the finest detail – and beyond

From conception and development to production and marketing, at Liebherr, we do everything we can to offer top-quality, innovative products. We test all the mechanical, electronic and refrigeration components for reliable operation, from the development stage onwards. Before we approve a door hinge, for example, it must undergo at least 100,000 opening cycles. You can count on this: your Liebherr appliance will be the professional partner by your side – 24 hours a day, 365 days a year.

The Liebherr factor:

Professional refrigerators and freezers

- Specially developed for research, laboratories and medicine
- Safe storage of sensitive substances
- Top quality, thanks to elaborate testing procedures
- Complete solution in combination with SmartMonitoring and services

Complete responsibility

Responsible use of our resources is our objective and continuous improvement throughout the product lifecycle is our long-term aim.

This is why we continually develop more environmentally friendly methods for manufacturing more sustainable products – all with the familiar Liebherr quality. As well as high energy efficiency, we put a special focus on durability and ensuring that spare parts are available for at least ten years.

Conscientiously developed

We take every aspect of sustainability into account when designing our products. Our product responsibility begins during the development of the appliances and continues with the careful organisation of our production and supply chains. This means that the correct choice of materials with regard to recycling as well as minimising the use of energy during production are important factors. During the use phase our almost maintenance-free appliances are characterised by very low energy consumption and low operating costs.

Naturally refrigerated

We were the first to convert our complete range of refrigerators to CFC-free refrigerants and blowing agents. We now only use the natural refrigerants R600, R290 and R170. These are specially designed for highly efficient compressors and also result in lower energy consumption and electricity costs.

Responsibly manufactured

We handle resources responsibly and use renewable energies in the production of all of our appliances. We recycle the energy released during production, for example, to heat buildings. We also purify the water after the manufacturing process to make sure that it is free of pollutants. In addition, we are continuously reducing our waste volume by consistently separating waste and recycling production materials wherever possible.

Europe-wide certification

All our European production sites are certified according to the international standards for quality management (ISO 9001), environmental management (ISO 14001) and energy management (ISO 50001).

The Liebherr factor:

Environmentally conscious development and production:

- Appliances with very low energy consumption
- Natural refrigerant
- Resource-saving manufacturing processes
- European sites are fully certified

Choose refrigeration and freezing from the professionals

Whether in biotechnology, pharmaceutical research, or healthcare, the highly demanding work relies on refrigeration that meets the highest standards. With specially developed professional appliances and innovative SmartMonitoring, Liebherr offers solutions for the stringent requirements of the medical and scientific sectors – and strong arguments for choosing our systems expertise.

Five good reasons for our outstanding performance.

Discover all the details of SmartMonitoring starting on page 98 and find out how the digital system maximises safety and lightens your workload. Availability varies by country, please contact your Liebherr Account Manager for details.

Reliable temperature stability

Liebherr professional appliances are characterised by outstanding temperature stability. Sensitive vaccines, preparations, samples and medicines are cooled to precise, constant temperatures – even under extreme climatic conditions. In addition, SmartMonitoring controls temperature stability and sends alerts in the event of deviations.

Standard safety functions

Liebherr stands for maximum protection of valuable products. Numerous safety functions ensure that the quality of temperature-sensitive substances is constantly assured – as is the quality of your work. If you want maximum certainty, you can use our cloud-based SmartMonitoring solution, with instant notifications for additional peace of mind.

Innovative alarm systems

Research and medicine allow no room for inaccuracy – and that includes storage temperatures. Liebherr professional appliances are equipped with various alarm systems that immediately warn of any deviations and help you to realistically assess critical situations. In addition to the integrated alarm systems, SmartMonitoring also alerts you by text message, email or phone.

Sustainability and economy

Our refrigerators and freezers only use natural refrigerants and are characterised by high efficiency as well as very low energy and operating costs. The outstanding TCO (total cost of ownership) is also down to the long service life, easy care and, not least, the fact that the appliances need hardly any maintenance.

Compliance with standards and directives

Liebherr refrigerators and freezers comply with all relevant standards, norms and directives on storage quality, hygiene and safety. In addition, SmartMonitoring documents critical temperature data and automatically generates reports.

Stable temperature – constant quality

Liebherr appliances offer maximum reliability for storing sensitive substances by ensuring constant temperatures. SmartMonitoring also monitors the temperature stability and sends an alarm if there are any deviations. This not only maintains the correct climate for storage but also preserves the value of your stored products.

Precise temperature ranges

Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr refrigerators will not deviate from the set temperature by more than ±3 °C, and Liebherr freezers will not stray by more than ±5 °C. The measurement method in accordance with EN 60068-3 is used to determine the temperature fluctuations. This optimally protects the quality of their valuable contents.

Stability is in the air

The circulating-air refrigeration system and the optimal airflow in the interior keep the temperature stable and ensure that the set temperature is quickly restored after the door has been opened. This means frequent opening of the door during day-to-day use has little effect on temperature stability.

The Liebherr factor:

Consistent refrigeration for reliable storage:

- Temperature setting accurate to a tenth of a degree
- Low tolerance for deviations
- Innovative circulating-air refrigeration system
- Optimal airflow and circulation
- Constant monitoring of the precise storage temperature

Safety as standard

When handling highly sensitive substances, safety is the top priority. Whether the risk is unauthorised access or loss of quality – Liebherr protects valuable contents with numerous safety functions and optional SmartMonitoring.

SmartLock: the door that thinks

To prevent products from accidentally entering circulation after an interruption in the cold chain, SmartLock automatically locks the door in the event of an alarm. Only authorised people can unlock it again.

Self locking door: with safety hinges

To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.

Locking systems: individual and secure

Liebherr appliances can be electronically locked and unlocked using an individual PIN code and digital remote control by as many users as you like – without them having to share a key.

+2 °C SafetyDevice: protection from freezing

If the temperature falls below +2 °C due to a malfunction while the temperature setting is at +5 °C or higher, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing. At colder settings, this activation threshold decreases relatively with the temperature setting.

SmartMonitoring: extra safety

Liebherr's digital monitoring solution checks and documents the storage temperature and immediately alerting you in the event of deviations for maximum safety in refrigeration and freezing and providing optimal protection for your valuable contents.

The Liebherr factor:

Integrated safety functions and SmartMonitoring to protect sensitive substances:

- Self-closing door at an opening angle of less than 90°
- Automatic locking in the event of an alarm
- Electronic/mechanical locking systems
- Protection from freezing in the event of malfunctions
- Monitoring, documentation and alarms when required, thanks to SmartMonitoring

Checks are good, but alarms are better

Professional refrigerators and freezers together with SmartMonitoring guarantee maximum storage safety through constant temperature monitoring, immediate alarms for uncontrolled fluctuations and recording of critical situations.

LightAlarm: know at a glance when action is needed

If there is an uncontrolled temperature rise, if a door has been left open or there are any other problems, the interior light of the appliance starts flashing. In the case of glass-door appliances, this quickly reveals where action is needed. With solid-door appliances, the flashing interior warns you to close the door immediately to preserve the storage quality.

Alarm relay: don’t miss any deviations

In the event of an alarm, the responsible control centre is informed immediately, usually through connections to the building control system. You can define in advance which alarms are to be forwarded, as well as set how long forwarding remains active and whether a reminder should be sent after the alarm is acknowledged. This allows you to react immediately in critical situations.

Alarm history: quality check made easy

In order to be able to evaluate the quality of the stored substances, a clear history of anomalies that have occurred is necessary. The alarm history logs important data such as the date, duration and maximum temperature of the last ten, and can be accessed and reviewed from anywhere.

Integrated data logger: can be traced back for years

5 Years

To ensure full traceability, the integrated data logger records the temperature profile, alarm history and service information for up to five years. The stored data can be read directly from the appliance via a USB interface.

SmartMonitoring: additional digital alarms

Smart Monitoring

If there are deviations in the storage temperature, SmartMonitoring immediately alerts you by email, or by text message or phone (optional). This helps you react before problems arise. In addition, SmartMonitoring documents all relevant temperature data and automatically generates reports. For more details see page 98.

Maximum performance at a minimal cost

Rising costs increase the requirements that professional refrigerators and freezers must meet. Liebherr scores highly here on every level with sustainably economical appliances.

Ultra-efficient: good for people and the environment

Energy-efficient refrigerators and freezers help with ever-increasing electricity prices. Liebherr fully utilises the savings potential of every component – from the compressor to the seal, to the lighting and electronics. The ultra-efficient appliances in the Perfection series, for example, demonstrate how this positively affects your overall operating costs.

Outstanding service life: satisfaction guaranteed

Liebherr appliances are designed for a long service life. Extremely robustly manufactured, they withstand the demands of daily use. This is quality that pays off – for many years to come.

Almost maintenance free: saves costs, time and aggravation

Liebherr’s professional freestanding appliances operate without filters or other components and parts that require regular replacement. They only need to be regularly cleaned and calibrated according to your individual needs.

Original Liebherr: 15 years of spare parts availability

Liebherr-Hausgeräte GmbH is taking the service life of its high-quality appliances one step further for its customers: Spare parts availability will be extended to 15 years from the end of production of the respective model. This applies to all functional parts and storable parts of the equipment. Liebherr-Hausgeräte also guarantees this service retroactively for all appliances produced since 1 January 2021.

The Liebherr factor:

Very low energy and total operating costs:

- Energy-efficient
- Extremely long service life
- Almost maintenance-free

Meeting the highest expectations. And the applicable standards and directives.

Hardly any sector has more stringent requirements for the storage of substances than those of research, laboratories and medicine. Liebherr professional appliances are specially developed to meet these extremely strict requirements for aspects such as hygiene and occupational safety.

DIN 13277 compliance

Laboratory and pharmaceutical refrigerators from Liebherr meet all the necessary property and performance criteria to fully comply with DIN 13277.

IEC 61010-2-011 compliance

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always kept safe.

ATEX compliance

Liebherr laboratory appliances conform to EN/IEC 60079-0 / EN-IEC 60079-7 and comply with EU Directive 2014/34/EU (“ATEX Directive”). With an interior classified according to <Ex> II 3 G Ex ec IIC T6 (declared as Zone 22), they are suitable for flammable substances in closed containers that could form explosive atmospheres.

Cleanroom compatibility

Liebherr fridges and freezers in the new scientific line have been tested for use in cleanrooms in accordance with DIN EN ISO 14644. This eliminates the need for you to carry out an additional risk assessment.

Antimicrobial handle

A benefit for users but a bane for germs: The easy-turn handle mechanism makes opening the door effortless. It contains special antimicrobial substances that reduce bacteria by up to 99.99%*. Regular and time-consuming disinfection is not necessary. This means the appliance is extremely safe even if many people have access to it.
*According to ISO 22196:2011

Recommended cleaning products and disinfectants

Liebherr appliances are designed for a long service life. To maintain them, the manual or separate instructions contain recommendations for cleaning products and disinfectants that have been tested by Liebherr for safe use. This way you can be sure that you are not accidentally harming your appliance when you are trying to take care of it.

Easy-to-clean interior

The inner liner is made of polystyrene: a fully recyclable, robust, and odourless plastic. Manufactured seamlessly from one piece, it has no hidden dirt traps and the large, rounded corners can be cleaned quickly and easily. It’s the perfect combination of sustainability and hygiene.

SmartMonitoring

The digital, cloud-based solution from Liebherr helps provide proof of compliance and full documentation of the temperature data (find out more on page 98).

The Liebherr factor:

Designed to meet the strictest standards, norms and directives:

- Suitable for storing sensitive substances in accordance with **DIN 13277**
- Safe operation in accordance with **IEC 61010-2-011**
- ATEX compliant for storing explosive and highly flammable substances
- Cleanroom compatible
- Hygienic and easy-to-clean design
- SmartMonitoring for reliable documentation as proof of temperature compliance

SmartMonitoring: for maximum safety and convenience

SmartMonitoring makes reliable Liebherr appliances even safer and takes protection of valuable contents to a new level. The digital, cloud-based solution automatically and continually monitors and documents the storage temperature – relieving you of a daily task that takes time and attention.

Discover all the details of SmartMonitoring starting on page 98 and find out how the digital solution maximises safety and lightens your workload. Availability varies by country, please contact your Liebherr Account Manager for details.

Alternatively, go to home.liebherr.com/smartmonitoring

Continuous monitoring

SmartMonitoring constantly and accurately monitors temperature stability – even outside regular working hours, such as at weekends or on public holidays. And it can even do it at different sites for multiple appliances.

Complete documentation

SmartMonitoring documents the temperature and all relevant refrigeration parameters for your stored substances around the clock.

Immediate alarms in the event of deviations

If there are deviations in the storage temperature, you are immediately alerted by email, text message or phone. This way, you can react before problems arise.

Simple commissioning

The new generation of research, laboratory and medical appliances are either already equipped with the SmartModule or can be retrofitted with it and immediately connected to SmartMonitoring. Predecessor models can be easily connected via the external data loggers. Find out how Liebherr Service can help you take the first steps towards maximum safety.

The Liebherr factor:

Maximum safety and convenience with SmartMonitoring:

- An easy, simple and convenient monitoring solution for all network-capable Liebherr appliances
- Constant monitoring of the precise storage temperature
- Frees you from time-consuming checks and documentation
- Reliable, digital alarm systems
- All relevant data visible at a glance at any time

Endlessly reliable. Take our word for it.

In research, laboratories and medicine, there are more jobs to do, and less time to do them. Liebherr takes some of them off your hands. Let us lighten your daily workload – with many different services to ensure reliable refrigeration from the professionals.

Delivery right to your door

Liebherr offers you various delivery options. We can deliver your new appliance to the kerbside or take it right into the place of use and unpack it there. We’ll not only take back the packaging for disposal, but also your old appliance if you wish.

Installation: it couldn’t be quicker

With our installation service, your new appliance is ready in no time to provide you with reliable refrigeration or freezing. Liebherr will not only commission the appliance for you, but also install the digital monitoring solution or other accessories. The availability varies in different countries.

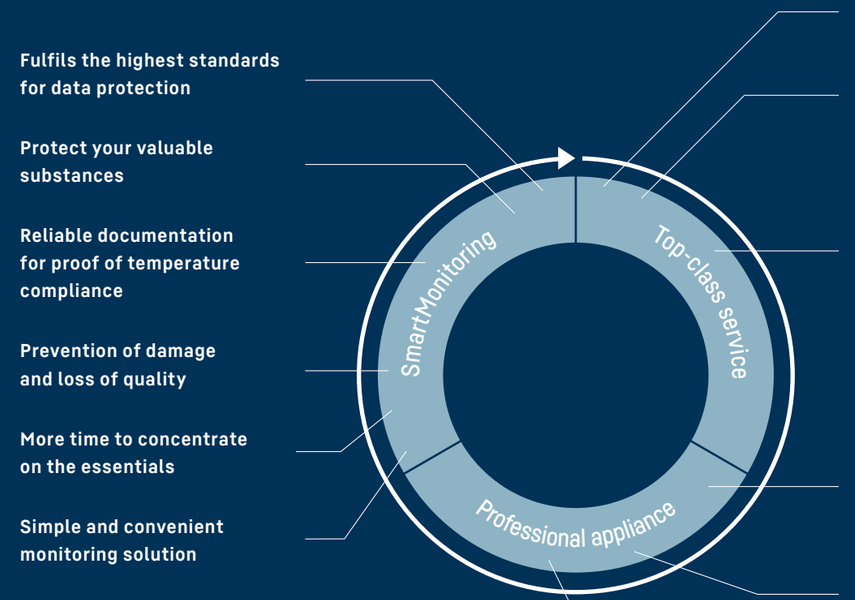
Qualification: let the professionals help

Be on the safe side and save time as well: Liebherr will take care of the time-consuming installation qualification (IQ) and operational qualification (OQ), including the documentation and training. If you want, we can send you the documentation and you can carry out the qualification yourself.

Maintenance: doing it right

Liebherr appliances for research, laboratory and medicine require an impressively low amount of maintenance.

Comprehensive solution for everyday use



Two unique series

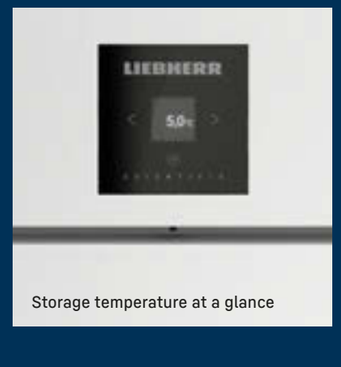
Whether it’s a large research facility, a small laboratory, a doctor's surgery, a nursing home, or a pharmacy, our range includes models for every requirement. But no matter how different the appliances are, they all have one thing in common: their first-rate quality.

Performance Perfection

Performance series

All the appliances in the Performance series comply with the safety standard IEC 61010-2-011. In addition, some appliances meet other standards, such as the ATEX directive.

Optimal temperature stability



Storage temperature at a glance

LED interior light

Antimicrobial handle with opening mechanism

LightAlarm and SmartLock

Perfection series

The appliances in the Perfection series not only comply with the IEC 61010-2-011 safety standard but also with DIN 13277, which specifies requirements for laboratory and medical applications.

Built-in LAN/WiFi interface for SmartMonitoring etc.

Refrigerators and freezers for laboratories and research

MediLine

Performance-Series

Perfection-Series

	MediLine **General laboratory use** SUFsg	Performance-Series **General laboratory use/ATEX** SRFvg/SFFsg/SRFfg/SFFfg/SCFfg/SRPvg/SFPvg/SRTvg/SRTfg/SFTsg/SFTfg	Perfection-Series **General laboratory use** SRFvh/SFFvh/SCFvh/SRPvh/SFPvh/SRTvh/SFTvh
Temperature stability		Refrigerators < ± 3 K deviation from setpoint	Refrigerators < ± 2 K deviation from setpoint
	Freezers < ± 7 K deviation from setpoint	Freezers < ± 5 K deviation from setpoint	Freezers < ± 5 K deviation from setpoint
	SmartFrost	Freezers with SmartFrost; SFPvg with NoFrost	Freezers with NoFrost
	Calibration option	Calibration option	Calibration option
Storage safety	Visual and audible alarms	Visual and audible alarms	Visual and audible alarms
	Custom alarm settings possible	Custom alarm settings possible	Custom alarm settings possible
	Alarm relay	Alarm relay	Alarm relay
		Alarm test function	Alarm test function
		+2 °C SafetyDevice function (Refrigerators)	+2 °C SafetyDevice function (Refrigerators)
	Alarm with battery backup (72 h) immediately upon power failure	Alarm immediately upon power failure	Alarm with battery backup (12 h) immediately upon power failure
			Alarm history with real-time clock and 10 events
	Integrated data logger		Integrated data logger
			PT1000 product sensor (optional for SFFvh models)
		Min./max. temperature log	Min./max. temperature log
		Self-closing door at < 90°	Self-closing door at < 90°
	Mechanical lock	Mechanical lock	Mechanical lock SRPvh/SFPvh with electronic lock
Interfaces	Interface Ethernet	Optional LAN/WiFi	Integrated LAN/WiFi
	Modbus RTU communication protocol TCP/IP	Local API (optional via SmartModule)	Local API
	USB interface for reading the data logger		USB interface for reading the data logger
SmartMonitoring	external data loggers	SmartModule can be retrofitted	SmartModule integrated
Features	LED 7-segment display with buttons	Monochrome display, touch buttons	2.4" touch & swipe colour display
	Maintenance timer 360 days	Individually adjustable maintenance timer	Individually adjustable maintenance timer
	Castors as standard	Castors/adjustable feet as accessories, SRPvg/SFPvg with castors as standard	Castors/adjustable feet as accessories, 75 cm-wide appliances with castors as standard, SRPvh/SFPvh with castors as standard
		Fridge evaporator cover (stops items freezing to inner liner), only for glass door models and SRTvg/SRTfg models	Fridge evaporator cover (stops items freezing to inner liner), only for glass door models and SRFvh/SCFvh/SRTvh models
	3 Sensor feedthroughs	Sensor feedthrough	Sensor feedthrough
		Refrigerators: glass door models with ceiling lighting (SRPvg models with ceiling lighting)	Refrigerators: Insulated and glass door models with vertical lighting
		Freezers: no lighting (SFPvg models with ceiling lighting)	Freezers: LED lighting in the front housing (SFPvh models with vertical lightning)
	Aluminum lever handle	Antimicrobial handle with opening mechanism (SRPvg/SFPvg with integrated handle)	Antimicrobial handle with opening mechanism (SRPvh/SFPvh with integrated handle)
Energy consumption		Super-efficient	Ultra-efficient
Compliance	Safety according to IEC 61010-2-011	Safety according to IEC 61010-2-011	Safety according to IEC 61010-2-011
		ATEX directive (SRFfg/SFFfg/SCFfg/SRTfg/SFTfg)	Fulfils DIN 13277

The series equipment listed above may vary depending on the model. Exact details can be found in the model description.

ULT freezers – maximum safety and efficiency at ultra-low temperatures

Liebherr ultra-low temperature freezers set new standards in the temperature range from –40 °C to –86 °C. Not only do they offer unprecedented quality and reliability for storing highly sensitive substances, but also outstanding energy efficiency and ease of use that you will notice every day. Robust, economical and extremely safe, the series of appliances from the experts in freezing for laboratories and research facilities boasts an impressive number of functions and features, ensuring optimal protection for your valuable samples, chemicals, and research materials.

This allows you to fully concentrate on your work with peace of mind.

The advantages at a glance

SmartMonitoring
The cloud-based digital solution continuously monitors and documents temperatures with the help of external data loggers and alerts you immediately via email, text message or phone if any deviations occur.

Stainless steel workmanship
The interior, shelves and inner doors are made of rust-proof stainless steel and are therefore easy to clean. This enables optimum hygiene.

Shelves
Three stainless steel shelves in the interior, that can be freely adjusted in 24 mm increments, offer flexibility for space-saving storage, tailored to your requirements. You can add more shelves if required.

Serial interfaces
Interfaces for connecting to documentation and monitoring systems, as well as a volt-free contact for sending alarms to external remote warning systems.

Data recording
There are two feedthroughs (28 mm) on the top and bottom left for installing separate sensors for external monitoring or data recording systems in the interior.

Unloading ramp
No forklift required: the unloading ramp integrated in the packaging helps you easily position the appliance.

Detachable inner door
The detachable inner doors made of rust-proof stainless steel prevent loss of cold air when opening and are also easy to clean.

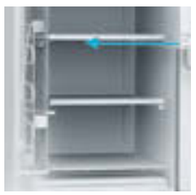
SUFsg 5001 MediLine

Door seals
The innovative door seal design, consisting of two all-round seals, makes the door completely airtight when closed. This also helps reduce energy consumption. The seals can be replaced separately and without tools.

Intuitive electronics
The intuitive electronics with integrated real-time clock allow the temperature to be set with an accuracy of one tenth of a degree. 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 and qualified for your applications and requirements.

Monitoring system
The 3-stage monitoring system, consisting of integrated alarm notifications for temperature, door or mains electrical faults, upgradable features such as CO_2 emergency refrigeration and online monitoring, ensures optimum protection during storage. In the event of a power failure, integrated 12-volt batteries immediately supply the electronics with power. Notifications are provided in critical situations.

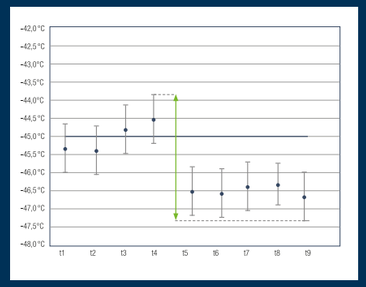
Insulation
The combination of CFC-free polyurethane foam and vacuum-insulated panels ensures the best possible insulation to prevent rapid temperature increases.



Pressure compensation valve
When the door is opened and closed, the air exchange creates a vacuum which makes it difficult to open the door again immediately afterwards. The heated pressure compensation valve quickly equalises the vacuum and the door can be easily opened again after just a few seconds.

The equipment details shown depend on the model; the description for the respective model applies.

Quality right down to the smallest detail



Minimal temperature fluctuations

In order to maintain the quality of the stored samples, it is important to minimise temperature fluctuations. Liebherr ultra-low temperature freezers are characterised by extremely low fluctuations, both within the appliance and over time.

Low energy consumption

Ultra-low temperature freezers are among the appliances with the highest energy consumption in research facilities. Liebherr ultra-low temperature freezers are some of the most economical models on the market worldwide. In combination with highly insulating vacuum panels, the efficient cooling system allows economical operation, optimum energy savings and therefore low operating costs.

Low heat generation

The efficient cascade cooling system, using HC refrigerants, generates significantly less heat than previous technologies. This reduces costs in the thermal design of the room's air conditioning system. If heat dissipation via the room air conditioning is not possible, water cooling is available as an option.

Connection to documentation and monitoring systems

All the appliances have a volt-free alarm output and an Ethernet interface for remote monitoring. In addition, the temperature and alarm records can be read via the integrated USB interface. Optionally, a 4-20 mA output allows the temperature value to be integrated into existing data recording systems. External data loggers can be used to monitor the temperature in Smart-Monitoring, for example.

IQ, OQ, training

From installation qualification (IQ) to operational qualification (OQ) to training, we offer you comprehensive expert help with installation and commissioning. We carry out the various checks for you or set specific parameters for you on request. In addition, we provide on-site training for your staff on how to use the equipment and address any questions you may have. Our document folder also contains all the essential information about the devices.

Installation service for accessories

Our qualified installation service assists you with professional installation and connection of accessories, such as the analogue temperature sensor or CO_2 emergency refrigeration.

The equipment details shown depend on the model; the description for the respective model applies.

Mechanical lock

The mechanical lock protects the stored products from unwanted access. The door is opened with an ergonomic and unbreakable aluminium lever handle.

	SUFsg 7001 MediLine	SUFsg 7001 ver. H72 MediLine	SUFsg 5001 MediLine	SUFsg 5001 ver. H72 MediLine	SUFsg 3501 MediLine
Gross / net capacity	728 / 700 litre	728 / 700 litre	491 / 477 litre	491 / 477 litre	402 / 382 litre
Exterior dimensions in mm (w / d / h)	1204 / 1082 / 1966	1204 / 1082 / 1966	920 / 1082 / 1966	920 / 1082 / 1966	797 / 1082 / 1966
Interior dimensions in mm (w / d / h)	890 / 605 / 1300	890 / 605 / 1300	606 / 605 / 1300	606 / 605 / 1300	466 / 605 / 1300
Energy consumption in 365 days [1]	2957 kWh	2957 kWh	2884 kWh	2884 kWh	2738 kWh
Ambient temperature range	+16 °C to +32 °C	+16 °C to +32 °C	+16 °C to +32 °C	+16 °C to +32 °C	+16 °C to +32 °C
Heat output	1224 kJ/h	1224 kJ/h	1188 kJ/h	1188 kJ/h	1116 kJ/h
Heat output system / Refrigeration system	air cooling / 2-stage cascade system	water-cooled / 2-stage cascade system	air cooling / 2-stage cascade system	water-cooled / 2-stage cascade system	air cooling / 2-stage cascade system
Refrigerant	R 290 / R 170	R 290 / R 170	R 290 / R 170	R 290 / R 170	R 290 / R 170
Sound power level [2]	47 dB(A)	47 dB(A)	47 dB(A)	47 dB(A)	47 dB(A)
Voltage / frequency / Connection rating	230V~ / 50 Hz / 7.0 A	230V~ / 50 Hz / 7.0 A	230V~ / 50 Hz / 7.0 A	230V~ / 50 Hz / 7.0 A	230V~ / 50 Hz / 7.0 A
Temperature range	-40 °C to -86 °C	-40 °C to -86 °C	-40 °C to -86 °C	-40 °C to -86 °C	-40 °C to -86 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white	steel / white
Door material / colour	steel / white	steel / white	steel / white	steel / white	steel / white
Internal liner material	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel
Type of control	LED 7-segment display with buttons	LED 7-segment display with buttons	LED 7-segment display with buttons	LED 7-segment display with buttons	LED 7-segment display with buttons
Volt-free alarm contact	yes	yes	yes	yes	yes
SmartMonitoring compatible / Connectivity type	yes / external data loggers	yes / external data loggers	yes / external data loggers	yes / external data loggers	yes / external data loggers
Connectivity solution	retrofittable	retrofittable	retrofittable	retrofittable	retrofittable
Interface	LAN (Ethernet)	LAN (Ethernet)	LAN (Ethernet)	LAN (Ethernet)	LAN (Ethernet)
Data logger	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface
Power failure alarm	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs	immediately upon power failure for 72 hrs
Cooling system	static	static	static	static	static
Pull-down time +22 °C to -80 °C	450 min	450 min	360 min	360 min	180 min
Warm-up time -80 °C to -60 °C / to 0 °C	250 min / 2220 min	250 min / 2220 min	230 min / 2160 min	230 min / 2160 min	170 min / 1300 min
Number / maximum number of storage shelves	4 / 11	4 / 11	4 / 11	4 / 11	4 / 11
Adjustable shelves	3	3	3	3	3
Shelf material	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel
Usable shelf area in mm (w / d)	860 / 590	860 / 590	580 / 590	580 / 590	460 / 590
Shelf loading / Maximum total load	50 kg / 200 kg	50 kg / 200 kg	50 kg / 200 kg	50 kg / 200 kg	50 kg / 200 kg
Number of racks per shelf	6	6	4	4	3
Max. number of cryoboxes, 50 mm / 75 mm	528 / 336	528 / 336	352 / 224	352 / 224	264 / 168
Castors	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Access ports	3 x Ø 28 mm	3 x Ø 28 mm	3 x Ø 28 mm	3 x Ø 28 mm	3 x Ø 28 mm
Type of lock / Door hinges	mechanical / right-hand hinged, not reversible	mechanical / right-hand hinged, not reversible	mechanical / right-hand hinged, not reversible	mechanical / right-hand hinged, not reversible	mechanical / right-hand hinged, not reversible
Gross / net weight	361 / 313 kg	361 / 313 kg	308 / 254 kg	308 / 254 kg	260 / 226 kg
Accessories					
Racks for cryoboxes	see page 36	see page 36	see page 36	see page 36	see page 36
Cryoboxes, set of 36	7790038	7790038	7790038	7790038	7790038
CO_2 backup system	7790048	7790048	7790048	7790048	7790048
Stainless steel storage shelves	7790050	7790050	7790049	7790049	7790657
Foamed inner doors	7790127	7790127	7790070	7790070	7790656
Cover for mains switch incl. key lock	7790051	7790051	7790051	7790051	7790051
4 – 20mA analogue output	7790042	7790042	7790042	7790042	7790042
Data logger, ULT	6145367	6145367	6145367	6145367	6145367

1 Measured at +25° C. ambient temperature and adjusted temperature of -80° C.
2 Average sound pressure level at 1 m distance.

Ultra-low temperature freezers

Racks for cryoboxes

Convenient and temperature-resistant storage systems for well-organised sample storage. Available as aluminium or stainless steel side-access racks for 5x4 or 6x4 50 mm boxes and as stainless steel front-access drawer racks for 5x4 or 6x4 50 mm boxes.

Maximum Loading SUFsg 5001: 8x Rack 5x4 + 8x Rack 6x4,
Maximum Loading SUFsg 7001: 12x Rack 5x4 + 12x Rack 6x4,
Maximum Loading SUFsg 3501: 6x Rack 5x4 + 6x Rack 6x4.

Aluminium side-access rack 5x4	7790003
Aluminium side-access rack 6x4	7790014
Aluminium side-access rack 5x4 + cryoboxes	7790015
Aluminium side-access rack 6x4 + cryoboxes	7790025
Stainless steel side-access rack 5x4 + cryoboxes	7790029
Stainless steel side-access rack 6x4 + cryoboxes	7790030

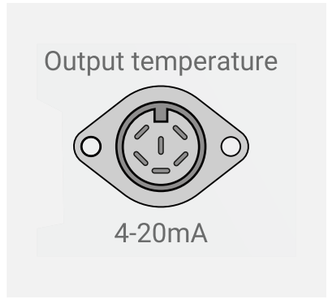
Stainless steel side-access rack 5x4	7790027
Stainless steel side-access rack 6x4	7790028
Stainless steel front-access rack 5x4 + drawers	7790031
Stainless steel front-access rack 6x4 + drawers	7790032
Stainless steel front-access rack 5x4 + cryoboxes + drawers	7790033
Stainless steel front-access rack 6x4 + cryoboxes + drawers	7790036

Foamed inner doors

The foamed inner doors provide the best possible insulation and temperature stability, ensuring efficient cooling and low power consumption.

Cover for mains switch incl. key lock

Protection against unintended disconnection or manipulation of the mains switch.



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.

Cryoboxes

The set contains 36 durable and temperature-resistant cryoboxes made from water-repellent cardboard, with fixed 9x9 grid, for safe storage and transport of valuable samples.

CO_2 backup system

The CO_2 backup system ensures that the cooling of the stored samples continues at reduced temperatures for up to 72 hours in the event of a power failure. The CO_2 bottle is not part of the accessory.

Stainless steel storage shelves

Additional robust stainless steel shelves for flexible and individual partitioning of the interior at 24 mm increments.

Data logger, ULT

For reliable storage at extreme temperatures, this data logger has a special temperature sensor for temperature ranges as low as -200 °C, so that all cooling situations can be covered with a single solution.

The new generation of appliances for laboratories and research – safety redefined

Hardly any sector has more stringent requirements for refrigerators and freezers than laboratories and research. Liebherr meets these demands with a specifically developed range and a new generation of appliances.

Sensitive substances are reliably stored at precise temperatures and additionally protected by integrated alarm systems. Maximum efficiency ensures low consumption, while durable materials and maintenance-free components guarantee minimal operating costs. The comprehensive range is user-friendly and easy to connect in a network – such as Liebherr SmartMonitoring.

Discover typical Liebherr quality that will pay off for years and lighten your daily workload.

Laboratory refrigerators and freezers with stainless steel inner liner

The advantages at a glance

Easily accessible refrigeration components
The refrigeration components are easily accessible, located in the upper part of the machinery compartment to significantly increase the capacity of the interior. The front can be easily lifted up to facilitate cleaning or servicing. When opened by more than 45 ° it can be completely detached.

SmartLock
To prevent products from accidentally entering circulation after an interruption in the cold chain, SmartLock automatically locks the door if there is an alarm. Only authorised persons can unlock it again.

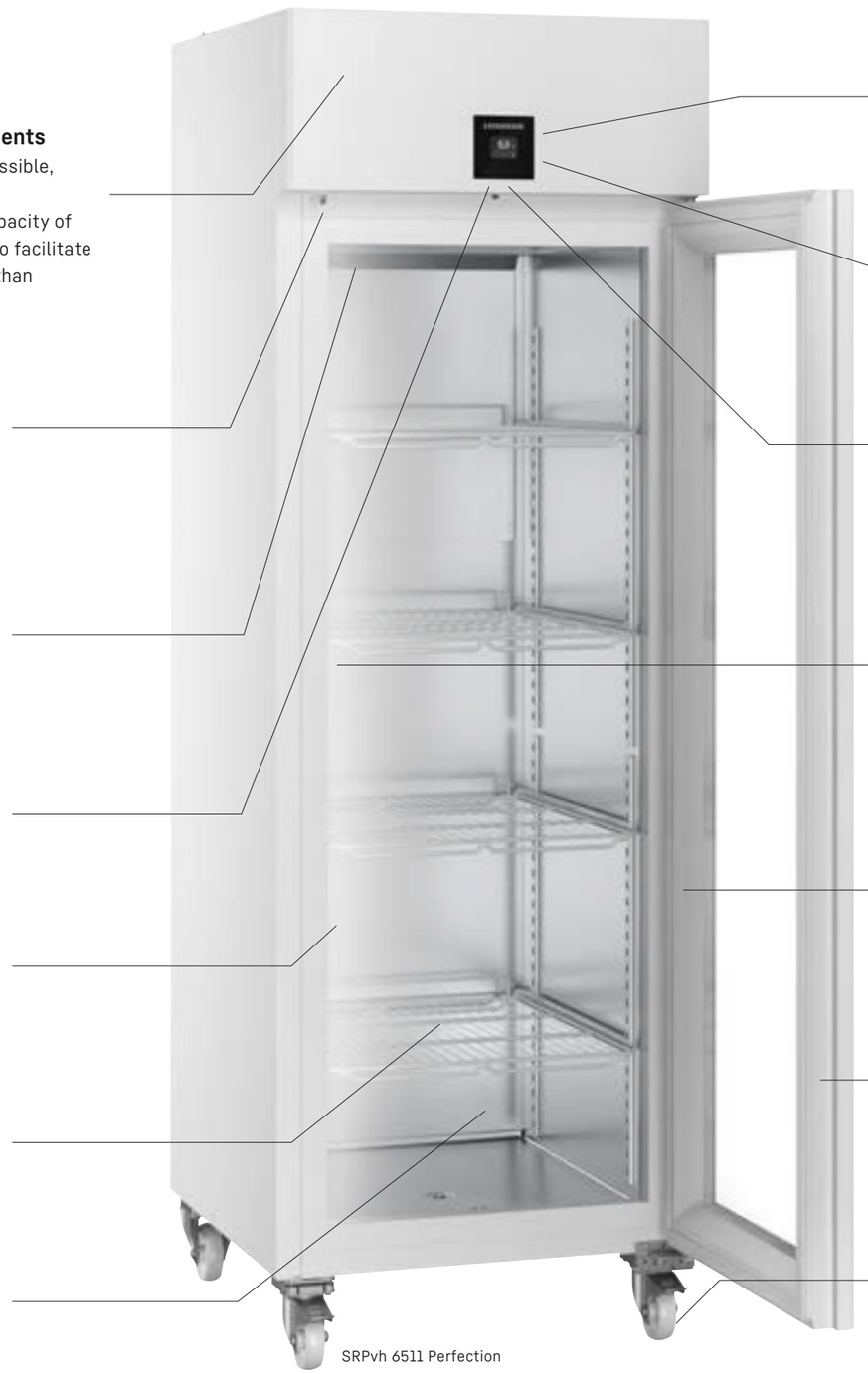
Feedthrough for external sensors
An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.

Power failure alarm
If a malfunction occurs, an integrated battery provides a visual and audible alarm and takes over the power supply. As soon as the power is restored, the time of failure and the maximum temperature reached are displayed.

LightAlarm
In the event of an uncontrolled temperature rise or other problems, the interior light of the appliance starts flashing. This visually shows when action is needed.

Grid shelf
Corrosion-free grid shelves made of coated steel guarantee a secure hold, constant air circulation and good temperature stability.

Stainless steel workmanship
The smooth interior made of chrome-nickel steel (1.4301 / AISI 304) is easy to clean and ensures optimal hygiene.



SRPvh 6511 Perfection

+2 °C SafetyDevice
If the temperature falls below +2 °C due to a malfunction while the temperature setting is at +5 °C or higher, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

Electronic lock with remote control system
Liebherr appliances can be electronically locked and unlocked using an individual PIN code and optional digital remote control by as many users as you like – without them having to share a key.

Integrated WiFi/LAN interface
The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.

Vertical LED lighting
Vertical LED lighting provides optimal illumination of the interior over the entire height of the appliance. This not only saves you time looking for things, but, above all, cuts energy costs.

Self-closing door < 90°
To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.

Self-closing door
The self-closing door with an easy-to-replace solenoid gasket closes particularly tightly, preventing unnecessary loss of cold. The ergonomic door handle, running all the way up the door, makes it easy to open.

Castors
Models in the Performance and Perfection series come with castors as standard, to allow versatile use according to the available space, as well as easy cleaning, even under appliances.

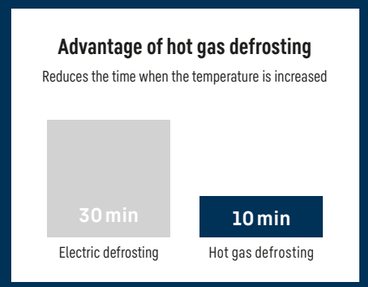
The equipment details shown depend on the model; the description for the respective model applies.

Enlarged glass door view
Overview of the food in stock – essential during a hectic working day. The all-glass door with enlarged field of view provides maximum visibility of the appliance interior. This makes it easier to organise goods and to quickly find the required product, saving valuable time.

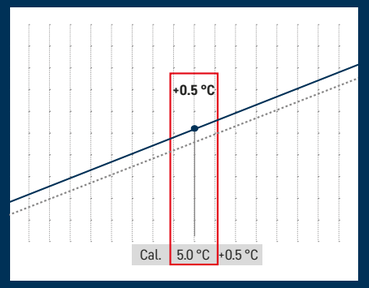
Quality right down to the smallest detail

Integrated WiFi/LAN interface
The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.

SmartMonitoring: extra safety
Liebherr's digital monitoring solution checks and documents the storage temperature and alerts you immediately in the event of deviations for maximum safety in refrigeration and freezing and optimal protection for your valuable contents.



Energy-efficient hot gas defrosting
Timed and on-demand hot gas defrosting allows for very short defrosting times. To further improve temperature stability during defrosting, the internal temperature is slightly lowered shortly beforehand to create a reserve of cold air.



Calibration function
Due to operational requirements and application-specific conditions, it is possible to set temperature deviation of the interior from the set temperature to a storage temperature determined with calibrated thermometers. These deviations can be adjusted by the calibration function. For the secure knowledge of cooling at precise temperatures.

DIN 13277 compliance
Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277.
DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.

±2 °C temperature stability
Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Pharmaceutical refrigerators have an impressive maximum deviation of just ±2 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods.

The equipment details shown depend on the model; the description for the respective model applies.

Laboratory refrigerators with stainless steel inner liner

	SRPvh 1412 Perfection	SRPvh 1402 Perfection	SRPvh 8411 Perfection	SRPvh 8401 Perfection	SRPvh 6511 Perfection	SRPvh 6501 Perfection
Gross / net capacity	1447 / 1091 litre	1391 / 1091 litre	903 / 702 litre	871 / 702 litre	642 / 480 litre	614 / 480 litre
Exterior dimensions in mm (w / d / h)	1427 / 867 / 2135	1427 / 867 / 2135	787 / 1017 / 2135	787 / 1017 / 2135	697 / 867 / 2135	697 / 867 / 2135
Interior dimensions in mm (w / d / h)	976 / 638 / 1493	976 / 638 / 1493	579 / 788 / 1493	579 / 788 / 1493	489 / 638 / 1493	489 / 638 / 1493
Energy consumption in 365 days [1]	705 kWh	464 kWh	374 kWh	220 kWh	317 kWh	172 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	695 kJ/h	565 kJ/h	425 kJ/h	360 kJ/h	365 kJ/h	305 kJ/h
Refrigerant	R 600a	R 600a	R 600a	R 600a	R 600a	R 600a
Sound power level	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)
Voltage / frequency	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz
Connection rating / Rated consumption watts	4.0 A / 130 W	4.0 A / 130 W	4.0 A / 130 W	4.0 A / 130 W	4.0 A / 130 W	4.0 A / 130 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic
Temperature range	0 °C to +16 °C	-2 °C to +16 °C	0 °C to +16 °C	-2 °C to +16 °C	0 °C to +16 °C	-2 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	2.6 °C / 1.9 °C	2.3 °C / 2.1 °C	3.9 °C / 2.9 °C	3.1 °C / 2.3 °C	2.5 °C / 3.4 °C	2.3 °C / 2.5 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white	steel / white	steel / white
Door material / colour	Insulating glass door with steel frame / white	steel / white	Insulating glass door with steel frame / white	steel / white	Insulating glass door with steel frame / white	steel / white
Internal liner material	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface
Interior light	LED light column both sides, separate connection	LED light column both sides	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Adjustable shelves / Shelf material	8 / wire shelves plastic-coated	8 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	480 / 638	480 / 638	570 / 788	570 / 788	480 / 638	480 / 638
Shelf loading / Maximum total load	60 kg / 520 kg	60 kg / 520 kg	60 kg / 240 kg	60 kg / 240 kg	60 kg / 240 kg	60 kg / 240 kg
Castors	5 swivel castors, 2 with parking brake	5 swivel castors, 2 with parking brake	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle
Access ports	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	electronic, with remote control	electronic, with remote control	electronic, with remote control	electronic, with remote control	electronic, with remote control	electronic, with remote control
Door hinges	left-hand / right-hand	left-hand / right-hand	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site
Gross / net weight	293 / 268 kg	225 / 200 kg	186 / 168 kg	165 / 141 kg	169 / 152 kg	148 / 130 kg
Accessories						
U-shaped trayslide, left / U-shaped trayslide, right	7745088 / 7745090	7745088 / 7745090	7745092 / 7745094	7745092 / 7745094	7745088 / 7745090	7745088 / 7745090
Grey grid shelf / Perforated metal shelf in grey	7112608 / 7746614	7112608 / 7746614	7112614 / 7746616	7112614 / 7746616	7112608 / 7746614	7112608 / 7746614
Castors Ø 100 mm	9597965	9597965	9597828	9597828	9597828	9597828
Adjustable feet, 115 – 175 mm	9080132	9080132	9080131	9080131	9080131	9080131
Foot pedal opener	9597649	9597649	9597617	9597617	9597617	9597617
Side-by-Side set in white	9597677	9597677	9597677	9597677	9597677	9597677
Additional remote controls / Digital input for electronic lock	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory refrigerators with stainless steel inner liner

	SRPvg 1412 Performance	SRPvg 1402 Performance	SRPvg 8411 Performance	SRPvg 8401 Performance	SRPvg 6511 Performance	SRPvg 6501 Performance
Gross / net capacity	1447 / 1091 litre	1391 / 1091 litre	903 / 702 litre	871 / 702 litre	642 / 480 litre	614 / 480 litre
Exterior dimensions in mm (w / d / h)	1427 / 867 / 2135	1427 / 867 / 2135	787 / 1017 / 2135	787 / 1017 / 2135	697 / 867 / 2135	697 / 867 / 2135
Interior dimensions in mm (w / d / h)	1210 / 638 / 1493	1210 / 638 / 1493	579 / 788 / 1493	579 / 788 / 1493	489 / 638 / 1493	489 / 638 / 1493
Energy consumption in 365 days [1]	724 kWh	464 kWh	299 kWh	195 kWh	286 kWh	178 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	650 kJ/h	520 kJ/h	400 kJ/h	350 kJ/h	365 kJ/h	305 kJ/h
Refrigerant	R 290	R 290	R 290	R 290	R 290	R 290
Sound power level	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	4.0 A / 320 W	4.0 A / 320 W	4.0 A / 220 W	4.0 A / 220 W	4.0 A / 220 W	4.0 A / 220 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic
Temperature range	0 °C to +16 °C	-2 °C to +16 °C	0 °C to +16 °C	-2 °C to +16 °C	0 °C to +16 °C	-2 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	3.1 °C / 2.9 °C	3.1 °C / 2.6 °C	4.6 °C / 3.5 °C	4.5 °C / 5.0 °C	4.6 °C / 3.4 °C	3.1 °C / 3.7 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white	steel / white	steel / white
Door material / colour	Insulating glass door with steel frame / white	steel / white	Insulating glass door with steel frame / white	steel / white	Insulating glass door with steel frame / white	steel / white
Internal liner material	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)
Type of control	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return	upon mains power return	upon mains power return	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible	visual and audible	visual and audible	visual and audible	visual and audible
Volt-free alarm contact	yes	yes	yes	yes	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule
Connectivity solution	retrofittable	retrofittable	retrofittable	retrofittable	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)
Interior light	LED ceiling light strip with separate switch	LED ceiling lighting	LED ceiling light strip with separate switch	LED ceiling lighting	LED ceiling light strip with separate switch	LED ceiling lighting
Adjustable shelves / Shelf material	8 / wire shelves plastic-coated	8 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	480 / 638	480 / 638	570 / 788	570 / 788	480 / 638	480 / 638
Shelf loading / Maximum total load	60 kg / 480 kg	60 kg / 480 kg	60 kg / 240 kg	60 kg / 240 kg	60 kg / 240 kg	60 kg / 240 kg
Castors	5 swivel castors, 2 with parking brake	5 swivel castors, 2 with parking brake	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle
Access ports	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	mechanical	mechanical	mechanical	mechanical	mechanical	mechanical
Door hinges	left-hand / right-hand	left-hand / right-hand	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site
Gross / net weight	292 / 267 kg	225 / 200 kg	186 / 168 kg	165 / 144 kg	174 / 157 kg	148 / 130 kg
Accessories						
U-shaped trayslide, left / U-shaped trayslide, right	7745088 / 7745090	7745088 / 7745090	7745092 / 7745094	7745092 / 7745094	7745088 / 7745090	7745088 / 7745090
Grey grid shelf	7112608	7112608	7112614	7112614	7112608	7112608
Perforated metal shelf in grey	7746614	7746614	7746616	7746616	7746614	7746614
Castors Ø 100 mm	9597965	9597965	9597828	9597828	9597828	9597828
Adjustable feet, 115 – 175 mm	9080132	9080132	9080131	9080131	9080131	9080131
Foot pedal opener	9597649	9597649	9597617	9597617	9597617	9597617
Side-by-Side set in white	9597677	9597677	9597677	9597677	9597677	9597677
SmartModule	6145269	6145269	6145269	6145269	6145269	6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory freezers with stainless steel inner liner

	SFPvh 1402 Perfection	SFPvh 8401 Perfection	SFPvh 6501 Perfection	SFPvg 1402 Performance	SFPvg 8401 Performance	SFPvg 6501 Performance
Gross / net capacity	1391 / 1091 litre	871 / 702 litre	614 / 480 litre	1391 / 1091 litre	871 / 702 litre	614 / 480 litre
Exterior dimensions in mm (w / d / h)	1427 / 867 / 2135	787 / 1017 / 2135	697 / 867 / 2135	1427 / 867 / 2135	787 / 1017 / 2135	697 / 867 / 2135
Interior dimensions in mm (w / d / h)	1210 / 638 / 1493	579 / 788 / 1493	489 / 638 / 1493	1210 / 638 / 1493	579 / 788 / 1493	489 / 638 / 1493
Energy consumption in 365 days [1]	1162 kWh	748 kWh	702 kWh	1162 kWh	870 kWh	774 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	1485 kJ/h	935 kJ/h	875 kJ/h	1420 kJ/h	1110 kJ/h	975 kJ/h
Refrigerant	R 290	R 290	R 290	R 290	R 290	R 290
Sound power level	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)
Voltage / frequency	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	4.0 A / 420 W	4.0 A / 420 W	4.0 A / 420 W	4.0 A / 580 W	4.0 A / 610 W	4.0 A / 610 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic
Temperature range	-9 °C to -35 °C [2]	-9 °C to -35 °C [2]	-9 °C to -35 °C [2]	-9 °C to -30 °C	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [3] / max. fluctuation [4]	2.9 °C / 4.9 °C	3.6 °C / 4.9 °C	3.6 °C / 5.0 °C	2.9 °C / 4.9 °C	5.2 °C / 4.5 °C	5.2 °C / 4.8 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white	steel / white	steel / white
Door material / colour	steel / white	steel / white	steel / white	steel / white	steel / white	steel / white
Internal liner material	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	upon mains power return	upon mains power return	upon mains power return
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	retrofittable / WiFi/LAN (optional)	retrofittable / WiFi/LAN (optional)	retrofittable / WiFi/LAN (optional)
Data logger	integrated, USB interface	integrated, USB interface	integrated, USB interface			
Interior light	LED light column both sides	LED lighting column, left	LED lighting column, left	LED ceiling lighting	LED ceiling lighting	LED ceiling lighting
Adjustable shelves / Shelf material	8 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated	8 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	480 / 638	570 / 788	480 / 638	480 / 638	570 / 788	480 / 638
Shelf loading / Maximum total load	60 kg / 520 kg	60 kg / 240 kg	60 kg / 240 kg	60 kg / 480 kg	60 kg / 240 kg	60 kg / 240 kg
Castors	5 swivel castors, 2 with parking brake	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear	5 swivel castors, 2 with parking brake	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle	vertical recessed handle
Access ports	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	electronic, with remote control	electronic, with remote control	electronic, with remote control	mechanical	mechanical	mechanical
Door hinges	left-hand / right-hand	right, reversible on site	right, reversible on site	left-hand / right-hand	right, reversible on site	right, reversible on site
Gross / net weight	235 / 210 kg	167 / 149 kg	150 / 132 kg	225 / 200 kg	166 / 149 kg	150 / 132 kg
Accessories						
U-shaped trayslide, left / U-shaped trayslide, right	7745088 / 7745090	7745092 / 7745094	7745088 / 7745090	7745088 / 7745090	7745092 / 7745094	7745088 / 7745090
Grey grid shelf / Perforated metal shelf in grey	7112608 / 7746614	7112614 / 7746616	7112608 / 7746614	7112608 / 7746614	7112614 / 7746616	7112608 / 7746614
Castors Ø 100 mm / Adjustable feet, 115 – 175 mm	9597965 / 9080132	9597828 / 9080131	9597828 / 9080131	9597965 / 9080132	9597828 / 9080131	9597828 / 9080131
Foot pedal opener	9597649	9597617	9597617	9597649	9597617	9597617
Side-by-Side set in white	9597677	9597677	9597677	9597677	9597677	9597677
SmartModule				6145269	6145269	6145269
Additional remote controls	6123395	6123395	6123395			
Digital input for electronic lock	9086958	9086958	9086958			

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 The temperature range is valid at a maximum ambient temperature of +30°C
3 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
4 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Research and laboratory appliances – for maximum precision and safety

Constant temperatures are essential when storing sensitive substances. This is especially true for work in laboratories, where even the slightest deviations can jeopardise the quality of research results. This is why Liebherr has developed new refrigerators and freezers specifically for this sector, combining maximum refrigeration performance with optimum temperature stability. Innovative safety features with monitoring and alarm functions offer all-round protection from all kinds of incident and malfunction.

The next generation of appliances sets standards in terms of energy efficiency and total cost of ownership. On the following pages we present the latest results of research and development by the refrigeration specialists at Liebherr and show how they can benefit safety in your laboratory.

The advantages at a glance

Integrated data logger
The integrated logger records the temperature profile, alarm history and service information for up to five years. The data can be read out directly from the appliance via the USB interface.

Min./max. temperature log
The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

+2 °C SafetyDevice
If the temperature falls below +2 °C due to a malfunction while the temperature setting is at +5 °C or higher, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

Power failure alarm
If a malfunction occurs, an integrated battery provides a visual and audible alarm and takes over the power supply. As soon as the power is restored, the time of failure and the maximum temperature reached are displayed.

LightAlarm
In the event of an uncontrolled temperature rise or other problems, the interior light of the appliance starts flashing. This visually shows when action is needed.

Feedthrough for external sensors
An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.

SRFvh 4011 Perfection

Laboratory refrigerators and freezers with plastic inner liner

Mechanical lock
Liebherr professional appliances are equipped with a mechanical lock and two keys. This ensures that unauthorised persons cannot access your valuable and sensitive stored goods.

SmartMonitoring
The cloud-based digital solution continuously monitors and documents temperatures and alerts you immediately via email, text message or phone if any deviations occur.

Integrated WiFi/LAN interface
The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.

Easy-to-clean interior
The inner liner made of fully recyclable, robust and odourless polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.

Replaceable door seal
Save time and money: the insertable Liebherr door seals are easy to change. If a seal is damaged, you can replace it yourself without any tools. Contact Liebherr Customer Service to purchase replacements.

Self-closing door < 90°
To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.

The equipment details shown depend on the model; the description for the respective model applies.

Quality right down to the smallest detail

Antimicrobial handle with opening mechanism

A benefit for users but a bane for germs: The easy-turn handle mechanism makes opening the door effortless. It contains special antimicrobial substances that reduce bacteria by up to 99.99%*. Regular and time-consuming disinfection is not necessary. This means the appliance is extremely safe even if many people have access to it. *According to ISO 22196:2011

Grid shelf with pull-out stop

Corrosion-free grid shelves made of coated steel guarantee a secure hold, constant air circulation and good temperature stability. A pull-out stop prevents them from accidentally sliding out.

Ultra-efficient

Energy-efficient refrigerators and freezers help with ever increasing electricity prices. Liebherr fully utilises the savings potential of every component – from the compressor to the seal, to the lighting and electronics. The ultra-efficient appliances in the Perfection series for example demonstrates how this has a positive effect on your overall operating costs.

±3 °C temperature stability

Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Laboratory refrigerators have an impressive maximum deviation of just ±3 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods.

DIN 13277 compliance

Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277. DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.

IEC 61010-2-011

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

Vertical LED lighting

Vertical LED lighting provides optimal illumination of the interior over the entire height of the appliance. Thanks to the perfect overview on all levels, the required substance is immediately at hand, the door can be quickly closed again, and the interior temperature remains stable. This saves you time looking for things – and above all energy costs.

The equipment details shown depend on the model; the description for the respective model applies.

SRFvh 5511
Perfection

SRFvh 5501
Perfection

Gross / net capacity	588 / 440 litre	558 / 441 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793	747 / 769 / 1793
Interior dimensions in mm (w / d / h)	606 / 536 / 1460	606 / 536 / 1460
Energy consumption in 365 days [1]	360 kWh	171 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	475 kJ/h	246 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 190 W	2.0 A / 190 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+3 °C to +16 °C	+3 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	3.3 °C / 2.0 °C	2.2 °C / 1.7 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution	integrated, removable	integrated, removable
Interface	WiFi/LAN	WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Adjustable shelves / Shelf material	5 / wire shelves plastic-coated	5 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	600 / 536	600 / 536
Shelf loading / Maximum total load	60 kg / 300 kg	60 kg / 300 kg
Castors	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
DIN 13277	yes	yes
Type of lock / Door hinges	mechanical / right, reversible on site	mechanical / right, reversible on site
Gross / net weight	111 / 98 kg	94 / 80 kg
Accessories		
Pharmacy drawer	9032868	9032868
White grid shelf	7113310	7113310
White base grid / Glass shelf	7113314 / 9291929	7113314 / 9291929
Scanner rail	7435210	7435210
Castors Ø 80 mm	9086926	9086926
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request
Side-by-Side set in white	9017739	9017739

SRFvh 4011
Perfection

SRFvh 4001
Perfection

Gross / net capacity	420 / 297 litre	394 / 298 litre
Exterior dimensions in mm (w / d / h)	597 / 654 / 1884	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	460 / 423 / 1660	460 / 423 / 1660
Energy consumption in 365 days [1]	389 kWh	172 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	463 kJ/h	250 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 180 W	2.0 A / 180 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+3 °C to +16 °C	+3 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	3.0 °C / 2.4 °C	2.4 °C / 2.2 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution	integrated, removable	integrated, removable
Interface	WiFi/LAN	WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Adjustable shelves / Shelf material	5 / wire shelves plastic-coated	5 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	460 / 423	460 / 423
Shelf loading / Maximum total load	45 kg / 225 kg	45 kg / 225 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
DIN 13277	yes	yes
Type of lock / Door hinges	mechanical / right, reversible on site	mechanical / right, reversible on site
Gross / net weight	87 / 80 kg	71 / 65 kg
Accessories		
Pharmacy drawer	9032867	9032867
White grid shelf	7113308	7113308
White base grid / Glass shelf	7113312 / 9293493	7113312 / 9293493
Perforated metal shelf, white	9029022	9029022
Scanner rail	7435208	7435208
Castors Ø 80 mm / Ø 100 mm	- / -	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request
Side-by-Side set in white	9006786	9006786

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory refrigerators with plastic inner liner

SRFvg 5511
Performance

SRFvg 5501
Performance

SRFvg 4011
Performance

SRFvg 4001
Performance

SRFvg 3511
Performance

SRFvg 3501
Performance

	SRFvg 5511	SRFvg 5501	SRFvg 4011	SRFvg 4001	SRFvg 3511	SRFvg 3501
Gross / net capacity	588 / 440 litre	558 / 441 litre	420 / 297 litre	394 / 298 litre	367 / 260 litre	344 / 261 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684	747 / 769 / 1684	597 / 654 / 1884	597 / 654 / 1884	597 / 654 / 1684	597 / 654 / 1684
Interior dimensions in mm (w / d / h)	606 / 536 / 1442	606 / 536 / 1460	460 / 423 / 1642	460 / 423 / 1660	460 / 423 / 1442	460 / 423 / 1460
Energy consumption in 365 days [1]	433 kWh	250 kWh	431 kWh	245 kWh	393 kWh	226 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	542 kJ/h	317 kJ/h	542 kJ/h	321 kJ/h	471 kJ/h	288 kJ/h
Refrigerant	R 600a	R 600a	R 600a	R 600a	R 600a	R 600a
Sound power level	49 dB(A)	49 dB(A)	49 dB(A)	49 dB(A)	48 dB(A)	48 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 135 W	2.0 A / 140 W	2.0 A / 135 W	2.0 A / 140 W	2.0 A / 135 W	2.0 A / 120 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic
Temperature range	+3 °C to +16 °C	+3 °C to +16 °C	+3 °C to +16 °C	+3 °C to +16 °C	+3 °C to +16 °C	+3 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	3.8 °C / 3.2 °C	3.9 °C / 3.0 °C	5.4 °C / 3.4 °C	4.6 °C / 2.2 °C	3.6 °C / 3.2 °C	5.0 °C / 3.1 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white	Insulated glass door with plastic frame / white	steel / white	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return	upon mains power return	upon mains power return	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible	visual and audible	visual and audible	visual and audible	visual and audible
Volt-free alarm contact	yes	yes	yes	yes	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule
Connectivity solution	retrofittable	retrofittable	retrofittable	retrofittable	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)
Interior light	LED ceiling light strip with separate switch		LED ceiling light strip with separate switch		LED ceiling light strip with separate switch	
Adjustable shelves / Shelf material	5 / wire shelves plastic-coated	5 / wire shelves plastic-coated	5 / wire shelves plastic-coated	5 / wire shelves plastic-coated	4 / wire shelves plastic-coated	4 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	600 / 536	600 / 536	460 / 423	460 / 423	460 / 423	460 / 423
Shelf loading / Maximum total load	60 kg / 300 kg	60 kg / 300 kg	45 kg / 225 kg	45 kg / 225 kg	45 kg / 180 kg	45 kg / 180 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm
Type of lock	mechanical	mechanical	mechanical	mechanical	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site
Gross / net weight	105 / 96 kg	86 / 80 kg	88 / 82 kg	70 / 64 kg	81 / 76 kg	65 / 59 kg
Accessories						
White grid shelf	7113310	7113310	7113308	7113308	7113308	7113308
White base grid / Glass shelf	7113314 / 9291929	7113314 / 9291929	7113312 / 9293493	7113312 / 9293493	7113312 / 9293493	7113312 / 9293493
Perforated metal shelf, white			9029022	9029022	9029022	9029022
Scanner rail	7435210	7435210	7435208	7435208	7435208	7435208
Castors Ø 80 mm / Ø 100 mm	9086926 / 9080023	9086926 / 9080023	– / –	9086926 / 9080023	9086926 / 9080023	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924
Evaporator cover		9803590		9803588		9803586
Additional lock barrels (up to 5)	on request	on request	on request	on request	on request	on request
Side-by-Side set in white	9017739	9017739	9006786	9006786	9017739	9017739
SmartModule	6145269	6145269	6145269	6145269	6145269	6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Quality right down to the smallest detail

LED front lighting

The LED front lighting provides optimal illumination of the drawers even in dark environments. Thanks to the perfect overview, the desired substance is immediately at hand, the door can be quickly closed again, and the interior temperature remains stable. For low consumption and lower energy costs.

NoFrost technology

Liebherr professional laboratory appliances no longer need manual defrosting. Any moisture that occurs is bound by the fan-assisted cooling, and when necessary, defrosting phases remove any remaining moisture particles from of the interior – for convenient, safe, and ice-free storage.

Ultra-efficient

Energy-efficient refrigerators and freezers help with ever increasing electricity prices. Liebherr fully utilises the savings potential of every component – from the compressor to the seal, to the lighting and electronics. The ultra-efficient appliances in the Perfection series for example demonstrates how this has a positive effect on your overall operating costs.

±5 °C temperature stability

Sensitive substances cannot be subjected to large deviations from the set storage temperature. Liebherr freezers guarantee a temperature fluctuation of no more than ±5 °C, so that the valuable goods you store in them are optimally protected and their quality is preserved.

DIN 13277 compliance

Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277.
DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.

IEC 61010-2-011

Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

The equipment details shown depend on the model; the description for the respective model applies.

	SFFvh 5501 Perfection	SFFvh 4001 Perfection
Gross / net capacity	472 / 257 litre	273 / 174 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	603 / 510 / 1118	420 / 400 / 1400
Energy consumption in 365 days [1]	540 kWh	292 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	725 kJ/h	479 kJ/h
Refrigerant	R 290	R 600a
Sound power level	55 dB(A)	46 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 250 W	2.0 A / 230 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	-9 °C to -35 °C [2]	-9 °C to -35 °C [2]
Gradient [3] / max. fluctuation [4]	5.5 °C / 4.4 °C	6.9 °C / 6.4 °C
External cabinet finish	steel / white	steel / white
Door material / colour	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	LED	LED
Adjustable shelves / Shelf material	4 / wire shelves plastic-coated	6 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	600 / 510	420 / 400
Shelf loading / Maximum total load	60 kg / 300 kg	45 kg / 315 kg
Castors	castors with brake at the front, fixed castors at the rear	
Drawers / Number of baskets included	6 / 2	6 / –
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
DIN 13277	yes	yes
Type of lock	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	113 / 104 kg	86 / 81 kg
Accessories		
White grid shelf	7112590	7113416
White base grid		7112594
Standard full-depth basket	9141791	
Castors Ø 80 mm / Ø 100 mm	9086926 / –	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request
Side-by-Side set in white	9017739	9006786
Product sensor (PT 1000)	6942678	6942678

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 The temperature range is valid at a maximum ambient temperature of +30°C
3 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
4 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

SFFsg 5501
Performance

SFFsg 5501 ver. 740
Performance

Gross / net capacity	499 / 394 litre	499 / 310 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684	747 / 769 / 1684
Interior dimensions in mm (w / d / h)	588 / 523 / 1388	588 / 523 / 1388
Energy consumption in 365 days [1]	501 kWh	501 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	713 kJ/h	713 kJ/h
Refrigerant	R 290	R 290
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 240 W	2.0 A / 240 W
Cooling system	static	static
Defrost	manual	manual
Temperature range	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [2] **/ max. fluctuation** [3]	6.0 °C / 2.9 °C	6.0 °C / 2.9 °C
External cabinet finish	steel / white	steel / white
Door material / colour	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible	yes	yes
Connectivity type	SmartModule	SmartModule
Connectivity solution	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)
Removable shelves	4	4
Shelf material	wire shelves plastic-coated	wire shelves plastic-coated
Usable shelf area in mm (w / d)	580 / 523	580 / 523
Shelf loading / Maximum total load	60 kg / 300 kg	60 kg / 300 kg
Drawers / Number of baskets included	- / -	8 / 2
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
Type of lock	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	93 / 80 kg	104 / 99 kg
Accessories		
Glass shelf / Full-depth drawer	9293495 / 9749825	9293495 / -
Short bottom basket / Standard full-depth basket	9141004 / 9141791	- / -
Castors Ø 80 mm / Ø 100 mm	9086926 / 9080023	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request
Side-by-Side set in white	9017739	9017739
SmartModule	6145269	6145269

SFFsg 4001
Performance

SFFsg 4001 ver. 740
Performance

Gross / net capacity	316 / 242 litre	316 / 190 litre
Exterior dimensions in mm (w / d / h)	597 / 654 / 1884	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	403 / 408 / 1588	403 / 408 / 1588
Energy consumption in 365 days [1]	385 kWh	385 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	529 kJ/h	529 kJ/h
Refrigerant	R 290	R 290
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 220 W	2.0 A / 220 W
Cooling system	static	static
Defrost	manual	manual
Temperature range	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [2] **/ max. fluctuation** [3]	5.7 °C / 2.5 °C	5.7 °C / 2.5 °C
External cabinet finish	steel / white	steel / white
Door material / colour	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible	yes	yes
Connectivity type	SmartModule	SmartModule
Connectivity solution	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)
Removable shelves	5	5
Shelf material	wire shelves plastic-coated	wire shelves plastic-coated
Usable shelf area in mm (w / d)	400 / 408	400 / 408
Shelf loading / Maximum total load	45 kg / 270 kg	45 kg / 270 kg
Drawers		6
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
Type of lock	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	82 / 77 kg	87 / 82 kg
Accessories		
Long drawer / Short drawer	9749823 / 9749844	- / -
Glass shelf	9293499	9293499
Castors Ø 80 mm / Ø 100 mm	9086926 / 9080023	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request
Side-by-Side set in white	9006786	9006786
SmartModule	6145269	6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

New

SRTvh 1511
Perfection

New

SRTvh 1501
Perfection

Gross / net capacity	137 / 97 litre	134 / 97 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	450 / 460 / 620	450 / 440 / 620
Energy consumption in 365 days [1]	187 kWh	111 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	208 kJ/h	198 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	45 dB(A)	43 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 60 W	2.0 A / 50 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+3 °C to +16 °C	+3 °C to +16 °C
Gradient [2] / max. fluctuation [3]	3.7 °C / 2.9 °C	3.7 °C / 3.4 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution	integrated, removable	integrated, removable
Interface	WiFi/LAN	WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Adjustable shelves / Shelf material	3 / wire shelves plastic-coated	3 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	450 / 425	450 / 425
Shelf loading / Maximum total load	45 kg / 180 kg	45 kg / 180 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	45 / 43 kg	37 / 33 kg
Accessories		
Worktop, white	9876118	9876118
White grid shelf	7113408	7113408
Pharmacy drawer	9876137	9876137
Perforated metal shelf, white	7746588	7746588
Castors / Adjustable legs	9904819 / 9906105	9904819 / 9906105
Scanner rail	7401607	7401607
Additional lock barrels (up to 5)	on request	on request
Stacking kit, white	9876098	9876098
Side-by-Side set in white	9031901	9031901

New

SRTvg 1511
Performance

New

SRTvg 1501
Performance

Gross / net capacity	137 / 97 litre	134 / 97 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	450 / 460 / 620	450 / 440 / 620
Energy consumption in 365 days [1]	214 kWh	156 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	202 kJ/h	198 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	49 dB(A)	47 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 100 W	2.0 A / 100 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+3 °C to +16 °C	+3 °C to +16 °C
Gradient [2] / max. fluctuation [3]	3.7 °C / 5.2 °C	4.9 °C / 4.4 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)
Interior light	LED ceiling light strip with separate switch	
Adjustable shelves / Shelf material	3 / wire shelves plastic-coated	3 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	450 / 425	450 / 425
Shelf loading / Maximum total load	45 kg / 180 kg	45 kg / 180 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	45 / 43 kg	39 / 35 kg
Accessories		
Worktop, white	9876118	9876118
White grid shelf	7113408	7113408
Perforated metal shelf, white	7746588	7746588
Castors / Adjustable legs	9904819 / 9906105	9904819 / 9906105
Scanner rail	7401607	7401607
Additional lock barrels (up to 5)	on request	on request
Stacking kit, white	9876098	9876098
Side-by-Side set in white	9031901	9031901
SmartModule	6145269	6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Laboratory freezers with plastic inner liner

New

SFTvh 1501
Perfection

New

SFTsg 1501
Performance

New

SFTsg 1501 ver. 740
Performance

	SFTvh 1501	SFTsg 1501	SFTsg 1501 ver. 740
Gross / net capacity	103 / 59 litre	101 / 69 litre	101 / 71 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	380 / 330 / 600	380 / 410 / 610	380 / 410 / 610
Energy consumption in 365 days [1]	187 kWh	180 kWh	180 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output / Refrigerant	280 kJ/h / R 600a	294 kJ/h / R 600a	294 kJ/h / R 600a
Sound power level	39 dB(A)	40 dB(A)	40 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating	2.0 A	2.0 A	2.0 A
Rated consumption watts	80 W	110 W	110 W
Cooling system / Defrost	forced-air / automatic	static / manual	static / manual
Temperature range	-9 °C to -35 °C [2]	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [3] **/ max. fluctuation** [4]	3.2 °C / 3.9 °C	7.4 °C / 3.3 °C	7.4 °C / 3.3 °C
External cabinet finish	steel / white	steel / white	steel / white
Door material / colour	steel / white	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	immediately upon power failure for at least 12 hrs	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible	visual and audible
Volt-free alarm contact	yes	yes	yes
SmartMonitoring compatible	yes	yes	yes
Connectivity type	SmartModule	SmartModule	SmartModule
Connectivity solution	integrated, removable	retrofittable	retrofittable
Interface	WiFi/LAN	WiFi/LAN (optional)	WiFi/LAN (optional)
Data logger	integrated, USB interface		
Interior light	LED		
Shelf material	glass	wire shelves plastic-coated	glass
Usable shelf area in mm (w / d)	380 / 266	380 / 338	380 / 347
Shelf loading / Maximum total load	40 kg / 120 kg	45 kg / 135 kg	40 kg / 120 kg
Drawers	3		3
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm
Type of lock / Door hinges	mechanical / right, reversible on site	mechanical / right, reversible on site	mechanical / right, reversible on site
Gross / net weight	42 / 39 kg	37 / 34 kg	40 / 37 kg
Accessories			
Worktop, white	9876118	9876118	9876118
Drawer set		9876260	
Castors / Adjustable legs	9904819 / 9906105	9904819 / 9906105	9904819 / 9906105
Additional lock barrels (up to 5)	on request	on request	on request
Stacking kit, white	9876098	9876098	9876098
Side-by-Side set in white	9031901	9031901	9031901
SmartModule		6145269	6145269

Laboratory fridge-freezer combination with plastic inner liner

SCFvh 4032
Perfection

SCFvh 4002
Perfection

		SCFvh 4032	SCFvh 4002
Gross / net capacity	**fridge comp.**	284 / 206 litre	272 / 206 litre
Gross / net capacity	**freezer comp.**	112 / 58 litre	112 / 58 litre
Exterior dimensions in mm (w / d / h)		597 / 654 / 2044	597 / 654 / 2044
Interior dimensions in mm (w / d / h)	**fridge comp.**	460 / 423 / 1037	460 / 423 / 1037
Interior dimensions in mm (w / d / h)	**freezer comp.**	406 / 292 / 595	406 / 292 / 595
Energy consumption in 365 days [1]		459 kWh	277 kWh
Ambient temperature range		+10 °C to +35 °C	+10 °C to +35 °C
Heat output / Refrigerant		380 kJ/h / R 600a	290 kJ/h / R 600a
Sound power level		48 dB(A)	48 dB(A)
Voltage / frequency		220 – 240V~ / 50/60 Hz	220 – 240V~ / 50/60 Hz
Connection rating / Rated consumption watts		2.0 A / 160 W	2.0 A / 140 W
Cooling system	**fridge / freezer comp.**	forced-air / forced-air	forced-air / forced-air
Defrost	**fridge / freezer comp.**	automatic / automatic	automatic / automatic
Temperature range	**fridge / freezer comp.**	+3 °C to +16 °C / -9 °C to -30 °C	+3 °C to +16 °C / -9 °C to -30 °C
Gradient [3]	**fridge / freezer comp.**	3.3 °C / 4.3 °C	3.3 °C / 3.3 °C
Max. fluctuation [4]	**fridge / freezer comp.**	2.9 °C / 7.6 °C	3.0 °C / 6.4 °C
External cabinet finish		steel / white	steel / white
Door material / colour		glass door / steel / white	steel / white
Internal liner material		commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control		2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm		immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact		visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type		yes / SmartModule	yes / SmartModule
Connectivity solution / Interface		integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger		integrated, USB interface	integrated, USB interface
Interior light	**fridge / freezer comp.**	vertical LED light strip recessed in left wall with separate switch / LED	LED lighting column, left / LED
Adjustable shelves	**fridge comp.**	4	4
Shelf material	**fridge / freezer comp.**	wire shelves plastic-coated / glass	wire shelves plastic-coated / glass
Usable shelf area in mm (w / d)	**fridge comp.**	460 / 423	460 / 423
Shelf loading	**fridge / freezer comp.**	45 kg / 40 kg	45 kg / 40 kg
Maximum total load		345 kg	345 kg
Drawers	**freezer comp.**	3	3
Handle		antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports / DIN 13277		2 x Ø 10 mm / yes	2 x Ø 10 mm / yes
Type of lock / Door hinges		mechanical / right, reversible on site	mechanical / right, reversible on site
Gross / net weight		103 / 97 kg	90 / 83 kg
Accessories			
Pharmacy drawer		9032867	9032867
White grid shelf / White base grid		7113308 / 7113272	7113308 / 7113272
Perforated metal shelf, white		9029022	9029022
Scanner rail		7435208	7435208
Additional lock barrels		on request	on request
Side-by-Side set in white		9027388	9027388

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 The temperature range is valid at a maximum ambient temperature of +30°C
3 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
4 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

The advantages at a glance

+2 °C SafetyDevice
If the temperature falls below +2 °C due to a malfunction while the temperature setting is at +5 °C or higher, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

Power failure info
The power failure info function reports when the appliance was temporarily without power and what the maximum temperature was during this time. This allows you to better assess the potential loss of quality.

Min./max. temperature log
The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

Easy-to-clean interior
The inner liner made of fully recyclable, robust and odourless polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.

Feedthrough for external sensors
An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.

SRFfg 4001 Performance

Mechanical lock
Liebherr professional appliances are equipped with a mechanical lock and two keys. This ensures that unauthorised persons cannot access your valuable and sensitive stored goods.

SmartMonitoring
The cloud-based digital solution continuously monitors and documents temperatures and alerts you immediately via email, text message or phone if any deviations occur.

Retrofittable WiFi/LAN interface
The retrofittable WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.

Antimicrobial handle with opening mechanism
A benefit for users but a bane for germs: The easy-turn handle mechanism makes opening the door effortless. It contains special antimicrobial substances that reduce bacteria by up to 99.99%*. Regular and time-consuming disinfection is not necessary. This means the appliance is extremely safe even if many people have access to it. *According to ISO 22196:2011

Replaceable door seal
Save time and money: the insertable Liebherr door seals are easy to change. If a seal is damaged, you can replace it yourself without any tools. Contact Liebherr Customer Service to purchase replacements.

Self-closing door < 90°
To make loading, unloading and cleaning easier, the appliance door stays open if opened by more than 90°. If the opening angle is less than 90°, it closes automatically for safety.

The equipment details shown depend on the model; the description for the respective model applies.

Quality right down to the smallest detail

Explosion protection: ATEX 95
The ATEX-95 certification confirms that the Liebherr spark-free laboratory refrigerators and freezers are suitable for storing explosive and highly flammable materials as defined by EU Directive 2014/34/EU (ATEX).

Super-efficient
Rising electricity prices are increasing the demands on the efficiency of refrigerators and freezers. From the compressor to the seal, to the lighting and electronics, Liebherr fully utilises the savings potential of every component. The result is impressive – especially in terms of total operating costs.

Robust glass shelves
For more convenience in the lab, the robust glass shelves of the refrigerators and freezers with spark-proof interior are easy to clean and simple to remove when the door is opened by around 90°.

±3 °C temperature stability
Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Laboratory refrigerators have an impressive maximum deviation of just ±3 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods.

IEC 61010-2-011
Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

The equipment details shown depend on the model; the description for the respective model applies.

SRFfg 5501
Performance

Gross / net capacity	558 / 441 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684
Interior dimensions in mm (w / d / h)	600 / 537 / 1460
Energy consumption in 365 days [1]	399 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	408 kJ/h
Refrigerant	R 600a
Sound power level	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz
Connection rating	2.0 A
Rated consumption watts	145 W
Cooling system / Defrost	forced-air / automatic
Temperature range	+3 °C to +16 °C
Gradient [2] **/ max. fluctuation** [3]	3.7 °C / 3.0 °C
External cabinet finish	steel / white
Door material / colour	steel / white
Internal liner material	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons
Power failure alarm	upon mains power return
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
SmartMonitoring compatible	yes
Connectivity type	SmartModule
Connectivity solution	retrofittable
Interface	WiFi/LAN (optional)
Adjustable shelves	5
Shelf material	glass
Usable shelf area in mm (w / d)	600 / 537
Shelf loading / Maximum total load	40 kg / 300 kg
Handle	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm
ATEX conformity	yes
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	91 / 84 kg
Accessories	
Glass shelf	9291929
Scanner rail	7435210
Castors Ø 80 mm / Ø 100 mm	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924
Additional lock barrels (up to 5)	on request
Side-by-Side set in white	9017739
SmartModule	6145269

SRFfg 4001
Performance

394 / 298 litre
597 / 654 / 1884
460 / 422 / 1660
421 kWh
+10 °C to +35 °C
454 kJ/h
R 600a
49 dB(A)
220 – 240V~ / 50 Hz
2.0 A
140 W
forced-air / automatic
+3 °C to +16 °C
5.1 °C / 3.2 °C
steel / white
steel / white
commercial grade moulded polystyrene
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes
SmartModule
retrofittable
WiFi/LAN (optional)
5
glass
460 / 422
40 kg / 225 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
mechanical
right, reversible on site
74 / 68 kg
9293493
7435208
9086926 / 9080023
9080022 / 9086924
on request
9006786
6145269

SRFfg 3501
Performance

344 / 261 litre
597 / 654 / 1684
460 / 423 / 1460
406 kWh
+10 °C to +35 °C
388 kJ/h
R 600a
48 dB(A)
220 – 240V~ / 50 Hz
2.0 A
120 W
forced-air / automatic
+3 °C to +16 °C
3.6 °C / 3.1 °C
steel / white
steel / white
commercial grade moulded polystyrene
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes
SmartModule
retrofittable
WiFi/LAN (optional)
4
glass
460 / 423
40 kg / 180 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
mechanical
right, reversible on site
68 / 60 kg
9293493
7435208
9086926 / 9080023
9080022 / 9086924
on request
9017739
6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Quality right down to the smallest detail

Liebherr offers refrigerators and freezers with a spark-free interior specifically for storing explosive and highly flammable substances in laboratories and in the chemical industry. The inner liners meet the safety requirements of EU Directive 2014/34/EU (ATEX) and have been tested according to the EN 1127-1, IEC 60079-0 and IEC 60079-15 standards by electro-suisse – SEV (Swiss association for electrical and power engineering and information technology), an approved ATEX conformity evaluation organisation.

SmartFrost
Where there's no ice, there's no need to defrost: SmartFrost greatly reduces the frost build-up in the interior and on stored products. Defrosting is required less often – and when it is necessary, it is made much easier by the smooth, easy-to-clean interior walls. The evaporator is embedded in foam insulation, ensuring high energy efficiency and uniform cooling.

Compliance with the ATEX Directive
Liebherr laboratory appliances conform to EN/IEC 60079-0 / EN-IEC 60079-7 and comply with EU Directive 2014/34/EU ("ATEX Directive"). With an interior classified according to <Ex> II 3 G Ex ec IIC T6 (declared as Zone 22), they are suitable for flammable substances in closed containers that could form explosive atmospheres.

±5 °C

±5 °C temperature stability
Sensitive substances cannot be subjected to large deviations from the set storage temperature. Liebherr freezers guarantee a temperature fluctuation of no more than ±5 °C, so that the valuable goods you store in them are optimally protected and their quality is preserved.

Norm IEC 61010-2-011

IEC 61010-2-011
Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

SFFg 5501
Performance

SFFg 5501 ver. 740
Performance

SFFg 4001
Performance

SFFg 4001 ver. 740
Performance

	SFFg 5501	SFFg 5501 ver. 740	SFFg 4001	SFFg 4001 ver. 740
Gross / net capacity	499 / 394 litre	499 / 310 litre	316 / 242 litre	316 / 190 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1684	747 / 769 / 1684	597 / 654 / 1884	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	588 / 517 / 1388	588 / 517 / 1388	403 / 402 / 1588	403 / 402 / 1588
Energy consumption in 365 days [1]	516 kWh	516 kWh	384 kWh	384 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	713 kJ/h	713 kJ/h	529 kJ/h	529 kJ/h
Refrigerant	R 290	R 290	R 290	R 290
Sound power level	49 dB(A)	49 dB(A)	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating	2.0 A	2.0 A	2.0 A	2.0 A
Rated consumption watts	240 W	240 W	220 W	220 W
Cooling system / Defrost	static / manual	static / manual	static / manual	static / manual
Temperature range	-9 °C to -30 °C	-9 °C to -30 °C	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [2] / max. fluctuation [3]	5.4 °C / 3.3 °C	5.4 °C / 3.3 °C	5.2 °C / 2.4 °C	5.2 °C / 2.4 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white
Door material / colour	steel / white	steel / white	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible	visual and audible	visual and audible
Volt-free alarm contact	yes	yes	yes	yes
SmartMonitoring compatible	yes	yes	yes	yes
Connectivity type	SmartModule	SmartModule	SmartModule	SmartModule
Connectivity solution	retrofittable	retrofittable	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)
Removable shelves	4	4	5	5
Shelf material	glass	glass	glass	glass
Usable shelf area in mm (w / d)	580 / 517	580 / 517	400 / 402	400 / 402
Shelf loading / Maximum total load	40 kg / 300 kg	40 kg / 300 kg	40 kg / 270 kg	40 kg / 270 kg
Drawers		8		6
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm	1 x Ø 10 mm
ATEX conformity	yes	yes	yes	yes
Type of lock	mechanical	mechanical	mechanical	mechanical
Door hinges	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site
Gross / net weight	95 / 88 kg	106 / 89 kg	83 / 76 kg	90 / 82 kg
Accessories				
Long drawer / Short drawer	9749825 / -	- / -	9749823 / 9749844	- / -
Castors Ø 80 mm / Ø 100 mm	9086926 / 9080023	9086926 / 9080023	9086926 / 9080023	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924
Additional lock barrels (up to 5)	on request	on request	on request	on request
Side-by-Side set in white	9017739	9017739	9006786	9006786
SmartModule	6145269	6145269	6145269	6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

The equipment details shown depend on the model; the description for the respective model applies.

Laboratory refrigerators and freezers with spark-free interior

New

SRTfg 1501
Performance

New

SFTfg 1501
Performance

New

SFTfg 1501 ver. 740
Performance

Gross / net capacity	134 / 98 litre	101 / 73 litre	101 / 71 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	450 / 440 / 620	380 / 410 / 610	380 / 410 / 610
Energy consumption in 365 days [1]	156 kWh	180 kWh	180 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	198 kJ/h	294 kJ/h	294 kJ/h
Refrigerant	R 600a	R 600a	R 600a
Sound power level	47 dB(A)	40 dB(A)	40 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 100 W	2.0 A / 110 W	2.0 A / 110 W
Cooling system / Defrost	forced-air / automatic	static / manual	static / manual
Temperature range	+3 °C to +16 °C	-9 °C to -30 °C	-9 °C to -30 °C
Gradient [2] **/ max. fluctuation** [3]	4.9 °C / 4.4 °C	7.4 °C / 3.3 °C	7.4 °C / 3.3 °C
External cabinet finish	steel / white	steel / white	steel / white
Door material / colour	steel / white	steel / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	monochrome display, touch buttons	monochrome display, touch buttons	monochrome display, touch buttons
Power failure alarm	upon mains power return	upon mains power return	upon mains power return
Fault: warning signal	visual and audible	visual and audible	visual and audible
Volt-free alarm contact	yes	yes	yes
SmartMonitoring compatible	yes	yes	yes
Connectivity type	SmartModule	SmartModule	SmartModule
Connectivity solution	retrofittable	retrofittable	retrofittable
Interface	WiFi/LAN (optional)	WiFi/LAN (optional)	WiFi/LAN (optional)
Adjustable shelves	3		
Shelf material	glass	glass	glass
Usable shelf area in mm (w / d)	450 / 421	380 / 347	380 / 347
Shelf loading / Maximum total load	40 kg / 160 kg	40 kg / 120 kg	40 kg / 120 kg
Drawers			3
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 12 mm	1 x Ø 10 mm	1 x Ø 10 mm
ATEX conformity	yes	yes	yes
Type of lock / Door hinges	mechanical / right, reversible on site	mechanical / right, reversible on site	mechanical / right, reversible on site
Gross / net weight	40 / 37 kg	38 / 35 kg	40 / 35 kg
Accessories			
Worktop, white	9876118	9876118	9876118
Short drawer / Long drawer		9876296 / 9876279	
Glass shelf	9295392		
Castors / Adjustable legs	9904819 / 9906105	9904819 / 9906105	9904819 / 9906105
Additional lock barrels (up to 5)	on request	on request	on request
Stacking kit, white	9876098	9876098	9876098
Side-by-Side set in white	9031901	9031901	9031901
SmartModule	6145269	6145269	6145269

Laboratory fridge-freezer combinations with spark-free interior

SCFfg 4002
Performance

Gross / net capacity	**fridge compartment**	267 / 199 litre
Gross / net capacity	**freezer compartment**	110 / 62 litre
Exterior dimensions in mm (w / d / h)		597 / 654 / 2044
Interior dimensions in mm (w / d / h)	**fridge compartment**	460 / 422 / 1037
Interior dimensions in mm (w / d / h)	**freezer compartment**	406 / 292 / 614
Energy consumption in 365 days [1]		390 kWh
Ambient temperature range		+10 °C to +35 °C
Heat output		350 kJ/h
Refrigerant		R 600a
Sound power level		48 dB(A)
Voltage / frequency		220 – 240V~ / 50/60 Hz
Connection rating / Rated consumption watts		2.0 A / 170 W
Cooling system	**fridge / freezer comp.**	forced-air / static
Defrost	**fridge / freezer comp.**	automatic / manual
Temperature range	**fridge / freezer comp.**	+3 °C to +16 °C / -9 °C to -30 °C
Gradient [2]	**fridge / freezer comp.**	4.6 °C / 5.6 °C
Max. fluctuation [3]	**fridge / freezer comp.**	3.6 °C / 3.2 °C
External cabinet finish		steel / white
Door material / colour		steel / white
Internal liner material		commercial grade moulded polystyrene
Type of control		monochrome display, touch buttons
Power failure alarm		upon mains power return
Fault: warning signal / Volt-free alarm contact		visual and audible / yes
SmartMonitoring compatible		yes
Connectivity type / Connectivity solution		SmartModule / retrofittable
Interface		WiFi/LAN (optional)
Adjustable shelves	**fridge compartment**	4
Shelf material	**fridge / freezer comp.**	glass / glass
Usable shelf area in mm (w / d)	**fridge compartment**	460 / 422
Shelf loading	**fridge / freezer comp.**	40 kg / 40 kg
Maximum total load		345 kg
Drawers	**freezer compartment**	3
Handle		antimicrobial handle with opening mechanism
Access ports		2 x Ø 10 mm
ATEX conformity		yes
Type of lock		mechanical
Door hinges		right, reversible on site
Gross / net weight		89 / 83 kg
Accessories		
Glass shelf		9293493
Additional lock barrels		on request
Side-by-Side set in white		9027388
SmartModule		6145269

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

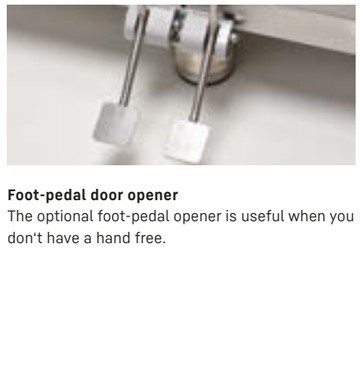
Laboratory refrigerators and freezers with stainless steel inner liner

Additional remote controls
With additional remote controls for refrigerators and freezers with electronic door locks, you can allow other people to access stored goods while retaining full control at all times. For example, you can individually control whether renewed access should be granted or denied to a person by activating or deactivating their remote control.

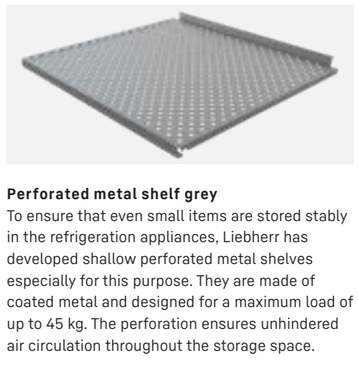
SmartModule
SmartModule connects refrigerators and freezers in a network with Liebherr SmartMonitoring and allows you to use its extensive digital monitoring and documentation functions. In addition, appliances can be integrated into a customer's existing monitoring system via a local API. The small electronic unit with integrated LAN/WiFi is ready to use as soon as it is mounted on the back of the appliance.

U-shaped trayslides
Additional U-shaped trayslides can be retrofitted as required to provide extra storage options.

Grid shelf grey
If you need more storage space or want to separate stored products and have a better overview, Liebherr appliances can be equipped with additional grid shelves. Made of metal with a polypropylene coating, they are identical to the ones that come as standard in the appliances, offering the same corrosion-resistant and durable extra shelving.



Foot-pedal door opener
The optional foot-pedal opener is useful when you don't have a hand free.



Perforated metal shelf grey
To ensure that even small items are stored stably in the refrigeration appliances, Liebherr has developed shallow perforated metal shelves especially for this purpose. They are made of coated metal and designed for a maximum load of up to 45 kg. The perforation ensures unhindered air circulation throughout the storage space.

Digital input for electronic lock
The digital input for the electronic lock allows Liebherr appliances to be integrated into existing external time and attendance or access control systems. When a voltage signal triggers the remote box, the electronic lock opens and allows access to the appliance. Possible applications include connection to access control systems or integration into goods management applications.

Side-by-Side set white
Using the Side-by-Side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.

Castors / Height-adjustable feet
The sturdy castors facilitate transport and allow quick cleaning underneath and behind the appliance. A total of four castors including mounting accessories are supplied. Two of the castors also have a locking brake. The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height, they perfectly compensate for any unevenness on the floor.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with plastic inner liner

Product temperature sensor
A product temperature sensor for logging product temperatures is available as a retrofit kit for the laboratory appliances with electronic controller. The logged product temperatures can either be read by the electronic controller or transferred to an external documentation system via the existing RS 485 interface.

Special locking
To protect the stored products from unwanted access, special locks are available as accessories for the refrigerators and freezers. This way, different locks can be installed on several appliances so that only the people responsible for a particular appliance have access to it.

Stacking Kit
The stacking kit can be used to combine two refrigerators or refrigerators and freezers. This way, different temperature zones are available on a small surface area.

Evaporator cover
To better protect temperature-sensitive goods and prevent them from touching the refrigeration system, a protective plate can be retrofitted in the interior. This prevents direct contact with the refrigeration components so that the goods can be safely stored in the intended area.

Height-adjustable feet
The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height, they perfectly compensate for any unevenness on the floor.

Grid shelf white
If you need more storage space or want to separate stored products and have a better overview, Liebherr appliances can be equipped with additional grid shelves. Made of metal with a polypropylene coating, they are identical to the ones that come as standard in the appliances, offering the same corrosion-resistant and durable extra shelving.

SmartModule
SmartModule connects refrigerators and freezers in a network with Liebherr SmartMonitoring and allows you to use its extensive digital monitoring and documentation functions. In addition, appliances can be integrated into a customer's existing monitoring system via a local API. The small electronic unit with integrated LAN/WiFi is ready to use as soon as it is mounted on the back of the appliance.

Long drawer
Always keep a good overview of your stored products with this sturdy plastic drawer. With its ergonomic handle, the drawer is very easy for you to open, day in, day out.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with plastic inner liner

Glass shelf
Additional shelves made of high-quality safety glass not only increase storage space but also make it easier to see the goods. They are ideal for storing smaller containers or materials. In addition, the shatterproof glass shelves are quick and easy to clean.

Side-by-side set white
Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.

Perforated metal shelf white
To ensure that even small items are stored securely in the refrigeration appliances, Liebherr has developed shallow perforated metal shelves specifically for this purpose. They are made of coated metal and designed for a maximum load of up to 45 kg. The perforation ensures unhindered air circulation throughout the storage space.

Flexible scanner rail
Scanner rails provide a perfect overview of the materials stored in the refrigerator. Thanks to their flexibility, they can be easily attached to the front of the grid shelves. With correspondingly marked paper cards, they make it easy to sort and find stored products.

Base grid white
With the sturdy base grid, you can also make the most of the appliance floor. The grid has an abrasion-resistant coating and protects the inner liner from scratches and other damage.

Pharmacy drawers
Optimal overview, easy access, high temperature stability: the practical organisational system made of cold-conducting aluminium comes with a transparent front, perforated base, flexible dividing walls and a ¾-extension drawer. Medicines, vaccines and other items can be quickly found – and the door closed again with minimal loss of cold air.

Castors
The sturdy castors facilitate transport and allow quick cleaning underneath and behind the appliance. A total of four castors including mounting accessories are supplied. Two of the castors also have a locking brake.

Worktop
Benefit from a larger work surface thanks to a robust worktop that is heat resistant up to 100 °C. This optional worktop, available as an accessory, is easy to install and raises your appliance by 3 cm so that it fits perfectly with 85-cm work tables. The integrated ventilation slits ensure excellent heat dissipation, even when installed flush to the wall.

Laboratory refrigerators and freezers and laboratory fridge-freezer combination with spark-free interior

Special locking
To protect the stored products from unwanted access, special locks are available as accessories for the refrigerators and freezers. This way, different locks can be installed on several appliances to so that only the people responsible for a particular appliance have access to it.

Glass shelf
Additional shelves made of high-quality safety glass not only increase storage space but also make it easier to see the goods. They are ideal for storing smaller containers or materials. In addition, the shatterproof glass shelves are quick and easy to clean.

Stacking Kit
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SmartModule
SmartModule connects refrigerators and freezers in a network with Liebherr SmartMonitoring and allows you to use its extensive digital monitoring and documentation functions. In addition, appliances can be integrated into a customer's existing monitoring system via a local API. The small electronic unit with integrated LAN/WiFi is ready to use as soon as it is mounted on the back of the appliance.

Long drawer
Always keep a good overview of your stored products with this sturdy plastic drawer. With its ergonomic handle, the drawer is very easy for you to open, day in, day out.

Side-by-side set white
Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.

Castors / Height-adjustable feet
The sturdy castors facilitate transport and allow quick cleaning underneath and behind the appliance. A total of four castors including mounting accessories are supplied. Two of the castors also have a locking brake. The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height, they perfectly compensate for any unevenness on the floor.

Pharmaceutical refrigerators – medical refrigeration solutions with maximum safety

Medicines, vaccines, and samples that are sensitive to temperature must be stored under the most reliable conditions, ensuring maximum safety and compliance with stringent standards. This guarantees their availability whenever needed, 24/7.

Liebherr pharmaceutical refrigerators, compliant with DIN 13277, have been specifically designed to meet these exacting requirements. Featuring a dynamic cooling system, highly effective insulation, and precise temperature control, they guarantee reliable storage of sensitive substances and preparations. Visual and audible alarm systems provide additional safety.

The combination of maximum temperature stability, energy efficiency, robustness and ease of use lightens your daily workload – and saves you money in the long term because of the extremely low energy and operating costs.

Pharmaceutical refrigerators

Perfection series

Perfection series

Pharmaceutical storage
HMFvh / HMTvh

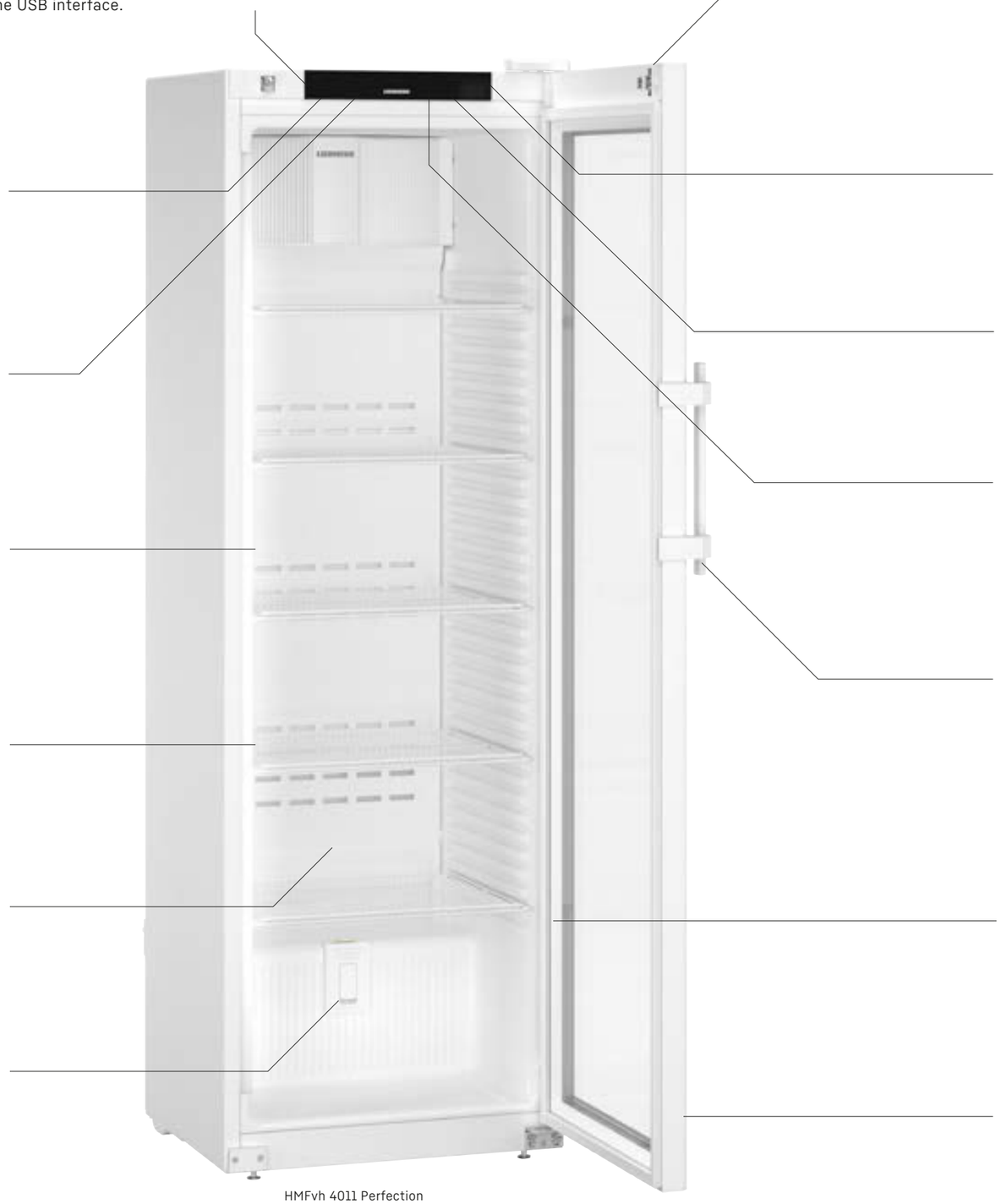
Temperature stability	Refrigerators +/–2 K deviation from setpoint (model version H63 +/–3 K)
	Calibration option
Storage safety	Visual and audible alarms
	Alarm relay
	Alarm test function
	+2 °C SafetyDevice function
	Alarm with battery backup (12 h) immediately upon power failure
	Alarm history with real-time clock and 10 events
	Integrated data logger
	PT1000 product sensor
	Min./max. temperature log
	Self-closing door at < 90°
	Custom alarm settings possible
	Electronic lock
Interfaces	Integrated LAN/WiFi
	Local API
	USB interface for reading the data logger
SmartMonitoring	SmartModule integrated
Features	2.4” touch & swipe colour display
	Individually adjustable maintenance timer
	Castors/adjustable feet as accessories, 75 cm wide appliances with castors as standard
	Evaporator cover (stops items freezing to inner liner)
	Sensor feedthrough
	Insulated and glass door models with vertical lighting
	Antimicrobial handle with opening mechanism
Energy consumption	Ultra-efficient
Compliance	Safety according to IEC 61010-2-011
	Fulfils DIN 13277

The series equipment listed above may vary depending on the model. Exact details can be found in the model description.

Pharmaceutical refrigerators compliant with DIN 13277

The advantages at a glance

Integrated data logger
The integrated logger records the temperature profile, alarm history and service information for up to five years. The data can be read out directly from the appliance via the USB interface.



HMFvh 4011 Perfection

SmartLock
To prevent products from accidentally entering circulation after an interruption in the cold chain, SmartLock automatically locks the door if there is an alarm. Only authorised persons can unlock it again.

+2 °C SafetyDevice
If the temperature falls below +2 °C due to a malfunction while the temperature setting is at +5 °C or higher, the SafetyDevice takes control, stabilising the temperature, activating the alarm and protecting the contents from freezing.

SmartMonitoring
The cloud-based digital solution continuously monitors and documents temperatures and alerts you immediately via email, text message or phone if any deviations occur.

Power failure alarm
If a malfunction occurs, an integrated battery provides a visual and audible alarm and takes over the power supply. As soon as the power is restored, the time of failure and the maximum temperature reached are displayed.

Integrated WiFi/LAN interface
The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.

Vertical LED lighting
Vertical LED lighting provides uniform illumination throughout the interior, making it easy to locate items while also reducing energy costs.

Min./max. temperature log
The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

Antimicrobial handle with opening mechanism
A benefit for users but a bane for germs: The easy-turn handle mechanism makes opening the door effortless. It contains special antimicrobial substances that reduce bacteria by up to 99.99%*. Regular and time-consuming disinfection is not necessary. This means the appliance is extremely safe even if many people have access to it. *According to ISO 22196:2011

LightAlarm
In the event of an uncontrolled temperature rise or other problems, the interior light of the appliance starts flashing. This quickly shows when action is needed.

Replaceable door seal
Save time and money: the insertable Liebherr door seals are easy to change. If a seal is damaged, you can replace it yourself without any tools. Contact Liebherr Customer Service to purchase replacements.

Easy-to-clean interior
The inner liner made of fully recyclable, robust and odourless polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.

Self-closing door < 90°
To facilitate loading, unloading, and cleaning, the appliance door remains open when positioned at an angle greater than 90°. If the opening angle is less than 90°, it closes automatically for safety.

Feedthrough for external sensors
An integrated opening allows a separate sensor to be connected for additional temperature monitoring without having to drill holes or break the door seal.

The equipment details shown depend on the model; the description for the respective model applies.

Quality right down to the smallest detail

Electronic lock with remote control
Liebherr appliances can be securely locked with a PIN code. Locking and unlocking via remote control is also possible. This allows any number of users to lock and unlock one or more appliances without having to share a key.

Grid shelf with pull-out stop
Stable, durable, allows air to circulate: the robust, corrosion-free wire shelves made from coated steel support even heavy goods. At the same time, they guarantee constant air circulation for temperature stability. A pull-out stop prevents the shelf from sliding out when removing items.

Ultra-efficient
Energy-efficient refrigerators and freezers help with ever increasing electricity prices. Liebherr fully utilises the savings potential of every component – from the compressor to the seal, to the lighting and electronics. The ultra-efficient appliances in the Perfection series for example demonstrates how this has a positive effect on your overall operating costs.

±2 °C temperature stability
Temperature fluctuations must be minimal to ensure that the quality of sensitive substances is preserved. Liebherr Pharmaceutical refrigerators have an impressive maximum deviation of just ±2 °C from the set temperature. This not only maintains the storage climate, but also the value of your stored goods. (Model version H63 with temperature stability +/-3 K).

DIN 13277 compliance
Laboratory and pharmacy refrigerators from Liebherr meet all the necessary equipment and performance criteria to fully comply with DIN 13277. DIN 13277 defines the requirements and test specifications for refrigerators and freezers used in laboratories and for storing medicinal products.

IEC 61010-2-011
Liebherr refrigerators and freezers specially developed for storing temperature-sensitive products are CE safety-compliant. This ensures that all mechanical and electrical requirements for injury-free operation are met – and that you and your team are always safe.

Pharmacy drawers
Optimal overview, easy access, high temperature stability: the practical organisational system made of cold-conducting aluminium comes with a transparent front, perforated base, flexible dividing walls and a ¾-extension drawer. Medicines, vaccines and other items can be quickly found – and the door closed again with minimal loss of cold air.

The equipment details shown depend on the model; the description for the respective model applies.

HMFvh 5511
Perfection

HMFvh 5501
Perfection

Gross / net capacity	588 / 435 litre	558 / 436 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793	747 / 769 / 1793
Interior dimensions in mm (w / d / h)	600 / 536 / 1460	600 / 536 / 1460
Energy consumption in 365 days [1]	360 kWh	171 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	475 kJ/h	246 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 190 W	2.0 A / 190 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+5 °C	+5 °C
Gradient [2] **/ max. fluctuation** [3]	3.3 °C / 2.0 °C	2.2 °C / 1.7 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Number of shelves / Adjustable shelves	6 / 5	6 / 5
Shelf material	wire shelves plastic-coated	wire shelves plastic-coated
Usable shelf area in mm (w / d)	600 / 536	600 / 536
Shelf loading / Maximum total load	60 kg / 300 kg	60 kg / 300 kg
Castors	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
DIN 13277	yes	yes
Type of lock / Door hinges	electronic, with remote control / right, reversible on site	electronic, with remote control / right, reversible on site
Gross / net weight	109 / 101 kg	94 / 82 kg
Accessories		
Pharmacy drawer	9032868	9032868
White grid shelf	7113310	7113310
White base grid / Glass shelf	7113314 / 9291929	7113314 / 9291929
Scanner rail	7435210	7435210
Castors Ø 80 mm	9086926	9086926
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Side-by-Side set in white	9017739	9017739
Additional remote controls	6123395	6123395
Digital input for electronic lock	9086958	9086958

Pharmaceutical refrigerators compliant with DIN 13277

HMFvh 4011
Perfection

HMFvh 4001
Perfection

Gross / net capacity	420 / 297 litre	394 / 295 litre
Exterior dimensions in mm (w / d / h)	597 / 654 / 1884	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	460 / 423 / 1660	460 / 423 / 1660
Energy consumption in 365 days [1]	389 kWh	172 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	463 kJ/h	250 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 180 W	2.0 A / 180 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+5 °C	+5 °C
Gradient [2] **/ max. fluctuation** [3]	3.0 °C / 2.4 °C	2.4 °C / 2.2 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Number of shelves / Adjustable shelves	6 / 5	6 / 5
Shelf material	wire shelves plastic-coated	wire shelves plastic-coated
Usable shelf area in mm (w / d)	460 / 423	460 / 423
Shelf loading / Maximum total load	45 kg / 225 kg	45 kg / 225 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 10 mm	1 x Ø 10 mm
DIN 13277	yes	yes
Type of lock / Door hinges	electronic, with remote control / right, reversible on site	electronic, with remote control / right, reversible on site
Gross / net weight	87 / 82 kg	72 / 66 kg
Accessories		
Pharmacy drawer	9032867	9032867
White grid shelf	7113308	7113308
White base grid / Glass shelf	7113312 / 9293493	7113312 / 9293493
Perforated metal shelf, white	9029022	9029022
Scanner rail	7435208	7435208
Castors Ø 80 mm / Ø 100 mm	– / –	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924
Side-by-Side set in white	9006786	9006786
Additional remote controls	6123395	6123395
Digital input for electronic lock	9086958	9086958

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Vertical LED lighting
Vertical LED lighting ensures optimal illumination throughout the full interior of the appliance. With a clear view of all levels, the required item is easily accessible, the door can be quickly closed, and the interior temperature remains stable. This not only saves time when searching for items but also reduces energy costs.

Pharmacy drawers
Optimal overview, easy access, high temperature stability: the practical organisational system made of cold-conducting aluminium comes with a transparent front, perforated base, flexible dividing walls and a ¾-extension drawer. Medicines, vaccines and other items can be quickly found – and the door closed again with minimal loss of cold air.

The equipment details shown depend on the model; the description for the respective model applies.

HMFvh 5511 ver. H63
Perfection

HMFvh 5501 ver. H63
Perfection

HMFvh 4011 ver. H63
Perfection

HMFvh 4001 ver. H63
Perfection

Gross / net capacity	588 / 361 litre	558 / 361 litre	420 / 239 litre	394 / 239 litre
Exterior dimensions in mm (w / d / h)	747 / 769 / 1793	747 / 769 / 1793	597 / 654 / 1884	597 / 654 / 1884
Interior dimensions in mm (w / d / h)	600 / 536 / 1460	600 / 536 / 1460	460 / 423 / 1660	460 / 423 / 1660
Energy consumption in 365 days [1]	400 kWh	179 kWh	409 kWh	172 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C	+10 °C to +35 °C
Heat output / Refrigerant	475 kJ/h / R 600a	246 kJ/h / R 600a	463 kJ/h / R 600a	250 kJ/h / R 600a
Sound power level	49 dB(A)	49 dB(A)	49 dB(A)	49 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 190 W	2.0 A / 190 W	2.0 A / 180 W	2.0 A / 180 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic	forced-air / automatic	forced-air / automatic
Temperature range	+5 °C	+5 °C	+5 °C	+5 °C
Gradient [2] **/ max. fluctuation** [3]	3.1 °C / 2.6 °C	2.8 °C / 2.3 °C	4.1 °C / 2.2 °C	4.9 °C / 2.6 °C
External cabinet finish	steel / white	steel / white	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule	yes / SmartModule	yes / SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Number of shelves / Adjustable shelves	1 / 1	1 / 1	1 / 1	1 / 1
Number of drawers / Shelf material	7 / wire shelves plastic-coated	7 / wire shelves plastic-coated	8 / wire shelves plastic-coated	8 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	550 / 520	550 / 520	400 / 420	400 / 420
Shelf loading / Maximum total load	50 kg / 300 kg	50 kg / 300 kg	50 kg / 225 kg	50 kg / 225 kg
Castors	castors with brake at the front, fixed castors at the rear	castors with brake at the front, fixed castors at the rear		
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports / DIN 13277	1 x Ø 10 mm / yes	1 x Ø 10 mm / yes	1 x Ø 10 mm / yes	1 x Ø 10 mm / yes
Type of lock	electronic, with remote control	electronic, with remote control	electronic, with remote control	electronic, with remote control
Door hinges	right, reversible on site	right, reversible on site	right, reversible on site	right, reversible on site
Gross / net weight	124 / 116 kg	108 / 120 kg	102 / 96 kg	86 / 80 kg
Accessories				
White grid shelf	7113310	7113310	7113308	7113308
White base grid / Glass shelf	7113314 / 9291929	7113314 / 9291929	7113312 / 9293493	7113312 / 9293493
Perforated metal shelf, white / Scanner rail	– / 7435210	– / 7435210	9029022 / 7435208	9029022 / 7435208
Castors Ø 80 mm / Ø 100 mm	9086926 / –	9086926 / –	– / –	9086926 / 9080023
Adjustable feet, 90 – 120 mm / 150 – 180 mm	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924	9080022 / 9086924
Side-by-Side set in white	9017739	9017739	9006786	9006786
Additional remote controls / Digital input for electronic lock	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958	6123395 / 9086958

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

New

HMTvh 1511
Perfection

New

HMTvh 1501
Perfection

Gross / net capacity	137 / 97 litre	134 / 97 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	450 / 460 / 620	450 / 440 / 620
Energy consumption in 365 days [1]	187 kWh	111 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	208 kJ/h	198 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	45 dB(A)	43 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A / 60 W	2.0 A / 50 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+5 °C	+5 °C
Gradient [2] **/ max. fluctuation** [3]	3.7 °C / 2.9 °C	3.7 °C / 3.4 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes / SmartModule	yes / SmartModule
Connectivity solution	integrated, removable	integrated, removable
Interface	WiFi/LAN	WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Adjustable shelves / Shelf material	3 / wire shelves plastic-coated	3 / wire shelves plastic-coated
Usable shelf area in mm (w / d)	450 / 425	450 / 425
Shelf loading / Maximum total load	45 kg / 180 kg	45 kg / 180 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	electronic, with remote control	electronic, with remote control
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	45 / 42 kg	37 / 34 kg
Accessories		
Worktop, white	9876118	9876118
White grid shelf	7113408	7113408
Pharmacy drawer	9876137	9876137
Perforated metal shelf, white	7746588	7746588
Castors	9904819	9904819
Adjustable legs	9906105	9906105
Scanner rail	7401607	7401607
Stacking kit, white	9876098	9876098
Side-by-Side set in white	9031901	9031901
Additional remote controls	6123395	6123395
Digital input for electronic lock	9086958	9086958

New

HMTvh 1511 ver. H63
Perfection

New

HMTvh 1501 ver. H63
Perfection

Gross / net capacity	137 / 78 litre	134 / 78 litre
Exterior dimensions in mm (w / d / h)	597 / 605 / 819	597 / 605 / 819
Interior dimensions in mm (w / d / h)	450 / 460 / 620	450 / 440 / 620
Energy consumption in 365 days [1]	187 kWh	111 kWh
Ambient temperature range	+10 °C to +35 °C	+10 °C to +35 °C
Heat output	208 kJ/h	198 kJ/h
Refrigerant	R 600a	R 600a
Sound power level	45 dB(A)	43 dB(A)
Voltage / frequency	220 – 240V~ / 50 Hz	220 – 240V~ / 50 Hz
Connection rating	2.0 A	2.0 A
Rated consumption watts	60 W	60 W
Cooling system / Defrost	forced-air / automatic	forced-air / automatic
Temperature range	+5 °C	+5 °C
Gradient [2] **/ max. fluctuation** [3]	3.7 °C / 2.9 °C	3.7 °C / 3.4 °C
External cabinet finish	steel / white	steel / white
Door material / colour	Insulated glass door with plastic frame / white	steel / white
Internal liner material	commercial grade moulded polystyrene	commercial grade moulded polystyrene
Type of control	2.4" touch & swipe colour display	2.4" touch & swipe colour display
Power failure alarm	immediately upon power failure for at least 12 hrs	immediately upon power failure for at least 12 hrs
Fault: warning signal	visual and audible	visual and audible
Volt-free alarm contact	yes	yes
SmartMonitoring compatible	yes	yes
Connectivity type	SmartModule	SmartModule
Connectivity solution	integrated, removable	integrated, removable
Interface	WiFi/LAN	WiFi/LAN
Data logger	integrated, USB interface	integrated, USB interface
Interior light	vertical LED light strip recessed in left wall with separate switch	LED lighting column, left
Usable shelf area in mm (w / d)	390 / 370	390 / 370
Shelf loading / Maximum total load	25 kg / 75 kg	25 kg / 75 kg
Handle	antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
Access ports	1 x Ø 12 mm	1 x Ø 12 mm
Type of lock	electronic, with remote control	electronic, with remote control
Door hinges	right, reversible on site	right, reversible on site
Gross / net weight	48 / 45 kg	40 / 37 kg
Accessories		
Worktop, white	9876118	9876118
White grid shelf	7113408	7113408
Castors	9904819	9904819
Adjustable legs	9906105	9906105
Scanner rail	7401607	7401607
Stacking kit, white	9876098	9876098
Side-by-Side set in white	9031901	9031901
Additional remote controls	6123395	6123395
Digital input for electronic lock	9086958	9086958

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers.
2 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements.

Pharmaceutical refrigerators compliant with DIN 13277

Glass shelf
Additional shelves made of high-quality safety glass not only increase storage space but also make it easier to see the goods. They are ideal for storing smaller containers or materials. In addition, the shatterproof glass shelves are quick and easy to clean.

Grid shelf white
If you need more storage space or want to separate stored products and have a better overview, Liebherr appliances can be equipped with additional grid shelves. Made of metal with a polypropylene coating, they are identical to the ones that come as standard in the appliances and you benefit from the same corrosion-resistant and durable extra shelving.

Base grid white
With the sturdy base grid, you can also make the most of the appliance floor. The grid has an abrasion-resistant coating and protects the inner liner from scratches and other damage.

Height-adjustable feet
The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable height, they perfectly compensate for any. unevenness on the floor.

Special locking
To protect the stored products from unwanted access, up to 10 additional special locks are available as accessories for the refrigerators and freezers. This way, different locks can be installed on several appliances so that only the people responsible for a particular appliance have access to it.

Remote control electronic door lock
With additional remote controls for refrigerators and freezers with electronic door locks, you can allow other people to access stored goods while retaining full control at all times. For example, you can individually control whether renewed access should be granted or denied to a person by activating or deactivating their remote control.

Stacking kit
The stacking kit can be used to combine two refrigerators or refrigerators and freezers. This way, different temperature zones are available on a small surface area.

Digital input for electronic lock
The digital input for the electronic lock allows Liebherr appliances to be integrated into existing external time and attendance or access control systems. When a voltage signal triggers the remote box, the electronic lock opens and allows access to the appliance. Possible applications include connection to access control systems or integration into goods management applications.

Perforated metal shelf white
To ensure that even small items are stored securely in the refrigeration appliances, Liebherr has developed shallow perforated metal shelves specifically for this purpose. They are made of coated metal and designed for a maximum load of up to 45 kg. The perforation ensures unhindered air circulation throughout the storage space.

Pharmaceutical refrigerators compliant with DIN 13277

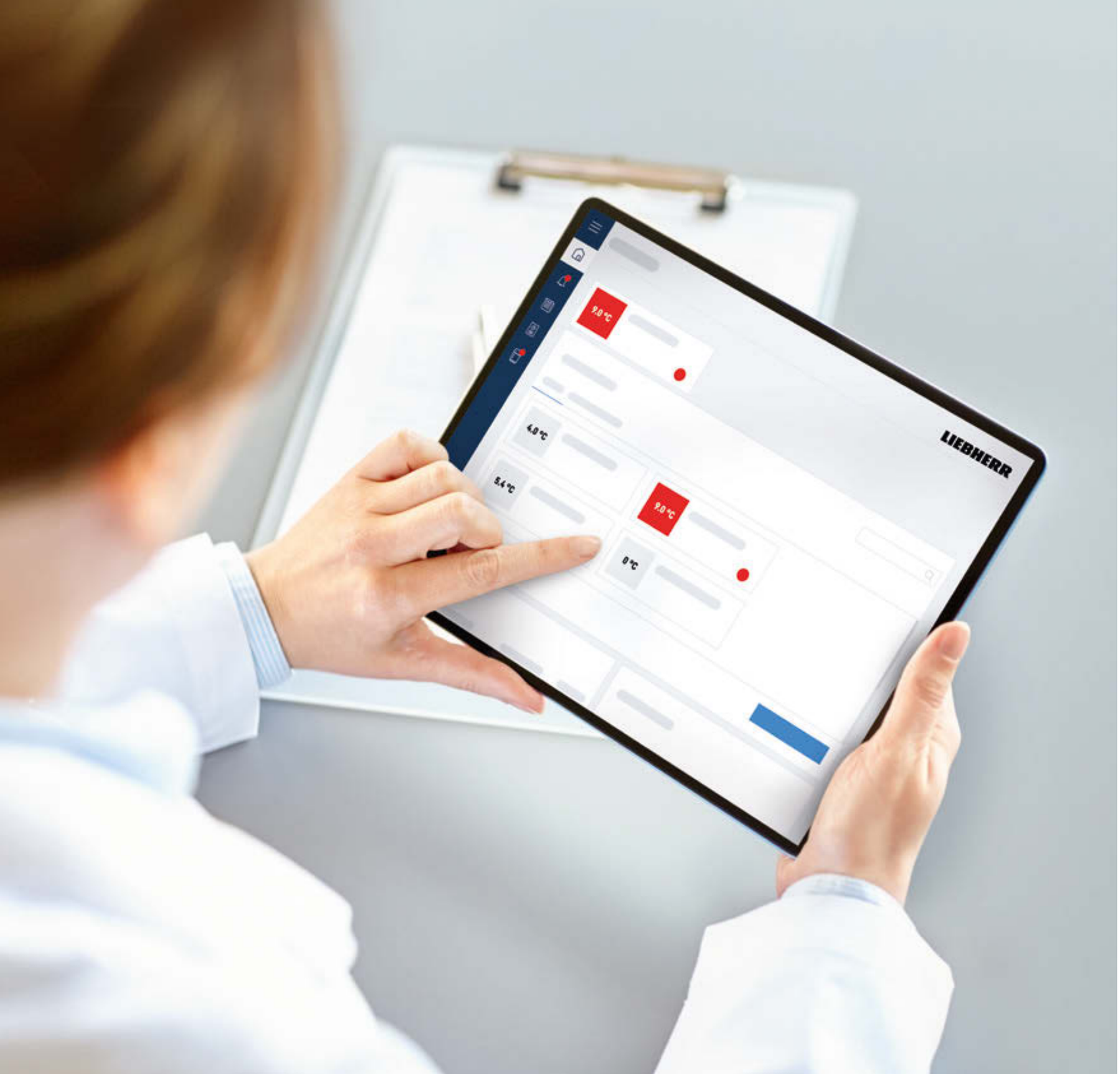
Flexible scanner rail
Scanner rails provide a perfect overview of the materials stored in the refrigerator. Thanks to their flexibility, they can be easily attached to the front of the grid shelves. With correspondingly marked paper cards, they make it easy to sort and find stored products.

Castors
The sturdy castors facilitate transport and allow quick cleaning underneath and behind the appliance. A total of four castors including mounting accessories are supplied. Two of the castors also have a locking brake.

Side-by-Side set white
Using the side-by-side set, two appliances can be placed next to each other. The required gap between the appliances is maintained, and they are neatly connected by the cover strip. This ensures tidy installation and avoids any condensation or water between the appliances.

Pharmacy drawers
Optimal overview, easy access, high temperature stability: the practical organisational system made of cold-conducting aluminium comes with a transparent front, perforated base, flexible dividing walls and a ¾-extension drawer. Medicines, vaccines and other items can be quickly found – and the door closed again with minimal loss of cold air.

Worktop
Benefit from a larger work surface thanks to a robust worktop that is heat resistant up to 100 °C. This optional worktop, available as an accessory, is easy to install and raises your appliance by 3 cm so that it fits perfectly with 85-cm work tables. The integrated ventilation slits ensure excellent heat dissipation, even when installed flush to the wall.



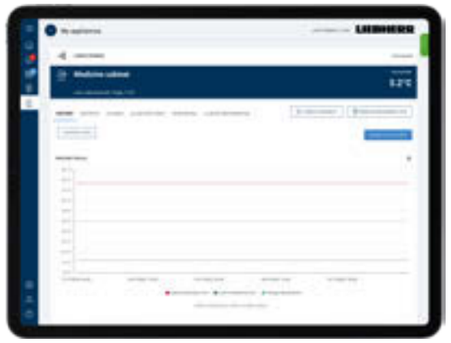
SmartMonitoring saves you work. And worry.

In medicine and research, precision and safety are of the utmost priority – and this also applies to storing sensitive substances. Laboratory samples, vaccines and medicines that need refrigeration require constant conditions with precisely defined temperature ranges.
The strict specifications and DIN for the storage of medicines place great demands on staff.

SmartMonitoring significantly eases the workload for these time-consuming and laborious tasks. The digital monitoring solution automatically and continuously monitors and fully documents all the relevant temperature data and appliance data for you and alerts you immediately if any deviations occur. This allows you to concentrate on what matters most: your research, your customers, or your patients.

Maximum safety, always in view

The combination of a professional Liebherr appliance and intelligent SmartMonitoring software guarantees optimal protection for sensitive substances. The cloud-based solution monitors and documents temperature stability round the clock and alerts you immediately if deviations occur. Preventing problems before they arise is the definition of maximum safety.

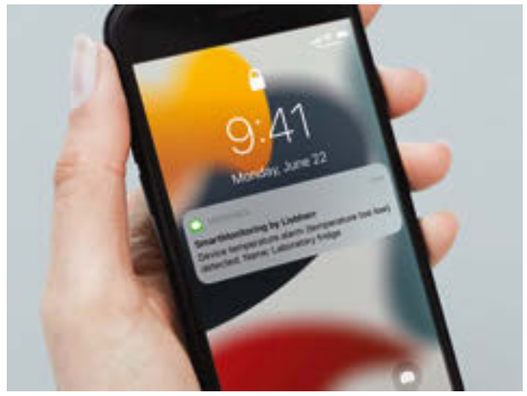


Continuous monitoring of precise, constant temperature

SmartMonitoring constantly checks the storage temperature, even for multiple appliances at different locations. This way, the digital monitoring solution ensures precise temperature stability at all times, safeguarding the quality of your stored medicines, vaccines, samples and tissue.

SmartMonitoring dashboard – everything at a glance

You can view all measurements and temperature data, alarm notifications and appliance statuses at any time on the web-based, intuitively operated SmartMonitoring dashboard, even for multiple appliances at different locations. With maximum safety always in view, you can relax and concentrate fully on your work.



Immediate alerts in the event of deviations

If there are deviations in the storage temperature, you are immediately alerted by email, text message, or phone. This way, you can react before problems arise. If an incident occurs, the alarm list will show the minimum and maximum values so that you can assess any potential for damage.

Well protected in all situations with the right alarm

If the appliance is accidentally switched off or disconnected from the power supply or the internet connection drops, SmartMonitoring alerts you immediately.

In addition, you can individually set a temperature limit value via SmartMonitoring, giving you time to react even earlier if necessary.

Complete documentation without time-consuming paperwork

SmartMonitoring constantly documents the temperature and all other refrigeration parameters for your stored substances. The automatically generated reports are saved for six months and can be viewed and downloaded at any time. This lightens the daily workload and helps you to demonstrate compliance.

External data loggers enable universal expansion of your SmartMonitoring solution

To efficiently expand the SmartMonitoring range, Liebherr appliances that were not previously compatible with SmartMonitoring and even non-Liebherr appliances can now be monitored with SmartMonitoring by integrating external data loggers.

The different data logger types reliably monitor deviations and door openings, as well as product, appliance, room and air temperatures. Even at ultra-low temperatures, you are protected thanks to a specially designed data logger.

Take advantage of a universal product solution that offers you additional flexibility and maximum reliability.

Maximum safety and convenience with SmartMonitoring

Enjoy the advantages of Liebherr's digital monitoring solution:

- **Optimal protection of your valuable products** by monitoring a constant, precise storage temperature
- **Fully documented proof** of temperature compliance
- **Prevention of damage and loss of quality** thanks to reliable alarm systems
- **More time for you to focus on your work** by eliminating time-consuming checks and documentation

The **availability** of SmartMonitoring varies in different countries.

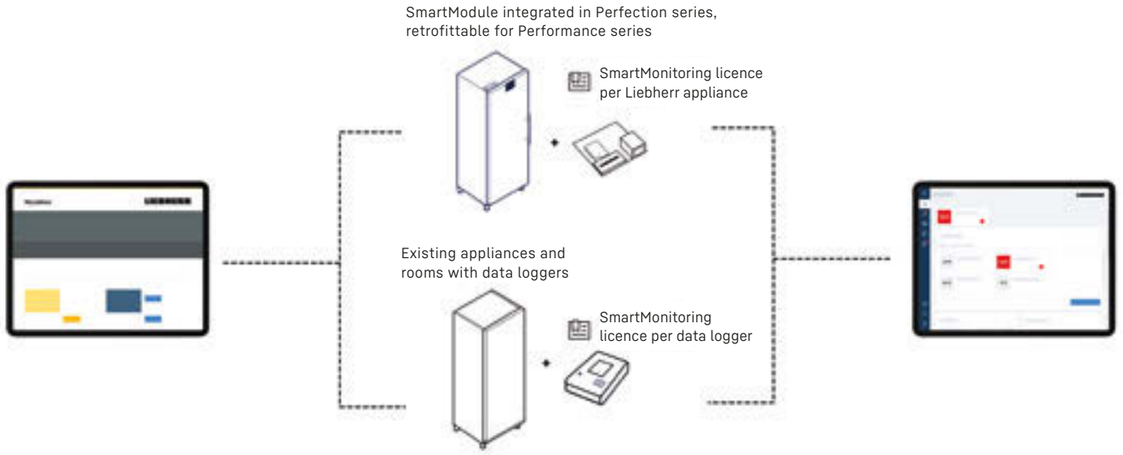
If SmartMonitoring isn't available in your country yet, get in contact with us.

Find out more about SmartMonitoring here: home.liebherr.com/smartmonitoring

SmartMonitoring – it’s that easy to be on the safe side

There are various ways to enjoy all of the benefits of the digital monitoring solution. One thing they all have in common is that they are simple and convenient. Liebherr will be happy to help you take your first steps towards maximum safety. Lightening your workload right from the very start.

Network-capable medical or laboratory appliance



01 Create a Liebherr Business Account at my.liebherr.com

02 Ensure that the network requirements are met and connect the **SmartModule/data logger** to the internet

03 Temperature control on the **SmartMonitoring dashboard**

Get your licence to chill.

With the right licence, you can take full advantage of the professional SmartMonitoring solutions from Liebherr. This includes all the basic functions such as monitoring, documentation and email alerts.

- 36-month term from activation
- No automatic extension
- One licence per monitored appliance (fridge/freezer)
- Authorisation for any number of users
- User and appliance management (role-based)
- Additional alerts via text message and phone optionally available

Register your appliance now and get a free 6-month trial licence.

Licence key 36 months (7080648)

SmartMonitoring text message/voice call company flat rate 36 months (7080652)

SmartModule (6145269)
SmartModule connects Liebherr appliances of the Performance series to SmartMonitoring or existing monitoring systems. The small unit with integrated LAN/WiFi is ready to use as soon as it is mounted on the back of the appliance.

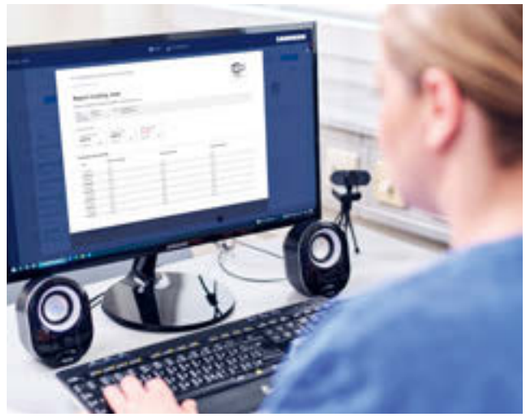
Local interface
Liebherr appliances can also be used with existing monitoring solutions. The SmartModule acts as a local interface for transferring measurement data to your existing monitoring system.
https://developer.liebherr.com/apis/smartmodule-localapi/

Data logger, temperature (6145363)
The standard online data logger reliably records temperature data and transmits it directly to SmartMonitoring via a WiFi connection.

Data logger, three-channel (6145365)
In addition to the standard temperature sensor, the three-channel data logger features an additional temperature sensor which can be used to monitor the temperature of sensitive products, as well as a door contact sensor.

Data logger, ULT (6145367)
For reliable storage at extreme temperatures, this data logger has a special temperature sensor for temperature ranges as low as -200 °C, so that all cooling situations can be covered with a single solution.

“SmartMonitoring takes care of refrigeration for us. It’s one less thing to worry about.”



The outpatient centre of Söflingen day clinic treats around 30 patients every day in three operating theatres, which includes providing medication. To ensure their effectiveness, reliable cooling of the medicines must be guaranteed at all times. SmartMonitoring takes over this time-consuming and stressful task at the clinic.

The pharmaceutical fridge combined with SmartMonitoring from Liebherr lightened the workload as soon as it was installed.

Complex and time-consuming tasks that SmartMonitoring performs at Söflingen day clinic:

1. Monitoring the precisely set temperature
2. Sending alarms via email, text message or phone if temperature fluctuations occur
3. Documenting storage conditions and clearly presenting all the relevant data on the SmartMonitoring dashboard
4. Ensuring that the stored medicines are refrigerated at a constant, precise temperature and are always available for use

Watch the case study video for more information

Dr Jana Wichmann, manager of the Söflingen day clinic

“When the fridge arrived, a team came along to set everything up. And it all works perfectly!”

“We love SmartMonitoring because it lets us concentrate on what really matters: emergency medicine.”

The German Red Cross has nine ambulance stations in Ulm and Heidenheim, with 400 employees and 50 vehicles. The medicines have to be kept refrigerated with maximum safety to be constantly available for use in an emergency. This is ensured by reliable pharmaceutical refrigerators as well as SmartMonitoring from Liebherr, which guarantees maximum storage safety at all the sites.

SmartMonitoring is in use day and night for safe storage and to lighten the workload at the ambulance station in Ulm:

1. Continuously monitoring temperature stability
2. Sending alarms via email, text message or phone if deviations occur
3. Automatically documenting and generating reports on all relevant data
4. User-friendly presentation of the data on the dashboard

Watch the case study video for more information

Lars Grau,
Head of Materials management and Medical devices

“SmartMonitoring makes it possible to incorporate several ambulance stations in the system and monitor them all from one place.”

Our catalogue programme

Liebherr commercial appliances can be found at specialist retailers where providing first-class service and expert advice are their top priorities.

You can find an overview of other Liebherr appliances in our catalogues.
Available in stores or at **home.liebherr.com**.

BIM data now available
The cooperation between Liebherr-Hausgeräte and Specifi® gives planners and dealers worldwide access to a digital Liebherr appliances library with BIM models for the food service and and scientific industries.
Compatible with AutoCAD® and Revit.
home.liebherr.com/bimdata

For more information about our technical specifications, go to: **home.liebherr.com/scientifichealthcare**

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