# Scientific and Healthcare 2025

Next-level cooling solutions



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**Refrigeration and freezing** 

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# **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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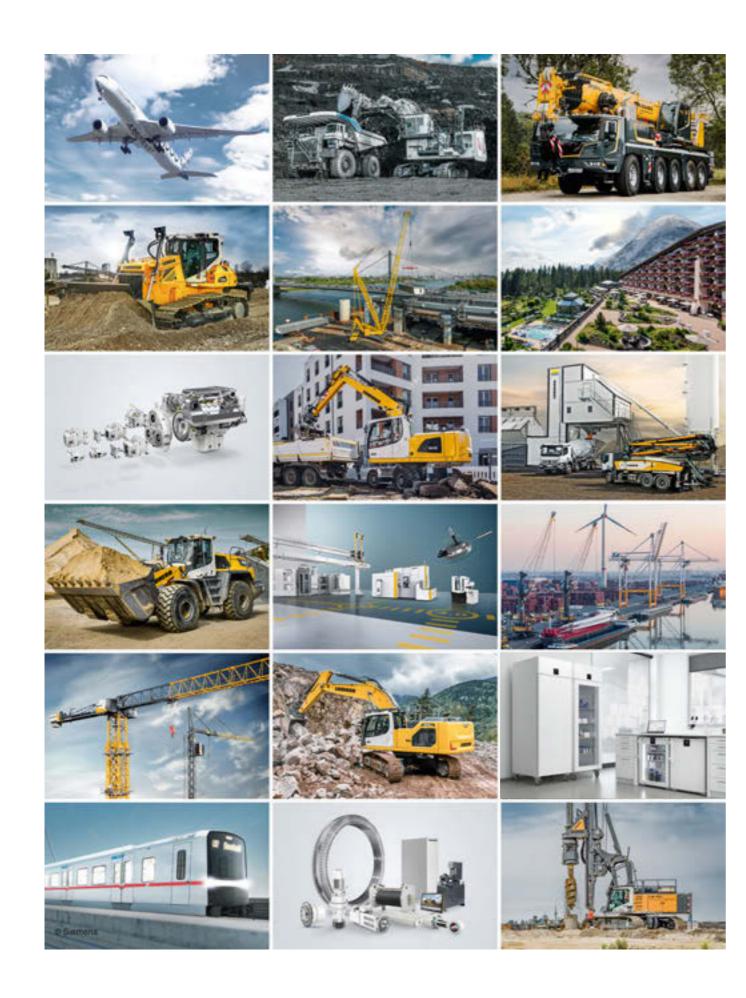
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# The Liebherr Group

# 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.









# 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.

# 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.

# 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.

# Our path to the future recyclable product design more renewable materials materials able to be separated more recycled materials reuse of materials fewer environmentally harmful raw materials Product responsibility lower energy consumption - maximum energy efficiency maximum durability more renewable energies simple repair less waste - optimal storage conditions

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# **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.

# 

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.

# 小: 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  $\pm 3$  °C, and Liebherr freezers will not stray by more than  $\pm 5$  °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 deviation
- 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:

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: 5 Years can be traced back for 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

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).

# Compliance with standards and directives





# 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.



# **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 Smart-Module 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

Fulfils the highest standards for data protection

Protect your valuable substances

Reliable documentation for proof of temperature compliance

Prevention of damage and loss of quality

More time to concentrate on the essentials

Simple and convenient monitoring solution



# Liebherr's service promise

Professional delivery service from kerbside to place of installation, including disposal of packaging and old appliances

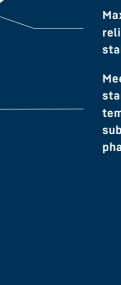
Fast and professional customer service

Comprehensive expert support for installation qualification (IQ) and operational qualification (OQ)

Large selection of professional appliances for research, medicine and laboratories

Maximum precision and reliable temperature stability

Meets the strict DIN 13277 standard on storage of temperature-sensitive substances such as pharmaceuticals



# 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.





# **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.







LightAlarm and SmartLock



Built-in LAN/WiFi interface for SmartMonitoring etc.

# Refrigerators and freezers for laboratories and research



MediLine



**Performance-Series** 



	Perf	ectio	on-S	eries
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MediLine
General laboratory use
SUFsg

Freezers <	7 K deviation	from setpoint
SmartFrost		
Calibration	option	
Visual and	udible alarms	
Custom ala	rm settings p	ossible
Alarm relay	0.1	

Alarm with battery backup (72 h) immediately upon power failure

Integrated data logger

Mechanical lock

Interface Ethernet
Modbus RTU communication protocol TCP/IP
USB interface for reading the data logger

external data loggers LED 7-segment display with buttons Maintenance timer 360 days

Castors as standard

3 Sensor feedthroughs

Aluminum lever handle

Energy consumption

Compliance

**Temperature stability** 

Storage safety

Interfaces

Features

SmartMonitoring

Safety according to IEC 61010-2-011

SRFvg	<b>al laboratory use/ATEX</b> /SFFsg/SRFfg/SFFfg/SCFfg/SRPvg/SFPvg/SRTvg/SRTfg, /SFTfg
Refrige	erators < ± 3 K deviation from setpoint
Freeze	rs < ± 5 K deviation from setpoint
Freeze	rs with SmartFrost; SFPvg with NoFrost
Calibra	ation option
Visual	and audible alarms
Custo	m alarm settings possible
Alarm	relay
Alarm	test function
+2 °C \$	SafetyDevice function (Refrigerators)
Alarm	immediately upon power failure
	nax. temperature log
	losing door at < 90°
Mecha	anical lock
Option	al LAN/WiFi
Local	API (optional via SmartModule)
Smart	Module can be retrofitted
Monoo	chrome display, touch buttons
Individ	dually adjustable maintenance timer
	s/adjustable feet as accessories, /SFPvg with castors as standard
	evaporator cover (stops items freezing to inner liner), or glass door models and SRTvg/SRTfg models
	r feedthrough
Senso Refrige	erators: glass door models with ceiling lighting g models with ceiling lighting)
Senso Refrige (SRPvę	
Senso Refrigo (SRPv Freeze Antimi	g models with ceiling lighting)
Senso Refrigo (SRPv Freeze Antimi (SRPv	g models with ceiling lighting) rs: no lighting (SFPvg models with ceiling lighting) crobial handle with opening mechanism
Senso Refrigo (SRPvs Freeze Antimi (SRPvs Super-	g models with ceiling lighting) rs: no lighting (SFPvg models with ceiling lighting) crobial handle with opening mechanism g/SFPvg with integrated handle)

# **Perfection-Series**

### General laboratory use

SRFvh/SFFvh/SCFvh/SRPvh/SFPvh/SRTvh/SFTvh

Refrigerators < ± 2 K deviation from setpoint

Freezers < ± 5 K deviation from setpoint

Freezers with NoFrost

Calibration option

Visual and audible alarms

Custom alarm settings possible

Alarm relay

Alarm test function

+2 °C SafetyDevice function (Refrigerators)

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 (optional for SFFvh models)

Min./max. temperature log

Self-closing door at < 90°

Mechanical lock SRPvh/SFPvh with electronic lock

Integrated LAN/WiFi

Local API

USB interface for reading the data logger

SmartModule integrated

2.4" touch & swipe colour display

Individually adjustable maintenance timer

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 SRFvh/SCFvh/SRTvh models

Sensor feedthrough

Refrigerators: Insulated and glass door models with vertical lighting

Freezers: LED lighting in the front housing (SFPvh models with vertical lightning)

Antimicrobial handle with opening mechanism (SRPvh/SFPvh with integrated handle)

Ultra-efficient

Safety according to IEC 61010-2-011

Fulfils DIN 13277



# 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.









# 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.

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<sub>2</sub> 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.

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

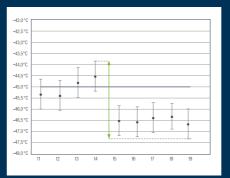
# Pressure compensation valve

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.

### Mechanical lock

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

# 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.



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.



### 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.



# Installation service for accessories

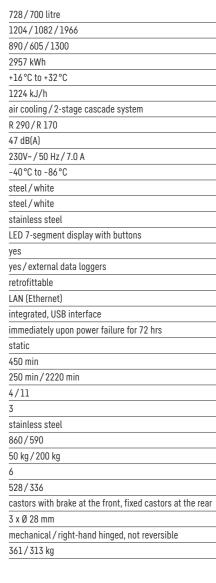
Our qualified installation service assists you with professional installation and connection of accessories, such as the analogue temperature sensor or CO<sub>2</sub> emergency refrigeration.



# SUFsg 7001 MediLine

Gross / net capacity
Exterior dimensions in mm (w / d / h)
Interior dimensions in mm (w / d / h)
Energy consumption in 365 days <sup>1</sup>
Ambient temperature range
Heat output
Heat output system / Refrigeration system
Refrigerant
Sound power level <sup>2</sup>
Voltage / frequency / Connection rating
Temperature range
External cabinet finish
Door material / colour
Internal liner material
Type of control
Volt-free alarm contact
SmartMonitoring compatible / Connectivity type
Connectivity solution
Interface
Data logger
Power failure alarm
Cooling system
Pull-down time +22 °C to -80 °C
Warm-up time -80 °C to -60 °C / to 0 °C
Number / maximum number of storage shelves
Adjustable shelves
Shelf material
Usable shelf area in mm (w / d)
Shelf loading / Maximum total load
Number of racks per shelf
Max. number of cryoboxes, 50 mm / 75 mm
Castors
Access ports
Type of lock / Door hinges
Gross / net weight
Accessories

Racks for cryoboxes	
Cryoboxes, set of 36	
CO₂ backup system	
Stainless steel storage shelves	
Foamed inner doors	
Cover for mains switch incl. key lock	
4 – 20mA analogue output	
Data logger, ULT	



see page 36	
7790038	
7790048	
7790050	
7790127	
7790051	
7790042	
6145367	



90/605/1300
957 kWh
16°C to +32°C
224 kJ/h
vater-cooled / 2-stage cascade system
290/R 170
7 dB(A)
30V~/50 Hz/7.0 A
40°C to -86°C
teel/white
teel/white
tainless steel
ED 7-segment display with buttons
es
es/external data loggers
etrofittable
AN (Ethernet)
ntegrated, USB interface
mmediately upon power failure for 72 hrs
tatic
50 min
50 min / 2220 min
/11
tainless steel
60/590
i0 kg / 200 kg
i
28/336
astors with brake at the front, fixed castors at the rear
x Ø 28 mm
nechanical/right-hand hinged, not reversible
61/313 kg

see page 36	
7790038	
7790048	
7790050	
7790127	
7790051	
7790042	
6145367	



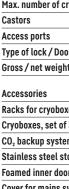
# SUFsg 5001 MediLine

SUFsg	5001
MediLine	

491/477 litre	491/477 litre
920/1082/1966	920/1082/1966
606/605/1300	606/605/1300
2884 kWh	2884 kWh
+16 °C to +32 °C	+16 °C to +32 °C
1188 kJ/h	1188 kJ/h
air cooling / 2-stage cascade system	water-cooled / 2-stage cascade
R 290/R 170	R 290/R 170
47 dB(A)	47 dB(A)
230V~/50 Hz/7.0 A	230V~/50 Hz/7.0 A
-40 °C to -86 °C	-40 °C to -86 °C
steel/white	steel/white
steel/white	steel/white
stainless steel	stainless steel
LED 7-segment display with buttons	LED 7-segment display with but
yes	yes
yes/external data loggers	yes/external data loggers
retrofittable	retrofittable
LAN (Ethernet)	LAN (Ethernet)
integrated, USB interface	integrated, USB interface
immediately upon power failure for 72 hrs	immediately upon power failure
static	static
360 min	360 min
230 min / 2160 min	230 min / 2160 min
4/11	4/11
3	3
stainless steel	stainless steel
580/590	580/590
50 kg / 200 kg	50 kg / 200 kg
4	4
352/224	352/224
castors with brake at the front, fixed castors at the rear	castors with brake at the front,
3 x Ø 28 mm	3 x Ø 28 mm
mechanical / right-hand hinged, not reversible	mechanical/right-hand hinged
308 / 254 kg	308/254 kg

see page 36	see page 36
7790038	7790038
7790048	7790048
7790049	7790049
7790070	7790070
7790051	7790051
7790042	7790042
6145367	6145367

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



34

### Ultra-low temperature freezers





### ver. H72

e rear
-

MediLine

# 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.

F	1
TL	

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

	7790027
	//9002/
Stainless steel side-access rack 6x4	7790028
Stainless steel front-access rack 5x4 + drawers	7790031
Stainless steel front-access rack 6x4 + drawers	7790032
	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.



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<sub>2</sub> 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<sub>2</sub> 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.

# Output temperature



# 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.



# 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.

# 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.

	+2 °C Saf If the temp temperatur control, sta protecting
e	<b>Electroni</b> Liebherr ap an individu many users
	Integrate The integra connect yo or existing
	Self-closi To make los door stays angle is les
	Self-closi The self-clo closes part The ergono makes it ea
SRPvh 6511 Perfection	Models in t as standar as well as e

# Laboratory refrigerators and freezers with stainless steel inner liner

# afetyDevice

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

# nic lock with remote control system

appliances can be electronically locked and unlocked using lual PIN code and optional digital remote control by as ers as you like – without them having to share a key.

# ted WiFi/LAN interface

rated WiFi/LAN interface enables you to easily your appliances with Liebherr SmartMonitoring g 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.

# sing door < 90°

loading, unloading and cleaning easier, the appliance s open if opened by more than 90°. If the opening ess than 90°, it closes automatically for safety.

# sing door

closing door with an easy-to-replace solenoid gasket articularly tightly, preventing unnecessary loss of cold. nomic door handle, running all the way up the door, easy to open.

the Performance and Perfection series come with castors ard, to allow versatile use according to the available space, s easy cleaning, even under appliances.

### 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.



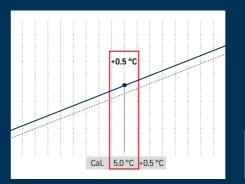




Integrated WiFi/LAN interface The integrated WiFi/LAN interface enables you to easily connect your appliances with Liebherr SmartMonitoring or existing local systems.



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.



### **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.

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



# 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.

# Quality right down to the smallest detail

# Advantage of hot gas defrosting

Reduces the time when the temperature is increased



# 10 min Hot gas defrosting

# 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.



# ±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.

-	1	100			
				-	
	-			-	
	-		- 1	-	
				-	
-	-				
1 I	स	7	17	1	
	CDDvb 1/12		CDDvb 1	100	

SRPvh 1412 Perfection

1447/1091 litre

412	SRPvh 1402 Perfection		
	1391/1091 litre		
i	1427/867/2135		
	976/638/1493		
	464 kWh		
	+10°C to +35°C		
	565 kJ/h		
	R 600a		
	60 dB(A)		
60 Hz	220-240V~/50/60 Hz		
	4.0 A/130 W		
natic	forced-air/automatic		
	-2°C to +16°C		
	2.3°C/2.1°C		
	steel/white		
oor with steel frame / white	steel/white		
eel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301		
e colour display	2.4" touch & swipe colour dis		
power failure for at	immediately upon power failu		
	least 12 hrs		
e/yes	visual and audible / yes		
е	yes/SmartModule		
able/WiFi/LAN	integrated, removable / WiFi,		
nterface	integrated, USB interface		
both sides,	LED light column both sides		
ion			
lastic-coated	8/wire shelves plastic-coate		
	480/638		
	60 kg / 520 kg		
2 with parking brake	5 swivel castors, 2 with parki		
handle	vertical recessed handle		
	1 x Ø 12 mm		
emote control	electronic, with remote contr		

	9/0/030/1493
	464 kWh
	+10 °C to +35 °C
	565 kJ/h
	R 600a
	60 dB(A)
	220-240V~/50/60 Hz
	4.0 A/130 W
	forced-air/automatic
	-2°C to +16°C
	2.3°C/2.1°C
	steel/white
/hite	steel/white
.)	Chrome-nickel steel (1.4301 / AISI 304)
	2.4" touch & swipe colour display
	immediately upon power failure for at
	least 12 hrs
	visual and audible / yes
	yes/SmartModule
	integrated, removable / WiFi/LAN
	integrated, USB interface
	LED light column both sides
	8/wire shelves plastic-coated
	480/638
	60 kg / 520 kg
	5 swivel castors, 2 with parking brake
	vertical recessed handle
	1 x Ø 12 mm

# te control left-hand/right-hand 225/200 kg

7745088/7745090
7112608/7746614
9597965
9080132
9597649
9597677
6123395/9086958



SRPvh 8411 Perfection

903 / 702 litre
787/1017/2135
579/788/1493
374 kWh
+10 °C to +35 °C
425 kJ/h
R 600a
60 dB(A)
220-240V~/50/60 Hz
4.0 A/130 W
forced-air/automatic
0°C to +16°C
3.9°C/2.9°C
steel/white
Insulating glass door with steel frame/whit
Chrome-nickel steel (1.4301 / AISI 304)
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible / yes
yes/SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
vertical LED light strip recessed in left
wall with separate switch
4 / wire shelves plastic-coated
570/788
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
electronic, with remote control
right, reversible on site
186/168 kg

7745092/7745094

7112614/7746616

6123395/9086958

9597828

9080131

9597617

9597677

_	
_	
_	

SRPvh 8401 Perfection

707	/ 702 litre
	/1017/2135
	/788/1493
	kWh °C to +35°C
360 R 60	kJ/h
	iB(A)
	-240V~/50/60 Hz A/130 W
	ed-air/automatic
	C to +16°C
	°C/2.3°C
	el/white
	el/white
	ome-nickel steel (1.4301 / AISI 304)
	touch & swipe colour display
	rediately upon power failure for at
	t 12 hrs
	al and audible / yes
	/ SmartModule
-	grated, removable / WiFi/LAN
	grated, USB interface
	lighting column, left
LLD	agnang ootanni, tore
4/v	vire shelves plastic-coated
	/788
60 k	kg / 240 kg
	tors with brake at the front,
fixe	d castors at the rear
vert	ical recessed handle
1 x (	Ø 12 mm
elec	tronic, with remote control
righ	t, reversible on site
165	/141 kg
105	/ 141 kg
774	5092/7745094
711	2614/7746616
959	7828

9597617

9597677

6123395/9086958

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

Exterior dimensions in mm (w / d / h)	1427 / 867 / 2135
Interior dimensions in mm (w / d / h)	976/638/1493
Energy consumption in 365 days <sup>1</sup>	705 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	695 kJ/h
Refrigerant	R 600a
Sound power level	60 dB(A)
Voltage / frequency	220 - 240V~/50/60 Hz
Connection rating / Rated consumption watts	4.0 A/130 W
Cooling system / Defrost	forced-air/automatic
Temperature range	0°C to +16°C
Gradient <sup>2</sup> /max. fluctuation <sup>3</sup>	2.6°C/1.9°C
External cabinet finish	steel/white
Door material / colour	Insulating glass door with st
Internal liner material	Chrome-nickel steel (1.430
Type of control	2.4" touch & swipe colour
Power failure alarm	immediately upon power fa
	least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible / yes
SmartMonitoring compatible / Connectivity type	yes/SmartModule
Connectivity solution / Interface	integrated, removable / Wi
Data logger	integrated, USB interface
Interior light	LED light column both side
	separate connection
Adjustable shelves / Shelf material	8 / wire shelves plastic-co
Usable shelf area in mm (w / d)	480/638
Shelf loading / Maximum total load	60 kg / 520 kg
Castors	5 swivel castors, 2 with pa
Handle	vertical recessed handle
Access ports	1 x Ø 12 mm
Type of lock	electronic, with remote co
Door hinges	left-hand / right-hand
Gross/net weight	293 / 268 kg
	2707 200 Kg
Accessories	
U-shaped trayslide, left / U-shaped trayslide, right	7745088/7745090
Grey grid shelf / Perforated metal shelf in grey	7112608/7746614
Castors Ø 100 mm	9597965
Adjustable feet, 115 – 175 mm	9080132
Foot pedal opener	9597649
Side-by-Side set in white	9597677

Additional remote controls / Digital input for electronic lock

Gross / net capacity



# SRPvh 6511 Perfection

642/480 litre
697/867/2135
489/638/1493
317 kWh
+10 °C to +35 °C
365 kJ/h
R 600a
60 dB(A)
220-240V~/50/60 Hz
4.0 A/130 W
forced-air/automatic
0°C to +16°C
2.5°C/3.4°C
steel/white
Insulating glass door with steel frame/white
Chrome-nickel steel (1.4301 / AISI 304)
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible / yes
yes/SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
vertical LED light strip recessed in left
wall with separate switch
4/wire shelves plastic-coated
480/638
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
electronic, with remote control
right, reversible on site
169/152 kg

7745088/7745090	
7112608/7746614	
9597828	
9080131	
9597617	
9597677	
6123395/9086958	



# SRPvh 6501 Perfection

614/480 litre
697/867/2135
489/638/1493
172 kWh
+10 °C to +35 °C
305 kJ/h
R 600a
60 dB(A)
220-240V~/50/60 Hz
4.0 A/130 W
forced-air/automatic
-2 °C to +16 °C
2.3 °C / 2.5 °C
steel/white
steel/white
Chrome-nickel steel (1.4301 / AISI 304)
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible / yes
yes / SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
LED lighting column, left
4 / wire shelves plastic-coated

7745088/7745090 7112608/7746614 9597828 9080131 9597617 9597677 6123395/9086958

The second secon			
Δ Υ	SRPvg 1412	SRPvg 1402	

1412	SRPvg 1402
е	Performance
е	1391/1091 litre
35	1427/867/2135
93	1210/638/1493
	464 kWh
<u>,</u>	+10°C to +35°C
	520 kJ/h
	R 290
	60 dB(A)
0 Hz	220-240V~/50 Hz
	4.0 A/320 W
omatic	forced-air/automatic
	-2°C to +16°C
	3.1°C/2.6°C
	steel/white
door with steel frame / white	steel/white
steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)
splay, touch buttons	monochrome display, touch buttons
ver return	upon mains power return
ble	visual and audible
	yes
ule	yes/SmartModule
	retrofittable
onal)	WiFi/LAN (optional)
t strip with separate switch	LED ceiling lighting
plastic-coated	8/wire shelves plastic-coated
	480/638
	60 kg / 480 kg
s, 2 with parking brake	5 swivel castors, 2 with parking brake
ed handle	vertical recessed handle
	1 x Ø 12 mm
	mechanical
t-hand	left-hand/right-hand
	225 / 200 kg
5090	7745088/7745090

)	7745088/7745090
	7112608
	7746614
	9597965
	9080132
	9597649
	9597677
	6145269



SRPvg 8411 Performance

903 / 702 litre
787/1017/2135
579/788/1493
299 kWh
+10 °C to +35 °C
400 kJ/h
R 290
60 dB(A)
220-240V~/50 Hz
4.0 A/220 W
forced-air/automatic
0 °C to +16 °C
4.6°C/3.5°C
steel/white
Insulating glass door with steel frame/white
Chrome-nickel steel (1.4301 / AISI 304)
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes/SmartModule
retrofittable
WiFi/LAN (optional)
LED ceiling light strip with separate switch
4 / wire shelves plastic-coated
570/788
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
mechanical
right, reversible on site
186/168 kg

7745092/7745094 7112614

9597677

6145269



SRPvg 8401
Performance

787	702 litre 71017 / 2135
	788/1493
195 k	
	C to +35°C
+10 350 k	
SSU 1 R 290	
60 dB	
	240V~/50 Hz
	/ 220 W
	d-air/automatic
	to +16°C
	C/5.0°C
	/white
	/white
	me-nickel steel (1.4301 / AISI 304)
	ochrome display, touch buttons
	mains power return
<u> </u>	l and audible
yes	
<u> </u>	SmartModule
	fittable
WiFi	/LAN (optional)
	ceiling lighting
	ire shelves plastic-coated
570/	· ·
60 kg	1/240 kg
	ors with brake at the front,
fixed	castors at the rear
verti	cal recessed handle
1 x Ø	12 mm
mech	anical
right	reversible on site
165/	′ 144 kg
7745	092/7745094
7112	614
	616

7745092 / 7745094
7112614
7746616
 9597828
9080131
 9597617
9597677
 6145269

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

	SRPvg 1412
	Performance
Gross / net capacity	1447/1091 litre
Exterior dimensions in mm (w / d / h)	1427/867/2135
Interior dimensions in mm (w / d / h)	1210/638/1493
Energy consumption in 365 days <sup>1</sup>	724 kWh
Ambient temperature range	+10°C to +35°C
Heat output	650 kJ/h
Refrigerant	R 290
Sound power level	60 dB(A)
Voltage / frequency	220 - 240V~ / 50 Hz
Connection rating / Rated consumption watts	4.0 A / 320 W
Cooling system / Defrost	forced-air/automatic
Temperature range	0°C to +16°C
Gradient <sup>2</sup> / max. fluctuation <sup>3</sup>	3.1°C/2.9°C
External cabinet finish	steel/white
Door material / colour	Insulating glass door with steel frame / w
Internal liner material	Chrome-nickel steel (1.4301 / AISI 304
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 / Connectivity type	yes / SmartModule
Connectivity solution	retrofittable
Interface	WiFi/LAN (optional)
Interior light	LED ceiling light strip with separate sw
Adjustable shelves / Shelf material	8/wire shelves plastic-coated
Usable shelf area in mm (w / d)	480/638
Shelf loading / Maximum total load	60 kg / 480 kg
Castors	5 swivel castors, 2 with parking brake
Handle	vertical recessed handle
Access ports	1 x Ø 12 mm
Type of lock	mechanical
Door hinges	left-hand / right-hand
Gross / net weight	292 / 267 kg
Accessories	
U-shaped trayslide, left / U-shaped trayslide, right	7745088 / 7745090
Grey grid shelf	7112608
Perforated metal shelf in grey	7746614
Castors Ø 100 mm	9597965
Adjustable feet, 115 – 175 mm	9080132
Foot pedal opener	9597649
Side-by-Side set in white	9597677
SmartModule	6145269

# Laboratory refrigerators with stainless steel inner liner



SRPvg 6511 Performance

642/480 litre
697/867/2135
489/638/1493
286 kWh
+10 °C to +35 °C
365 kJ/h
R 290
60 dB(A)
220-240V~/50 Hz
4.0 A/220 W
forced-air / automatic
0°C to +16°C
4.6°C/3.4°C
steel/white
Insulating glass door with steel frame / white
Chrome-nickel steel (1.4301 / AISI 304)
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes / SmartModule
retrofittable
WiFi/LAN (optional)
LED ceiling light strip with separate switch
4/wire shelves plastic-coated
480/638
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
mechanical
right, reversible on site
174/157 kg

7745088/7745090	
7112608	
7746614	
9597828	
9080131	
9597617	
9597677	
6145269	



Performance
614/480 litre
697/867/2135
489/638/1493
178 kWh
+10 °C to +35 °C
305 kJ/h
R 290
60 dB(A)
220-240V~/50 Hz
4.0 A/220 W
forced-air / automatic
-2°C to +16°C
3.1°C/3.7°C
steel/white
steel/white
Chrome-nickel steel (1.4301 / AISI 304)
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes / SmartModule
retrofittable
WiFi/LAN (optional)
LED ceiling lighting
4/wire shelves plastic-coated
480/638
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
mechanical
right, reversible on site
148/130 kg

7745088/7745090	
7112608	
7746614	
9597828	
9080131	
9597617	
9597677	
6145269	



SFPvh 1402

6123395

9086958

FPvh 1402	SFPvh 8401
rfection	Perfection
91/1091 litre	871/702 litre
27/867/2135	787/1017/2135
10/638/1493	579/788/1493
52 kWh	748 kWh
0°C to +35°C	+10°C to +35°C
35 kJ/h	935 kJ/h
90	R 290
dB(A)	60 dB(A)
0-240V~/50/60 Hz	220-240V~/50/60 Hz
A/420 W	4.0 A/420 W
ced-air/automatic	forced-air / automatic
°C to -35 °C ²	-9 °C to -35 °C ²
°C/4.9°C	3.6°C/4.9°C
el/white	steel/white
el/white	steel/white
rome-nickel steel (1.4301 / AISI 304)	Chrome-nickel steel (1.4301 / AISI 304)
" touch & swipe colour display	2.4" touch & swipe colour display
nediately upon power failure for at	immediately upon power failure for at
st 12 hrs	least 12 hrs
ual and audible / yes	visual and audible / yes
/SmartModule	yes/SmartModule
egrated, removable / WiFi/LAN	integrated, removable / WiFi/LAN
egrated, USB interface	integrated, USB interface
) light column both sides	LED lighting column, left
wire shelves plastic-coated	4 / wire shelves plastic-coated
0/638	570/788
kg / 520 kg	60 kg / 240 kg
wivel castors, 2 with parking brake	castors with brake at the front,
	fixed castors at the rear
tical recessed handle	vertical recessed handle
Ø 12 mm	1 x Ø 12 mm
ctronic, with remote control	electronic, with remote control
t-hand/right-hand	right, reversible on site
5/210 kg	167/149 kg
45088/7745090	7745092/7745094
12608/7746614	7112614/7746616
97965/9080132	9597828/9080131
97649	9597617
97677	9597677

6123395

9086958



SFPvh 6501 Perfection

614/480 litre
697/867/2135
489/638/1493
702 kWh
+10 °C to +35 °C
875 kJ/h
R 290
60 dB(A)
220-240V~/50/60 Hz
4.0 A/420 W
forced-air/automatic
-9°C to -35°C ²
3.6°C/5.0°C
steel/white
steel/white
Chrome-nickel steel (1.4301 / AISI 304)
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible / yes
yes/SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
LED lighting column, left
4/wire shelves plastic-coated
480/638
60 kg/240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
electronic, with remote control
right, reversible on site
150/132 kg
7745088/7745090
7112608/7746614
9597828/9080131

9597617

9597677

6123395

9086958



SFPvg 1402 Performance

1391/1091 litre	
1427/867/2135	
1210/638/1493	
1162 kWh	
+10 °C to +35 °C	
1420 kJ/h	
R 290	
60 dB(A)	
220-240V~/50/60 Hz	
4.0 A / 580 W	
forced-air/automatic	
-9 °C to -30 °C	
2.9°C/4.9°C	
steel/white	
steel/white	
Chrome-nickel steel (1.4	301 / AISI 304)
monochrome display, to	uch buttons
upon mains power retur	n
visual and audible / yes	
yes/SmartModule	
retrofittable/WiFi/LAN	(optional)
LED ceiling lighting	
8/wire shelves plastic-	coated
480/638	
60 kg/480 kg	
5 swivel castors, 2 with	parking brake
vertical recessed handle	9
1 x Ø 12 mm	
mechanical	

1 x Ø 12 mm	
mechanical	
left-hand / right-hand	
225/200 kg	

/112608/7746614	
9597965/9080132	
9597649	
9597677	
5145269	

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

Gross / net capacity	1391/1091 litre
Exterior dimensions in mm (w / d / h)	1427/867/2135
Interior dimensions in mm (w / d / h)	1210/638/1493
Energy consumption in 365 days <sup>1</sup>	1162 kWh
Ambient temperature range	+10°C to +35°C
Heat output	1485 kJ/h
Refrigerant	R 290
Sound power level	60 dB(A)
Voltage / frequency	220-240V~/50/6
Connection rating / Rated consumption watts	4.0 A / 420 W
Cooling system / Defrost	forced-air/automa
Temperature range	-9°C to -35°C <sup>2</sup>
Gradient <sup>3</sup> /max. fluctuation <sup>4</sup>	2.9°C/4.9°C
External cabinet finish	steel/white
Door material / colour	steel/white
Internal liner material	Chrome-nickel stee
Type of control	2.4" touch & swipe
Power failure alarm	immediately upon
	least 12 hrs
Fault: warning signal / Volt-free alarm contact	visual and audible
SmartMonitoring compatible / Connectivity type	yes/SmartModule
Connectivity solution / Interface	integrated, remova
Data logger	integrated, USB int
Interior light	LED light column b
Adjustable shelves / Shelf material	8/wire shelves pla
Usable shelf area in mm (w / d)	480/638
Shelf loading / Maximum total load	60 kg / 520 kg
Castors	5 swivel castors, 2
Handle	vertical recessed h
Access ports	1 x Ø 12 mm
Type of lock	electronic, with rer
Door hinges	left-hand/right-ha
Gross/net weight	235/210 kg
Accessories	
U-shaped trayslide, left / U-shaped trayslide, right	7745088/774509
Grey grid shelf / Perforated metal shelf in grey	7112608/774661
Castors Ø 100 mm / Adjustable feet, 115 – 175 mm	9597965/908013
Foot pedal opener	9597649
Side-by-Side set in white	9597677
SmartModule	

Perfection 1/1091 litre 7/867/2135 0/638/1493

Additional remote controls

Digital input for electronic lock

# Laboratory freezers with stainless steel inner liner



# SFPvg 8401 Performance

871/702 litre
787/1017/2135
579/788/1493
870 kWh
+10 °C to +35 °C
1110 kJ/h
R 290
60 dB(A)
220 - 240V~ / 50 Hz
4.0 A/610 W
forced-air/automatic
-9 °C to -30 °C
5.2°C/4.5°C
steel/white
steel/white
Chrome-nickel steel (1.4301 / AISI 304)
monochrome display, touch buttons
upon mains power return

visual and audible / yes	
yes/SmartModule	
retrofittable/WiFi/LAN (optional)	

LED ceiling lighting
4/wire shelves plastic-coated
570/788
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
mechanical
right, reversible on site
166/149 kg



# SFPvg 6501 Performance

614/480 litre
697/867/2135
489/638/1493
774 kWh
+10 °C to +35 °C
975 kJ/h
R 290
60 dB(A)
220-240V~/50 Hz
4.0 A/610 W
forced-air/automatic
-9 °C to -30 °C
5.2°C/4.8°C
steel/white
steel/white
Chrome-nickel steel (1.4301 / AISI 304)
monochrome display, touch buttons
upon mains power return

visual and audible / yes yes/SmartModule retrofittable / WiFi/LAN (optional)

LED ceiling lighting
4/wire shelves plastic-coated
480/638
60 kg / 240 kg
castors with brake at the front,
fixed castors at the rear
vertical recessed handle
1 x Ø 12 mm
mechanical
right, reversible on site
150/132 kg

7745088/7745090 7112608/7746614 9597828/9080131 9597617 9597677 6145269



# 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 Integrated data logger Mechanical lock The integrated logger records the temperature profile, at a glance alarm history and service information for up to five years. The data can be read out directly from the appliance via the USB interface. sensitive stored goods. SmartMonitoring Min./max. temperature log The cloud-based digital solution continuously monitors and The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage text message or phone if any deviations occur. temperatures were within the tolerance limits. Integrated WiFi/LAN interface +2 °C SafetyDevice The integrated WiFi/LAN interface enables you to easily If the temperature falls below +2 °C due to a malfunction while the connect your appliances with Liebherr SmartMonitoring temperature setting is at +5 °C or higher, the SafetyDevice takes or existing local systems. control, stabilising the temperature, activating the alarm and protecting the contents from freezing. Easy-to-clean interior The inner liner made of fully recyclable, robust and odourless 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. Replaceable door seal LightAlarm In the event of an uncontrolled temperature rise or other problems, replacements. the interior light of the appliance starts flashing. This visually shows when action is needed. Self-closing door < 90° 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. automatically for safety. 17 . 5 SRFvh 4011 Perfection

# Laboratory refrigerators and freezers with plastic inner liner



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

documents temperatures and alerts you immediately via email,

polystyrene is manufactured in one piece without joints. This makes it quick and easy to clean the large, rounded corners.



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



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

# LIEBHERR Å JÅ ±3°C

# 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





### ±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

# 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.

# 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.



### **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.



# 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.



SRFvh 5501 Perfection

558/441 litre	
747/769/1793	
606/536/1460	
171 kWh	
+10 °C to +35 °C	
246 kJ/h	
R 600a	
49 dB(A)	
220-240V~/50 Hz	
2.0 A / 190 W	
forced-air / automatic	
+3°C to +16°C	
2.2°C/1.7°C	
steel/white	
steel/white	
commercial grade moulded polystyrene	
2.4" touch & swipe colour display	
immediately upon power failure for at least 12 hrs	;
visual and audible	
yes	
yes/SmartModule	
integrated, removable	
WiFi/LAN	
integrated, USB interface	
LED lighting column, left	
5/wire shelves plastic-coated	
600/536	
60 kg / 300 kg	
castors with brake at the front, fixed castors at th	e reai
antimicrobial handle with opening mechanism	
1 x Ø 10 mm	
yes	
mechanical/right, reversible on site	
94/80 kg	

9032868
7113310
7113314/9291929
7435210
9086926
9080022/9086924
on request
9017739

		-
٩	-	5

### SRFvh 4011 Perfection

420/297 litre

Gross / net capacity

Heat output Refrigerant Sound power level Voltage / frequency

Cooling system / Defrost Temperature range Gradient <sup>2</sup> / max. fluctuation <sup>3</sup> External cabinet finish Door material / colour

Internal liner material

Power failure alarm

Fault: warning signal Volt-free alarm contact

Connectivity solution

Adjustable shelves / Shelf material Usable shelf area in mm (w / d) Shelf loading / Maximum total load

Interface Data logger Interior light

Handle

Access ports

Accessories Pharmacy drawer White grid shelf

Scanner rail

Type of lock / Door hinges

White base grid / Glass shelf Perforated metal shelf, white

Castors Ø 80 mm / Ø 100 mm

Additional lock barrels (up to 5)

Side-by-Side set in white

Adjustable feet, 90 - 120 mm / 150 - 180 mm

Gross / net weight

DIN 13277

Type of control

Exterior dimensions in mm (w/d/h) Interior dimensions in mm (w/d/h) Energy consumption in 365 days <sup>1</sup> Ambient temperature range

Connection rating / Rated consumption watts

SmartMonitoring compatible / Connectivity type

+20/2// uuc
 597/654/1884
460/423/1660
 389 kWh
 +10°C to +35°C
463 kJ/h
 R 600a
49 dB(A)
 220-240V~/50 Hz
2.0 A/180 W
 forced-air/automatic
 +3°C to +16°C
 3.0°C/2.4°C
steel/white
 Insulated glass door with plastic frame/white
commercial grade moulded polystyrene
 2.4" touch & swipe colour display
immediately upon power failure for at least 12 hrs
 visual and audible
yes
 yes/SmartModule
 integrated, removable
WiFi/LAN
integrated, USB interface
vertical LED light strip recessed in left wall with separate switch
5/wire shelves plastic-coated
460/423
45 kg / 225 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
 yes
 mechanical/right, reversible on site
87/80 kg
 9032867
7113308
7113312/9293493
9029022
7435208
 -/-
9080022/9086924
 on request

1 Measured at +25°C ambient temperature and +5°C set temperature for f	ridges and -20°C
2 Gradient as defined in EN 60068-3: the difference between the warmest an	d coldest average
3 Max. fluctuation as per EN 60068-3: greatest fluctuation value determine	ned throughout th

9006786

Gross / net capacity
Exterior dimensions in mm (w / d / h)
Interior dimensions in mm (w/d/h)
Energy consumption in 365 days <sup>1</sup>
Ambient temperature range
Heat output
Refrigerant
Sound power level
Voltage / frequency
Connection rating / Rated consumption watts
Cooling system / Defrost
Temperature range
Gradient <sup>2</sup> /max. fluctuation <sup>3</sup>
External cabinet finish
Door material / colour
Internal liner material
Type of control
Power failure alarm
Fault: warning signal
Volt-free alarm contact
SmartMonitoring compatible / Connectivity type
Connectivity solution
Interface
Data logger
Interior light
Adjustable shelves / Shelf material
Usable shelf area in mm (w / d)
Shelf loading / Maximum total load
Castors
Handle
Access ports
DIN 13277
Type of lock / Door hinges
Gross / net weight
Accessories
Pharmacy drawer
White grid shelf
White base grid / Glass shelf
Scanner rail
Castors Ø 80 mm
Adjustable feet, 90 – 120 mm / 150 – 180 mm

Additional lock barrels (up to 5)

Side-by-Side set in white

# Laboratory refrigerators with plastic inner liner



SRFvh 4001 Perfection

394/298 litre
597/654/1884
460/423/1660
172 kWh
+10°C to +35°C
250 kJ/h
R 600a
49 dB(A)
220-240V~/50 Hz
2.0 A/180 W
forced-air/automatic
+3°C to +16°C
2.4°C/2.2°C
steel/white
steel/white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at least 12 hrs
visual and audible
yes
yes/SmartModule
integrated, removable
WiFi/LAN
integrated, USB interface
LED lighting column, left
5/wire shelves plastic-coated
460/423
45 kg / 225 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
mechanical / right, reversible on site
71/65 kg

9032867	
7113308	
7113312/9293493	
9029022	
7435208	
9086926/9080023	
9080022/9086924	
on request	
9006786	

for freezers.

non neezers. E measurements, increased by their expanded uncertainty, throughout the duration. the duration of measurements.

Gross / net capacity
Exterior dimensions in mm (w / d / h)
Interior dimensions in mm (w/d/h)
Energy consumption in 365 days <sup>1</sup>
Ambient temperature range
Heat output
Refrigerant
Sound power level
Voltage / frequency
Connection rating / Rated consumption watts
Cooling system / Defrost
Temperature range
Gradient <sup>2</sup> / max. fluctuation <sup>3</sup>
External cabinet finish
Door material / colour
Internal liner material
Type of control
Power failure alarm
Fault: warning signal
Volt-free alarm contact
SmartMonitoring compatible / Connectivity type
Connectivity solution
Interface
Interior light
Adjustable shelves / Shelf material
Usable shelf area in mm (w / d)
Shelf loading / Maximum total load
Handle
Access ports
Type of lock
Door hinges
Gross / net weight
Accessories
White grid shelf
White base grid / Glass shelf
Perforated metal shelf, white
Scanner rail
Castors Ø 80 mm / Ø 100 mm
Adjustable feet, 90 - 120 mm / 150 - 180 mm
Evaporator cover
Additional lock barrels (up to 5)
Side-by-Side set in white
SmartModule



# SRFvg 5501 Performance 558/441 litre 747/769/1684 606/536/1460

250 kWh +10°C to +35°C 317 kJ/h R 600a 49 dB(A) 220-240V~/50 Hz 2.0 A/140 W forced-air/automatic +3°C to +16°C 3.9°C/3.0°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/wire shelves plastic-coated 600/536 60 kg / 300 kg antimicrobial handle with opening mechanism 1 x Ø 10 mm mechanical

right, reversible on site

86/80 kg

7113310 7113314/9291929

7435210

9803590

on request

9017739

6145269

9086926/9080023

9080022/9086924



Performance

on request

9006786

6145269

9080022/9086924

SRFvg 4001 Performance

420/297 litre	394/298 litre
597/654/1884	597/654/1884
460/423/1642	460/423/1660
431 kWh	245 kWh
+10 °C to +35 °C	+10 °C to +35 °C
542 kJ/h	321 kJ/h
R 600a	R 600a
49 dB(A)	49 dB(A)
220-240V~/50 Hz	220-240V~/50 Hz
2.0 A/135 W	2.0 A / 140 W
forced-air/automatic	forced-air/automatic
+3°C to +16°C	+3 °C to +16 °C
5.4°C/3.4°C	4.6°C/2.2°C
steel/white	steel/white
Insulated glass door with plastic frame/white	steel/white
commercial grade moulded polystyrene	commercial grade moulded polystyrene
monochrome display, touch buttons	monochrome display, touch buttons
upon mains power return	upon mains power return
visual and audible	visual and audible
yes	yes
yes/SmartModule	yes/SmartModule
retrofittable	retrofittable
WiFi/LAN (optional)	WiFi/LAN (optional)
LED ceiling light strip with separate switch	
5/wire shelves plastic-coated	5/wire shelves plastic-coated
460/423	460/423
45 kg / 225 kg	45 kg / 225 kg
antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
1 x Ø 10 mm	1 x Ø 10 mm
mechanical	mechanical
right, reversible on site	right, reversible on site
88/82 kg	70/64 kg
7117700	7117700
7113308	7113308
7113312/9293493	7113312/9293493
9029022	9029022
7435208	7435208
-/-	9086926/9080023

9080022/9086924

9803588

on request

9006786

6145269

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



### SRFvg 3511 Performance

367 / 260 litre
597/654/1684
460/423/1442
393 kWh
+10 °C to +35 °C
471 kJ/h
R 600a
48 dB(A)
220-240V~/50 Hz
2.0 A/135 W
forced-air/automatic
+3 °C to +16 °C
3.6°C/3.2°C
steel/white
Insulated glass door with plastic frame / white
commercial grade moulded polystyrene
monochrome display, touch buttons
upon mains power return
visual and audible
yes
yes/SmartModule
retrofittable
WiFi/LAN (optional)
LED ceiling light strip with separate switch
4/wire shelves plastic-coated
460/423
45 kg / 180 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
mechanical
right, reversible on site
81/76 kg

7113308	
7113312/9293493	
9029022	
7435208	
9086926/9080023	
9080022/9086924	
on request	
9017739	
6145269	



### SRFvg 3501 Performance

344/261 litre
597/654/1684
460/423/1460
226 kWh
+10 °C to +35 °C
288 kJ/h
R 600a
48 dB(A)
220-240V~/50 Hz
2.0 A/120 W
forced-air/automatic
+3 °C to +16 °C
5.0°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/wire shelves plastic-coated
460/423
45 kg/180 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
mechanical
right, reversible on site
65/59 kg

7113308	
7113312/9293493	
9029022	
7435208	
9086926/9080023	
9080022/9086924	
9803586	
on request	
9017739	
6145269	

# 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.

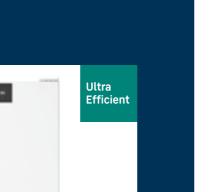
# Norm IEC 61010-2-011

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.

	Perfection
Gross / net capacity	472/257 litre
Exterior dimensions in mm (w / d / h)	747/769/1793
Interior dimensions in mm (w / d / h)	603/510/1118
Energy consumption in 365 days <sup>1</sup>	540 kWh
Ambient temperature range	+10°C to +35°C
Heat output	725 kJ/h
Refrigerant	R 290
Sound power level	55 dB(A)
Voltage / frequency	220-240V~/50 Hz
Connection rating / Rated consumption watts	2.0 A/250 W
Cooling system / Defrost	forced-air/automatic
Temperature range	-9°C to -35°C ²
Gradient <sup>3</sup> /max. fluctuation <sup>4</sup>	5.5 °C / 4.4 °C
External cabinet finish	steel/white
Door material / colour	steel/white
Internal liner material	commercial grade moulded poly
Type of control	2.4" touch & swipe colour displa
Power failure alarm	immediately upon power failure
Fault: warning signal / Volt-free alarm contact	visual and audible/yes
SmartMonitoring compatible / Connectivity type	yes/SmartModule
Connectivity solution / Interface	integrated, removable / WiFi/LA
Data logger	integrated, USB interface
Interior light	LED
Adjustable shelves / Shelf material	4/wire shelves plastic-coated
Usable shelf area in mm (w / d)	600/510
Shelf loading / Maximum total load	60 kg / 300 kg
Castors	castors with brake at the front,
Drawers / Number of baskets included	6/2
Handle	antimicrobial handle with openi
Access ports	1 x Ø 10 mm
DIN 13277	yes
Type of lock	mechanical
Door hinges	right, reversible on site
Gross / net weight	113/104 kg
Accessories	
White grid shelf	7112590

White grid shelf	7112590
White base grid	
Standard full-depth basket	9141791
Castors Ø 80 mm / Ø 100 mm	9086926/-
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
Product sensor (PT 1000)	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



# Laboratory freezers with plastic inner liner



SFFvh 5501



SFFvh 4001 Perfection

273/174 litre	
597/654/1884	
420/400/1400	
292 kWh	
+10°C to +35°C	
479 kJ/h	
R 600a	
46 dB(A)	
220-240V~/50 Hz	
2.0 A/230 W	
forced-air/automatic	
-9 °C to -35 °C ²	
6.9°C/6.4°C	
steel/white	
steel/white	
commercial grade moulded polystyrene	
2.4" touch & swipe colour display	
immediately upon power failure for at least 12 hrs	
visual and audible/yes	
yes/SmartModule	
integrated, removable / WiFi/LAN	
integrated, USB interface	
LED	
6/wire shelves plastic-coated	
420/400	
45 kg/315 kg	
6/-	
antimicrobial handle with opening mechanism	
1 x Ø 10 mm	
yes	
mechanical	
right, reversible on site	
86/81 kg	
7113416	
7113410 7112594	
/112074	
0094024 / 0090027	_
9086926/9080023	
9080022/9086924	_
on request	
9006786 6942678	
074/0/0	

**Research and laboratory** 

& swipe colour display

ly upon power failure for at least 12 hrs

, removable / WiFi/LAN

ith brake at the front, fixed castors at the rear

ial handle with opening mechanism

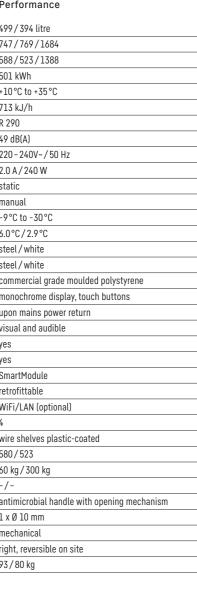


# SFFsg 5501 Performance

Gross / net capacity	499/394 litre
Exterior dimensions in mm (w / d / h)	747/769/1684
Interior dimensions in mm (w / d / h)	588/523/1388
Energy consumption in 365 days <sup>1</sup>	501 kWh
Ambient temperature range	+10°C to +35°C
Heat output	713 kJ/h
Refrigerant	R 290
Sound power level	49 dB(A)
Voltage / frequency	220-240V~/50 H
Connection rating / Rated consumption watts	2.0 A / 240 W
Cooling system	static
Defrost	manual
Temperature range	-9°C to -30°C
Gradient <sup>2</sup> / max. fluctuation <sup>3</sup>	6.0°C/2.9°C
External cabinet finish	steel/white
Door material / colour	steel / white
Internal liner material	commercial grade
Type of control	monochrome displ
Power failure alarm	upon mains power
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
SmartMonitoring compatible	yes
Connectivity type	SmartModule
Connectivity solution	retrofittable
Interface	WiFi/LAN (optiona
Removable shelves	4
Shelf material	wire shelves plasti
Usable shelf area in mm (w / d) 580/52	
Shelf loading / Maximum total load	60 kg / 300 kg
Drawers / Number of baskets included	-/-
Handle	antimicrobial hand
Access ports	1 x Ø 10 mm
Type of lock	mechanical
Door hinges	right, reversible on
Gross / net weight	93 / 80 kg

### Accessories

Glass shelf / Full-depth drawer	
Short bottom basket / Standard full-depth basket	
Castors Ø 80 mm / Ø 100 mm	
Adjustable feet, 90 – 120 mm / 150 – 180 mm	
Additional lock barrels (up to 5)	
Side-by-Side set in white	
SmartModule	



9293495/9749825	
9141004/9141791	
9086926/9080023	
9080022/9086924	
on request	
9017739	
6145269	

And
SFFsg 5501 ver. 740 Performance
499/310 litre
747/769/1684
588/523/1388
501 kWh
+10°C to +35°C
713 kJ/h
R 290
49 dB(A)
220 - 240V~ / 50 Hz
2.0 A/240 W
static
manual
-9°C to -30°C
6.0°C/2.9°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
wire shelves plastic-coated
580/523
60 kg / 300 kg
8/2
antimicrobial handle with opening mechanism
1 x Ø 10 mm
mechanical
right, reversible on site

9293495/-	
-/-	
9086926/9080023	
9080022/9086924	
on request	
9017739	
6145269	

104/99 kg



	i onomanoo
Gross / net capacity	316/242 litre
Exterior dimensions in mm (w/d/h)	597/654/1884
Interior dimensions in mm (w / d / h)	403/408/1588
Energy consumption in 365 days <sup>1</sup>	385 kWh
Ambient temperature range	+10°C to +35°C
Heat output	529 kJ/h
Refrigerant	R 290
Sound power level	49 dB(A)
Voltage / frequency	220-240V~/50 Hz
Connection rating / Rated consumption watts	2.0 A/220 W
Cooling system	static
Defrost	manual
Temperature range	-9°C to -30°C
Gradient <sup>2</sup> / max. fluctuation <sup>3</sup>	5.7°C/2.5°C
External cabinet finish	steel/white
Door material / colour	steel/white
Internal liner material	commercial grade mo
Type of control	monochrome display,
Power failure alarm	upon mains power ret
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
SmartMonitoring compatible	yes
Connectivity type	SmartModule
Connectivity solution	retrofittable
Interface	WiFi/LAN (optional)
Removable shelves	5
Shelf material	wire shelves plastic-c
Usable shelf area in mm (w / d)	400/408
Shelf loading / Maximum total load	45 kg / 270 kg
Drawers	
Handle	antimicrobial handle
Access ports	1 x Ø 10 mm
Type of lock	mechanical
Door hinges	right, reversible on sit
Gross / net weight	82/77 kg
Accessories	
Long drawer / Short drawer	9749823/9749844
Glass shelf	9293499
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

SmartModule



# SFFsg 4001 Performance

	403/408/1588
_	385 kWh
_	+10°C to +35°C
_	529 kJ/h
_	R 290
_	49 dB(A)
_	220-240V~/50 Hz
_	2.0 A/220 W
_	static
_	manual
_	-9°C to -30°C
_	5.7°C/2.5°C
_	steel/white
_	steel/white
_	commercial grade moulded pol
_	monochrome display, touch but
_	upon mains power return
_	visual and audible
	yes
_	yes
	SmartModule
_	retrofittable
	WiFi/LAN (optional)
_	5
	wire shelves plastic-coated
	400/408
	45 kg/270 kg
	antimicrobial handle with open
	1 x Ø 10 mm
	mechanical
	right, reversible on site
	82/77 kg
_	
_	
_	9749823/9749844
_	9293499

 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements. 63

9006786

6145269

# Laboratory freezers with plastic inner liner



# **Research and laboratory**

# SFFsg 4001 ver. 740

Performance

316/190 litre
597/654/1884
403/408/1588
 385 kWh
+10°C to +35°C
 529 kJ/h
R 290
49 dB(A)
220 - 240V~ / 50 Hz
2.0 A/220 W
static
manual
 -9°C to -30°C
5.7°C/2.5°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
 wire shelves plastic-coated
 400/408
 45 kg / 270 kg
 6
 antimicrobial handle with opening mechanism
 1 x Ø 10 mm
 mechanical
 right, reversible on site
 87 / 82 kg
 -/-
 <u>-/-</u> 9293499
 9086926/9080023
 9080922/9086924
 on request

# olystyrene

uttons

### ning mechanism

6145269



SRTvh 1511 Perfection

Gross / net capacity
Exterior dimensions in mm (w / d / h)
Interior dimensions in mm (w / d / h)
Energy consumption in 365 days <sup>1</sup>
Ambient temperature range
Heat output
Refrigerant
Sound power level
Voltage / frequency
Connection rating / Rated consumption watts
Cooling system / Defrost
Temperature range
Gradient <sup>2</sup> /max. fluctuation <sup>3</sup>
External cabinet finish
Door material / colour
Internal liner material
Type of control
Power failure alarm
Fault: warning signal
Volt-free alarm contact
SmartMonitoring compatible / Connectivity type
Connectivity solution
Interface
Data logger
Interior light
Adjustable shelves / Shelf material
Usable shelf area in mm (w / d)
Shelf loading / Maximum total load
Handle
Access ports
Type of lock
Door hinges
Gross / net weight

### Accessories

Worktop, white	
White grid shelf	
Pharmacy drawer	
Perforated metal shelf, white	
Castors / Adjustable legs	
Scanner rail	
Additional lock barrels (up to 5)	
Stacking kit, white	
Side-by-Side set in white	

137/97	litre
597/605	5/819
450/460	)/620
187 kWh	
+10°C to	+35°C
208 kJ/h	1
R 600a	
45 dB(A)	
220-240	0V~/50 Hz
2.0 A/60	W
forced-ai	r/automatic
+3°C to +	+16°C
3.7°C/2	.9°C
steel/w	nite
Insulated	l glass door with plastic frame / white
commerc	ial grade moulded polystyrene
2.4" touc	h & swipe colour display
immediat	tely upon power failure for at least 12 hrs
visual an	d audible
yes	
yes/Sma	artModule
integrate	d, removable
WiFi/LAN	1
integrate	d, USB interface
vertical LE	ED light strip recessed in left wall with separate switch
3/wire s	helves plastic-coated
450/425	5
45 kg/18	80 kg
antimicro	bial handle with opening mechanism
1 x Ø 12	mm
mechanio	cal
right, rev	ersible on site
45/43 k	g
9876118	

7113408

9876137

7746588

7401607 on request

9876098

9031901

9904819/9906105

1.	
	<u>.</u>
	-
the second se	
	New
SRTvh 1501	
Perfection	
134/97 litre	
597/605/819	
450/440/620	
111 kWh	
+10°C to +35°C	
198 kJ/h	
R 600a	
43 dB(A)	
220-240V~/50 Hz	
2.0 A/50 W	
forced-air/automatic	

0.3 

450/440/620
111 kWh
+10 °C to +35 °C
198 kJ/h
R 600a
43 dB(A)
220-240V~/50 Hz
2.0 A/50 W
forced-air / automatic
+3 °C to +16 °C
3.7°C/3.4°C
steel/white
steel/white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at least 12 hrs
visual and audible
yes
yes/SmartModule
integrated, removable
WiFi/LAN
integrated, USB interface
LED lighting column, left
3/wire shelves plastic-coated
450/425
45 kg / 180 kg
antimicrobial handle with opening mechanism
1 x Ø 12 mm
mechanical
right, reversible on site
37/33 kg

9876118		
7113408		
9876137		
7746588		
9904819/9906105		
7401607		
on request		
9876098		
9031901		
		-



# SRTvg 1511 Performance

137/97 litre

Gross / net capacity

Heat output Refrigerant Sound power level Voltage / frequency

Exterior dimensions in mm (w / d / h) Interior dimensions in mm (w / d / h) Energy consumption in 365 days <sup>1</sup>

Connection rating / Rated consumption watts

SmartMonitoring compatible / Connectivity type

Ambient temperature range

Cooling system / Defrost Temperature range Gradient<sup>2</sup>/max. fluctuation<sup>3</sup>

External cabinet finish

Door material / colour Internal liner material

Fault: warning signal Volt-free alarm contact

Connectivity solution

Adjustable shelves / Shelf material Usable shelf area in mm (w / d) Shelf loading / Maximum total load

Interface

Handle

Access ports Type of lock Door hinges Gross / net weight

Interior light

Type of control Power failure alarm

	13// 9/ uue
_	597/605/819
_	450/460/620
_	214 kWh
_	+10°C to +35°C
_	202 kJ/h
-	R 600a
	49 dB(A)
	220-240V~/50 Hz
	2.0 A/100 W
	forced-air/automatic
	+3°C to +16°C
	3.7°C/5.2°C
	steel/white
	Insulated glass door with plast
	commercial grade moulded pol
	monochrome display, touch bu
	upon mains power return
	visual and audible
	yes
	yes/SmartModule
	retrofittable
	WiFi/LAN (optional)
	LED ceiling light strip with sep
	3/wire shelves plastic-coated
	450/425
	45 kg / 180 kg
	antimicrobial handle with oper
	1 x Ø 12 mm
	mechanical
	right, reversible on site
	45/43 kg

Accessories	
Worktop, white	9876118
White grid shelf	7113408
Perforated metal shelf, white	7746588
Castors / Adjustable legs	9904819/9906105
Scanner rail	7401607
Additional lock barrels (up to 5)	on request
Stacking kit, white	9876098
Side-by-Side set in white	9031901
SmartModule	6145269

 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C for freezers
 Gradient as defined in EN 60068-3: the difference between the warmest and coldest average measurements, increased by their expanded uncertainty, throughout the duration.
 Max. fluctuation as per EN 60068-3: greatest fluctuation value determined throughout the duration of measurements. 65



SRTvg 1501
Performance

New

# **Research and laboratory**

	134/97 litre
	597/605/819
	450/440/620
	156 kWh
	+10°C to +35°C
	198 kJ/h
	R 600a
	47 dB(A)
	220-240V~/50 Hz
	2.0 A/100 W
	forced-air/automatic
	+3°C to +16°C
	4.9°C/4.4°C
	steel/white
astic frame/white	steel/white
polystyrene	commercial grade moulded polystyrene
buttons	monochrome display, touch buttons
	upon mains power return
	visual and audible
	yes
	yes/SmartModule
	retrofittable
	WiFi/LAN (optional)
separate switch	
ted	3/wire shelves plastic-coated
	450/425
	45 kg/180 kg
pening mechanism	antimicrobial handle with opening mechanism
	1 x Ø 12 mm
	mechanical
	right, reversible on site
	39/35 kg
	007/110
	9876118
	7113408
	7746588
	9904819/9906105
	7401607
	on request
	9876098
	9031901 6145269
	0140207



SFTvh 1501 Perfection

Gross / net capacity	103/59 litre
Exterior dimensions in mm (w / d / h)	597/605/819
Interior dimensions in mm (w / d / h)	380/330/600
Energy consumption in 365 days <sup>1</sup>	187 kWh
Ambient temperature range	+10°C to +35°C
Heat output / Refrigerant	280 kJ/h / R 600a
Sound power level	39 dB(A)
Voltage / frequency	220-240V~/50 Hz
Connection rating	2.0 A
Rated consumption watts	80 W
Cooling system / Defrost	forced-air/automatic
Temperature range	-9°C to -35°C ²
Gradient <sup>3</sup> / max. fluctuation <sup>4</sup>	3.2°C/3.9°C
External cabinet finish	steel/white
Door material / colour	steel/white
Internal liner material	commercial grade moulde
Type of control	2.4" touch & swipe colour
Power failure alarm	immediately upon power fa
	least 12 hrs
Fault: warning signal	visual and audible
Volt-free alarm contact	yes
SmartMonitoring compatible	yes
Connectivity type	SmartModule
Connectivity solution	integrated, removable
Interface	WiFi/LAN
Data logger	integrated, USB interface
Interior light	LED
Shelf material	glass
Usable shelf area in mm (w / d)	380/266
Shelf loading / Maximum total load	40 kg / 120 kg
Drawers	3
Handle	antimicrobial handle with op
Access ports	1 x Ø 10 mm
Type of lock / Door hinges	mechanical / right, reversi
Gross / net weight	42/39 kg
Accessories	
Worktop, white	9876118
Drawer set	
Castors / Adjustable legs	9904819/9906105

280 kJ/h/R 600a	
39 dB(A)	
220 - 240V~/50 H	2
2.0 A	
80 W	
forced-air/automa	itic
-9°C to -35°C ²	
3.2°C/3.9°C	
steel/white	
steel/white	
commercial grade	moulded polystyrene
2.4" touch & swipe	colour display
immediately upon	power failure for at
least 12 hrs	
visual and audible	
yes	
yes	
SmartModule	
integrated, remova	ble
WiFi/LAN	
integrated, USB int	erface
LED	
glass	
380/266	
40 kg / 120 kg	
3	
antimicrobial handle	with opening mechanism
1 x Ø 10 mm	
mechanical/right,	reversible on site
42/39 kg	

on request

9876098

9031901



New

SFTsg 1501 Performance

9031901

6145269

i onormanoo	i onioni
101/69 litre	101/71 li
597/605/819	597/605
380/410/610	380/410
180 kWh	180 kWh
+10 °C to +35 °C	+10°C to +
294 kJ/h / R 600a	294 kJ/h,
40 dB(A)	40 dB(A)
220-240V~/50 Hz	220-240
2.0 A	2.0 A
110 W	110 W
static/manual	static/ma
-9°C to -30°C	-9°C to -3
7.4°C/3.3°C	7.4°C/3.3
steel/white	steel/whi
steel/white	steel/whi
commercial grade moulded polystyrene	commerci
monochrome display, touch buttons	monochro
upon mains power return	upon mair
visual and audible	visual and
yes	yes
yes	yes
SmartModule	SmartMod
retrofittable	retrofittab
WiFi/LAN (optional)	WiFi/LAN
uire shelues plastic costed	
wire shelves plastic-coated	glass
380/338	$\frac{380}{347}$
45 kg / 135 kg	40 kg / 12
and a family of the south and the state	3
antimicrobial handle with opening mechanism	antimicrob
1 x Ø 10 mm	1 x Ø 10 m
mechanical / right, reversible on site	mechanica
37/34 kg	40/37 kg
9876118	9876118
9876260	
9904819/9906105	9904819/
on request	on reques
9876098	9876098

	101/71 litre
	597/605/819
	380/410/610
	180 kWh
	+10°C to +35°C
	294 kJ/h/R 600a
	40 dB(A)
	220-240V~/50 Hz
	2.0 A
	110 W
	static/manual
	-9°C to -30°C
	7.4°C/3.3°C
	steel/white
	steel/white
е	commercial grade moulded polystyrene
	monochrome display, touch buttons
	upon mains power return
	visual and audible
	yes
	yes
	SmartModule
	retrofittable
	WiFi/LAN (optional)
	glass
	380/347
	40 kg / 120 kg
	3
nism	antimicrobial handle with opening mechanism
	1 x Ø 10 mm
	mechanical / right, reversible on site
	40/37 kg
	9876118
	000/010/000/105
	9904819/9906105
	on request
	9876098
	9031901

6145269



SFTsg 1501 ver. 740 Performance

Gross / net capacity	fridge com
Gross / net capacity	freezer com
Exterior dimensions in mm (w / d	/ h)
Interior dimensions in mm (w / d /	/h) fridge com
Interior dimensions in mm (w / d /	/ h) freezer com
Energy consumption in 365 days <sup>1</sup>	
Ambient temperature range	
Heat output / Refrigerant	
Sound power level	
Voltage / frequency	
Connection rating / Rated consum	nption watts
Cooling system	fridge / freezer com
Defrost	fridge / freezer com
Temperature range	fridge / freezer com
Gradient <sup>3</sup>	fridge / freezer com
Max. fluctuation '	fridge / freezer com
External cabinet finish	
Door material / colour	
Internal liner material	
Type of control	
Power failure alarm	
Fault: warning signal / Volt-free a	larm contact
SmartMonitoring compatible / Co	nnectivity type
Connectivity solution / Interface	
Data logger	
Interior light	fridge / freezer com
Adjustable shelves	fridge com
Shelf material	fridge / freezer com
Usable shelf area in mm (w / d)	fridge com
Shelf loading	fridge / freezer com
Maximum total load	-
Drawers	freezer com
Handle	
Access ports / DIN 13277	
Type of lock / Door hinges	
Gross / net weight	
Accessories	
Pharmacy drawer	
White grid shelf / White base grid	1
Perforated metal shelf, white	•
Scanner rail	
Additional lock barrels	

Side-by-Side set in white

# SCFvh 4032 Perfection

284/2	06 litre
112/5	8 litre
597/6	54/2044
460/4	23/1037
406/2	92/595
459 kW	/h
+10°C	to +35 °C
380 kJ	/h/R 600a
48 dB(/	A)
220-2	40V~/50/60 Hz
2.0 A/	160 W
forced	-air / forced-air
automa	atic/automatic
+3°C to	o +16°C / -9°C to -30°C
3.3°C/	4.3°C
2.9°C/	/7.6°C
steel/	white
glass d	loor/steel/white
comme	ercial grade moulded polysty
2.4" to	uch & swipe colour display
immed	iately upon power failure for
visual	and audible/yes
yes/S	martModule
integra	ited, removable / WiFi/LAN
integra	ited, USB interface
vertical	LED light strip recessed in left wall
4	
wire sh	nelves plastic-coated / glass
460/4	23
45 kg /	40 kg
345 kg	
3	
antimio	crobial handle with opening r
2 x Ø 1	0 mm/yes
mecha	nical/right, reversible on sit
103/9	7 kg
903286	57
711330	08/7113272
902902	22

1 Measured at +25°C ambient temperature and +5°C set temperature for fridges and -20°C f
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 r
4 Max, fluctuation as ner EN 60068-3; greatest fluctuation value determined throughout th

7435208

on request

9027388

Additional lock barrels (up to 5)

Stacking kit, white

SmartModule

Side-by-Side set in white

# Laboratory fridge-freezer combination with plastic inner liner



# **Research and laboratory**

SCFvh 4002 Perfection

	272/206 litre
	112/58 litre
	597 / 654 / 2044
	460/423/1037
	406/292/595
	277 kWh
	+10°C to +35°C
	290 kJ/h/R 600a
	48 dB(A)
	220-240V~/50/60 Hz
	2.0 A / 140 W
	forced-air / forced-air
	automatic / automatic
С	+3°C to +16°C / -9°C to -30°C
	3.3°C/3.3°C
	3.0°C/6.4°C
	steel/white
	steel/white
lystyrene	commercial grade moulded polystyrene
lay	2.4" touch & swipe colour display
re for at least 12 hrs	immediately upon power failure for at least 12 hrs
	visual and audible / yes
	yes/SmartModule
AN	integrated, removable / WiFi/LAN
	integrated, USB interface
ft wall with separate switch / LED	LED lighting column, left / LED
	4
lass	wire shelves plastic-coated / glass
	460/423
	45 kg / 40 kg
	345 kg
	3
ning mechanism	antimicrobial handle with opening mechanism
5	2 x Ø 10 mm / yes
on site	mechanical/right, reversible on site
	90 / 83 kg
	9032867
	7113308/7113272
	9029022
	7435208
	on request
	9027388

for freezers.

67

# 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

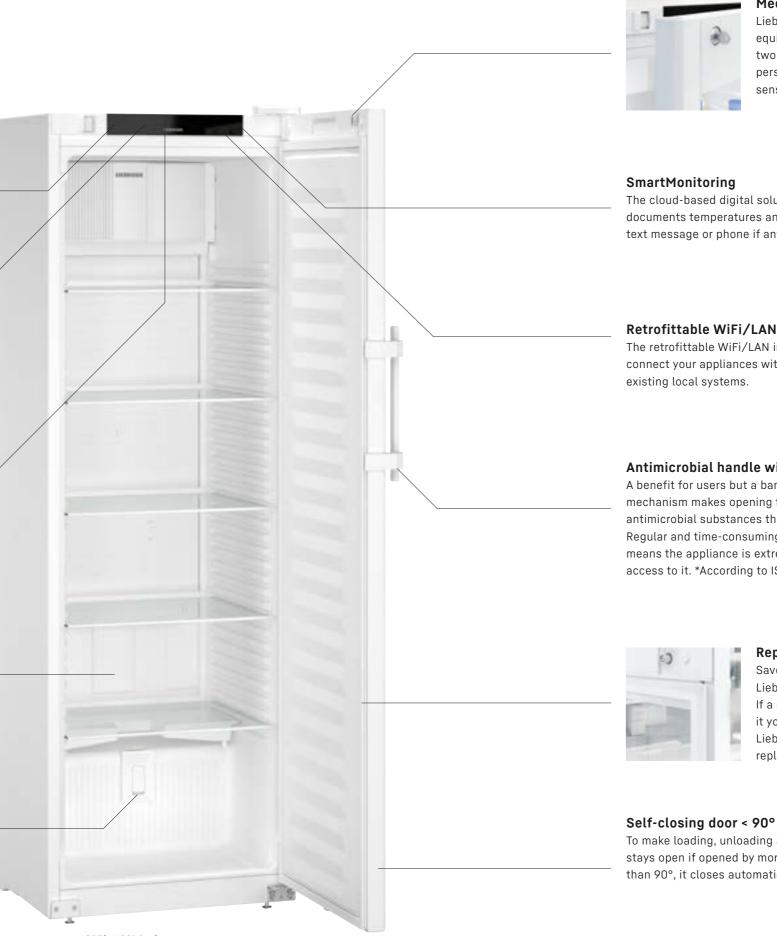
The min./max. temperature log stores the minimum and maximum interior temperatures and shows on the display whether the storage temperatures were within the tolerance limits.

# 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.

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

# 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.

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.

# Quality right down to the smallest detail



Explosion protection: ATEX 95

the Liebherr spark-free laboratory

suitable for storing explosive and

highly flammable materials as defined

by EU Directive 2014/34/EU (ATEX).

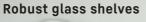
refrigerators and freezers are

The ATEX-95 certification confirms that



### 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.



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.

# Norm JEC 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.



SRFfg 5501
Performance

747	/769/1684
600	/537/1460
399	kWh
+10	°C to +35 °C
408	kJ/h
R 60	0a
49 d	B(A)
220	- 240V~ / 50 Hz
2.0	4
145	W
forc	ed-air/automatic
+3°	C to +16 °C
3.7°	C/3.0°C
stee	l/white
stee	l/white
com	mercial grade moulded polystyrene
mon	ochrome display, touch buttons
upo	n mains power return
visu	al and audible
yes	
yes	
Sma	rtModule
retro	ofittable
WiF	/LAN (optional)
5	
glas	S
600	/537
40 k	g / 300 kg
anti	microbial handle with opening mechanism
1 x Ø	ð 10 mm
yes	
mec	hanical
righ	t, reversible on site

9291929	
7435210	
9086926/9080023	
9080022/9086924	
on request	
9017739	
6145269	



SRFfg 4001
Performance

597/654/1884	
460/422/1660	
400/ 422/ 1000 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 mechanisn	n
1 x Ø 10 mm	
yes	
mechanical	
right, reversible on site	
74 / 68 kg	

Feriormance	Feilofilialice
394/298 litre	344/261 litre
597/654/1884	597/654/1684
460/422/1660	460/423/1460
421 kWh	406 kWh
+10 °C to +35 °C	+10 °C to +35 °C
454 kJ/h	388 kJ/h
R 600a	R 600a
49 dB(A)	48 dB(A)
220-240V~/50 Hz	220-240V~/50 Hz
2.0 A	2.0 A
140 W	120 W
forced-air/automatic	forced-air/automatic
+3°C to +16°C	+3 °C to +16 °C
5.1°C/3.2°C	3.6°C/3.1°C
steel/white	steel/white
steel/white	steel/white
commercial grade moulded polystyrene	commercial grade moulded polystyrene
monochrome display, touch buttons	monochrome display, touch buttons
upon mains power return	upon mains power return
visual and audible	visual and audible
yes	yes
yes	yes
SmartModule	SmartModule
retrofittable	retrofittable
WiFi/LAN (optional)	WiFi/LAN (optional)
5	4
glass	glass
460 / 422	460/423
40 kg / 225 kg	40 kg / 180 kg
antimicrobial handle with opening mechanism	antimicrobial handle with opening mechanism
1 x Ø 10 mm	1 x Ø 10 mm
yes	yes
mechanical	mechanical
right, reversible on site	right, reversible on site
74/68 kg	68/60 kg
0007/07	0007/07
9293493	9293493
7435208	7435208
9086926 / 9080023	9086926 / 9080023
9080022/9086924	9080022/9086924
on request	on request
9006786	9017739
6145269	6145269

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

Gross / net capacity	
Exterior dimensions in	1 mm (w / d / h)
Interior dimensions in	mm (w/d/h)
Energy consumption in	n 365 days 1
Ambient temperature	range
Heat output	
Refrigerant	
Sound power level	
Voltage / frequency	
Connection rating	
Rated consumption wa	atts
Cooling system / Defr	ost
Temperature range	
Gradient <sup>2</sup> /max. fluct	uation <sup>3</sup>
External cabinet finisl	h
Door material / colour	
Internal liner material	
Type of control	
Power failure alarm	
Fault: warning signal	
Volt-free alarm contac	ct
SmartMonitoring com	patible
Connectivity type	
Connectivity solution	
Interface	
Adjustable shelves	
Shelf material	
Usable shelf area in m	ım (w / d)
Shelf loading / Maxim	um total load
Handle	
Access ports	
ATEX conformity	
Type of lock	
Door hinges	
Gross / net weight	
Accessories	
Glass shelf	
Scanner rail	



# SRFfg 3501 Performance

# 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 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.



### 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.

### Gross / net capacity

Exterior dimensions in mm (w/d/h)Interior dimensions in mm (w/d/h)Energy consumption in 365 days <sup>3</sup> Ambient temperature range Heat output Refrigerant Sound power level Voltage / frequency **Connection rating Rated consumption watts** Cooling system / Defrost Temperature range Gradient<sup>2</sup>/max. fluctuation<sup>3</sup> **External cabinet finish** Door material / colour Internal liner material Type of control Power failure alarm Fault: warning signal Volt-free alarm contact SmartMonitoring compatible **Connectivity type Connectivity solution** Interface Removable shelves Shelf material Usable shelf area in mm (w/d)Shelf loading / Maximum total load Drawers Handle Access ports ATEX conformity Type of lock Door hinges Gross / net weight Accessories

Long drawer / Short drawer Castors Ø 80 mm / Ø 100 mm Adjustable feet, 90 - 120 mm / 150 - 180 mm Additional lock barrels (up to 5) Side-by-Side set in white SmartModule



### SFFfg 5501 Performance

499/394 litre 747/769/1684 588/517/1388 516 kWh +10 °C to +35 °C 713 kJ/h R 290 49 dB(A) 220-240V~/50 Hz 2.0 A 240 W static/manual -9°C to -30°C 5.4°C/3.3°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) alass 580/517 40 kg/300 kg antimicrobial handle with opening mechanism 1 x Ø 10 mm

mechanical right, reversible on site 95/88 kg

yes

9749825/-

on request

9017739

6145269

9086926/9080023

9080022/9086924

 -/-
 9086926/9080023
9080022/9086924
on request
9017739
6145269

right, reversible on site

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.





### SFFfg 4001 Performance

SFFfg 5501 ver. 740

Performance

499/310 litre

747/769/1684

588/517/1388

+10 °C to +35 °C

220-240V~/50 Hz

static/manual

-9°C to -30°C

5.4°C/3.3°C

steel/white

steel / white

commercial grade moulded polystyrene

antimicrobial handle with opening mechanism

monochrome display, touch buttons

upon mains power return

visual and audible

yes

yes

SmartModule

retrofittable

glass

580/517

40 kg/300 kg

1 x Ø 10 mm

mechanical

106/89 kg

yes

WiFi/LAN (optional)

516 kWh

713 kJ/h

49 dB(A)

R 290

2.0 A

240 W

316/242 litre
597/654/1884
403/402/1588
384 kWh
+10 °C to +35 °C
529 kJ/h
R 290
49 dB(A)
220-240V~/50 Hz
2.0 A
220 W
static/manual
-9 °C to -30 °C
5.2°C/2.4°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
400/402
40 kg / 270 kg

antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
mechanical
right, reversible on site
83/76 kg

9749823/9749844	
9086926/9080023	
9080022/9086924	
on request	
9006786	
6145269	



# **Research and laboratory**

### SFFfg 4001 ver. 740 Performance

1 er formanee
316/190 litre
597/654/1884
403/402/1588
384 kWh
+10 °C to +35 °C
529 kJ/h
R 290
49 dB(A)
220-240V~/50 Hz
2.0 A
220 W
static / manual
-9 °C to -30 °C
5.2°C/2.4°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
400/402
40 kg/270 kg
6
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
mechanical
right, reversible on site
90/82 kg
_/-
<u>/</u> 9086926/9080023
9080022/9086924
on request
9006786

6145269



SRTfg 1501
Performance

Gross / net capacity	134/98 litre
Exterior dimensions in mm (w / d / h)	597/605/819
Interior dimensions in mm (w / d / h)	450/440/620
Energy consumption in 365 days <sup>1</sup>	156 kWh
Ambient temperature range	+10 °C to +35 °C
Heat output	198 kJ/h
Refrigerant	R 600a
Sound power level	47 dB(A)
Voltage / frequency	220 - 240V~ / 50 Hz
Connection rating / Rated consumption watts	2.0 A/100 W
Cooling system / Defrost	forced-air/automatic
Temperature range	+3°C to +16°C
Gradient <sup>2</sup> / max. fluctuation <sup>3</sup>	4.9°C/4.4°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	3
Shelf material	glass
Usable shelf area in mm (w / d)	450/421
Shelf loading / Maximum total load	40 kg/160 kg
Drawers	
Handle	antimicrobial handle with opening mechanisr
Access ports	1 x Ø 12 mm
ATEX conformity	yes
Type of lock / Door hinges	mechanical / right, reversible on site
Gross / net weight	40 / 37 kg
Accessories	
Worktop, white	9876118
Short drawer / Long drawer	
Glass shelf	9295392
Castors / Adjustable legs	9904819/9906105
Additional lock barrels (up to 5)	on request
Stacking kit, white	9876098
Side-by-Side set in white	9031901
SmartModule	6145269



SFTfg 1501
Performance

New

101 / 73 litre	101/71
<u>597/605/819</u>	597/60
380/410/610	380/41
180 kWh	180 kW
+10°C to +35°C	+10°C t
294 kJ/h	294 kJ/
R 600a	R 600a
40 dB(A)	40 dB(A
220 - 240V~ / 50 Hz	220 - 24
2.0 A/110 W	2.0 A/1
static/manual	static/
-9°C to -30°C	-9°C to
7.4°C/3.3°C	7.4°C/
steel/white	steel/v
steel/white	steel/v
commercial grade moulded polystyrene	comme
monochrome display, touch buttons	monoch
upon mains power return	upon m
visual and audible	visual a
yes	yes
yes	yes
SmartModule	SmartM
retrofittable	retrofitt
WiFi/LAN (optional)	WiFi/LA
glass	glass
380/347	380/34
40 kg / 120 kg	40 kg /
	3
antimicrobial handle with opening mechanism	antimicr
1 x Ø 10 mm	1 x Ø 10
yes	yes
mechanical / right, reversible on site	mechar
38 / 35 kg	40/35
9876118	987611
9876296 / 9876279	
9904819/9906105	990481
on request	on requ
9876098	987609
9031901	903190

6145269

	Performance
_	101/71 litre
_	597/605/819
_	380/410/610
_	180 kWh
_	+10°C to +35°C
_	294 kJ/h
_	R 600a
_	40 dB(A)
_	220-240V~/50 Hz
_	2.0 A/110 W
_	static/manual
_	-9°C to -30°C
_	7.4°C/3.3°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)
-	glass
_	380/347
_	40 kg / 120 kg
_	3
1	antimicrobial handle with opening mechanism
_	1 x Ø 10 mm
_	yes
_	mechanical / right, reversible on site
-	40 / 35 kg
-	9876118
-	,0,0110
-	
_	9904819/9906105
_	on request
_	9876098
_	9031901



SFTfg 1501 ver 740

fridge compartment
freezer compartment
fridge compartment
freezer compartment
n watts
fridge / freezer comp.
Thuge / Treezer comp.
contact
contact
ion
fridaa aampartmant
fridge compartment
fridge / freezer comp. fridge compartment
• •
fridge / freezer comp.
£
freezer compartment

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

### Laboratory fridge-freezer combinations with spark-free interior



# SCFfg 4002 Performance

267 / 199 litre
110/62 litre
597/654/2044
460/422/1037
406/292/614
390 kWh
+10 °C to +35 °C
350 kJ/h
R 600a
48 dB(A)
220-240V~/50/60 Hz
2.0 A/170 W
forced-air/static
automatic/manual
+3 °C to +16 °C / -9 °C to -30 °C
4.6°C/5.6°C
3.6°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)
4
glass/glass
//0//00
460/422
400/422 40 kg / 40 kg
40 kg / 40 kg
40 kg / 40 kg 345 kg
40 kg / 40 kg 345 kg 3
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical right, reversible on site
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical right, reversible on site
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical right, reversible on site 89 / 83 kg
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical right, reversible on site 89 / 83 kg 9293493
40 kg / 40 kg 345 kg 3 antimicrobial handle with opening mechanism 2 x Ø 10 mm yes mechanical right, reversible on site 89 / 83 kg 9293493 on request

### 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.

### 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

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.

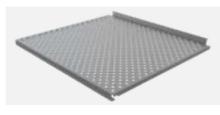


### Grid shelf grey

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.



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



### 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.



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.

To protect the stored products from unwanted



### 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.



### 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.

### 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.

### 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

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.



### 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 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.



### Flexible scanner rail Scanner rails provide a perfect overview of the materials stored in the refrigerator. Thanks to

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.



### Workton

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.



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

Additional shelves made of high-quality safety



### 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.

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



### 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.

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
	<b>Pharmaceutical storage</b> HMFvh / HMTvh
Temperature stability	Refrigerators +/-2 K dev (model version H63 +/-3
	Calibration option
Storage safety	Visual and audible alarms
	Alarm relay
	Alarm test function
	+2 °C SafetyDevice fund
	Alarm with battery back immediately upon powe
	Alarm history with real-ti
	Integrated data logger
	PT1000 product sensor
	Min./max. temperature
	Self-closing door at < 90
	Custom alarm settings
	Electronic lock
Interfaces	Integrated LAN/WiFi
	Local API
	USB interface for readir
SmartMonitoring	SmartModule integrated
Features	2.4" touch & swipe colo
	Individually adjustable
	Castors/adjustable feet a 75 cm wide appliances w
	Evaporator cover (stops items freezing to i
	Sensor feedthrough
	Insulated and glass door
	Antimicrobial handle with
Energy consumption	Ultra-efficient
Compliance	Safety according to IEC 6
	Fulfils DIN 13277

viation	from	setpoint
3 K)		

ms

nction

ckup (12 h) ver failure

-time clock and 10 events

e log

90°

s possible

ding the data logger

lour display

e maintenance timer

t as accessories, with castors as standard

o inner liner)

or models with vertical lighting

ith opening mechanism

61010-2-011

# 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.

### +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.



### Vertical LED lighting

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

### LightAlarm

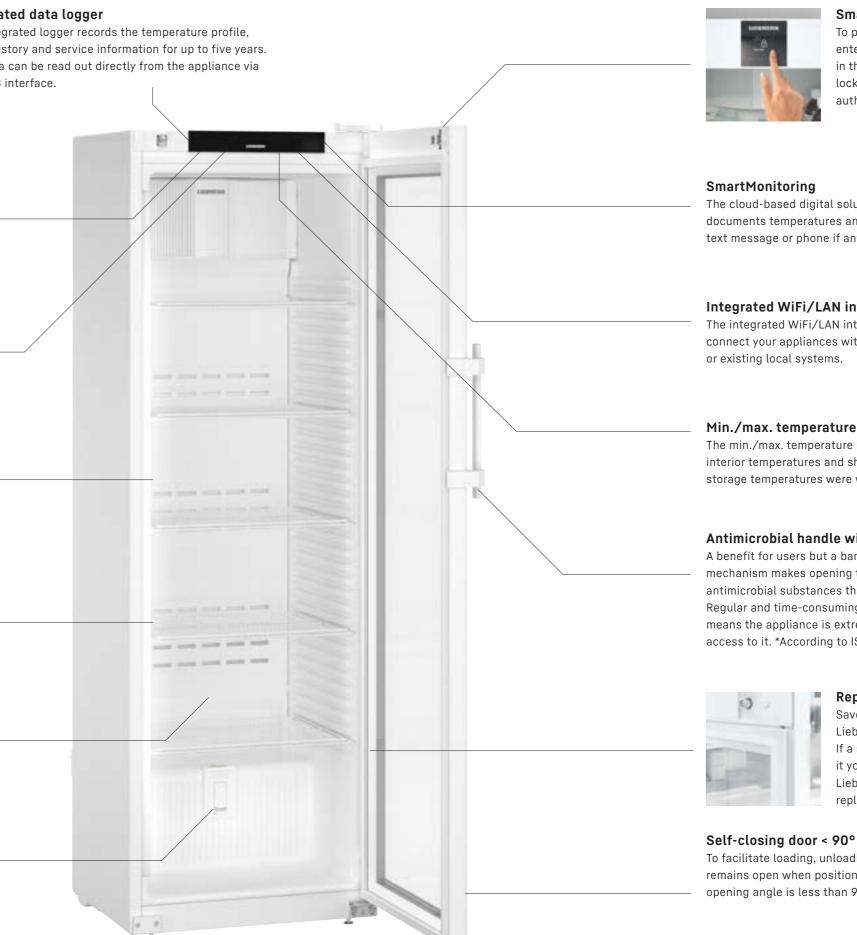
In the event of an uncontrolled temperature rise or other problems, the interior light of the appliance starts flashing. This quickly shows when action is needed.

### 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.



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.

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

### 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

### 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.

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.



# 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.

# ڴ<u>ا</u>لْطْ

### ±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

### 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.





### **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.



### 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.

### **HMFvh 4011** Perfection

420/297 litre

Gross / net capacity

Heat output

Refrigerant

Sound power level

Voltage / frequency

Temperature range

External cabinet finish

Door material / colour

Internal liner material

Power failure alarm

Type of control

Data logger

Interior light

Shelf material

Handle

Access ports

DIN 13277

Accessories

Scanner rail

Cooling system / Defrost

Gradient<sup>2</sup>/max. fluctuation<sup>3</sup>

Exterior dimensions in mm (w / d / h)

Interior dimensions in mm (w/d/h)

Connection rating / Rated consumption watts

Fault: warning signal / Volt-free alarm contact

SmartMonitoring compatible / Connectivity type

Connectivity solution / Interface

Usable shelf area in mm (w / d)

Type of lock / Door hinges

White base grid / Glass shelf

Perforated metal shelf, white

Castors Ø 80 mm / Ø 100 mm

Side-by-Side set in white

Additional remote controls

Digital input for electronic lock

Adjustable feet, 90 - 120 mm / 150 - 180 mm

Gross / net weight

Pharmacy drawer

White grid shelf

Shelf loading / Maximum total load

Number of shelves / Adjustable shelves

Energy consumption in 365 days <sup>1</sup>

Ambient temperature range

 597/654/1884
460/423/1660
 389 kWh
+10°C to +35°C
 463 kJ/h
 R 600a
 49 dB(A)
 220-240V~/50 Hz
 2.0 A/180 W
 forced-air/automatic
 +5°C
3.0 °C / 2.4 °C
 steel/white
 Insulated glass door with plas
commercial grade moulded po
 2.4" touch & swipe colour disp
immediately upon power failur
visual and audible/yes
yes/SmartModule
integrated, removable / WiFi/L
 integrated, USB interface
vertical LED light strip recessed in
6/5
wire shelves plastic-coated
 460/423
 45 kg / 225 kg
 antimicrobial handle with oper
 1 x Ø 10 mm
yes
 electronic, with remote contro
87 / 82 kg

9032867
7113308
7113312/9293493
9029022
7435208
-/-
9080022/9086924
9006786
6123395
9086958

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



**HMFvh 5511** Perfection

588/435 litre
747/769/1793
600/536/1460
360 kWh
+10°C to +35°C
475 kJ/h
R 600a
49 dB(A)
220-240V~/50 Hz
2.0 A/190 W
forced-air/automatic
+5°C
3.3°C/2.0°C
steel/white
Insulated glass door with plastic frame / white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at least 12 hrs
visual and audible / yes
yes/SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
vertical LED light strip recessed in left wall with separate switc
6/5
wire shelves plastic-coated
600/536
60 kg / 300 kg
castors with brake at the front, fixed castors at the rear
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
electronic, with remote control/right, reversible on site
109/101 kg

### Accessories

Gross / net weight

Gross / net capacity

Heat output

Refrigerant

Sound power level

Voltage / frequency

Temperature range

External cabinet finish

Door material / colour

Internal liner material

Power failure alarm

Type of control

Data logger

Interior light

Shelf material

Castors

Handle

Access ports

Type of lock / Door hinges

DIN 13277

Cooling system / Defrost

Gradient<sup>2</sup>/max. fluctuation<sup>3</sup>

Connectivity solution / Interface

Usable shelf area in mm (w / d)

Shelf loading / Maximum total load

Number of shelves / Adjustable shelves

Exterior dimensions in mm (w / d / h)

Interior dimensions in mm (w/d/h)

Connection rating / Rated consumption watts

Fault: warning signal / Volt-free alarm contact

SmartMonitoring compatible / Connectivity type

Energy consumption in 365 days <sup>1</sup>

Ambient temperature range

Pharmacy drawer	
White grid shelf	
White base grid / Glass shelf	
Scanner rail	
Castors Ø 80 mm	
Adjustable feet, 90 – 120 mm / 150 – 180 mm	
Side-by-Side set in white	
Additional remote controls	
Digital input for electronic lock	

### 9032868 7113310 7113314/9291929 7435210 9086926 9080022/9086924 9017739 6123395 9086958

electronic, wit	th remote control/right, reversible on site
94/82 kg	
9032868	
7113310	
7113314/929	91929
7435210	
9086926	
9080022/908	36924
9017739	
6123395	
9086958	

castors with brake at the front, fixed castors at the rear

antimicrobial handle with opening mechanism

**HMFvh 5501** 

Perfection

558/436 litre

747/769/1793

600/536/1460

+10°C to +35°C

220-240V~/50 Hz

forced-air / automatic

commercial grade moulded polystyrene

immediately upon power failure for at least 12 hrs

2.4" touch & swipe colour display

integrated, removable / WiFi/LAN

visual and audible/yes

integrated, USB interface

LED lighting column, left

wire shelves plastic-coated

6/5

600/536

60 kg/300 kg

1 x Ø 10 mm

ves

yes/SmartModule

2.0 A/190 W

2.2°C/1.7°C

steel/white

steel/white

171 kWh

246 kJ/h

R 600a

49 dB(A)

+5°C

9	0	

### Pharmaceutical refrigerators compliant with DIN 13277



### HMFvh 4001 Perfection

	597/654
	460/423
	172 kWh
	+10°C to
	250 kJ/h
	R 600a
	49 dB(A)
	220-240
	2.0 A/18
	forced-aii
	+5°C
	2.4°C/2.
	steel/wh
tic frame/white	steel/wh
olystyrene	commerc
blay	2.4" touch
re for at least 12 hrs	immediat
	visual and
	yes/Sma
LAN	integrate
	integrate
n left wall with separate switch	LED lighti
	6/5
	wire shelv
	460/423
	45 kg / 22
ning mechanism	antimicro
	1 x Ø 10 r
	yes
l/right, reversible on site	electronic
	72/66 kg
	9032867
	7113308
	7113312
	9029022
	7435208
	9086926
	9080022
	9006786
	6123395
	9086958

394 / 295 litre
597/654/1884
460/423/1660
172 kWh
+10 °C to +35 °C
250 kJ/h
R 600a
49 dB(A)
220-240V~/50 Hz
2.0 A/180 W
forced-air/automatic
+5°C
2.4°C/2.2°C
steel/white
steel/white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at least 12 hrs
visual and audible / yes
yes/SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
LED lighting column, left
6/5
wire shelves plastic-coated
460/423
45 kg / 225 kg
antimicrobial handle with opening mechanism
1 x Ø 10 mm
yes
electronic, with remote control / right, reversible on site
72/66 kg
9032867
7113308
7113312/9293493
9029022
7435208
9086926/9080023
9080022/9086924
9006786

Pharmaceutical storage



### 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.

Gross / net capacity Exterior dimensions in mm (w / d / h) Interior dimensions in mm (w/d/h)Energy consumption in 365 days <sup>1</sup> Ambient temperature range Heat output / Refrigerant Sound power level Voltage / frequency Connection rating / Rated consumption watts Cooling system / Defrost Temperature range Gradient<sup>2</sup>/max. fluctuation<sup>3</sup> External cabinet finish Door material / colour Internal liner material Type of control Power failure alarm

Fault: warning signal / Volt-free alarm contact SmartMonitoring compatible / Connectivity type Connectivity solution / Interface Data logger Interior light

Number of shelves / Adjustable shelves Number of drawers / Shelf material Usable shelf area in mm (w/d)Shelf loading / Maximum total load Castors

Handle	
Access ports / DIN 13277	
Type of lock	
Door hinges	
Gross / net weight	

Accessories

Vhite grid shelf
Vhite base grid / Glass shelf
erforated metal shelf, white / Scanner rail
astors Ø 80 mm / Ø 100 mm
djustable feet, 90 - 120 mm / 150 - 180 mm
ide-by-Side set in white
dditional remote controls / Digital input for electronic lock



HMFvh 5511 ver. H63 Perfection

Insulated glass door with plastic frame/white

commercial grade moulded polystyrene

immediately upon power failure for at

2.4" touch & swipe colour display

integrated, removable / WiFi/LAN

vertical LED light strip recessed in left

visual and audible / yes

integrated, USB interface

wall with separate switch

7 / wire shelves plastic-coated

castors with brake at the front,

electronic, with remote control

antimicrobial handle with opening mechanism

fixed castors at the rear

right, reversible on site

1 x Ø 10 mm/yes

124/116 kg

yes/SmartModule

588/361 litre

747/769/1793

600/536/1460

+10 °C to +35 °C

475 kJ/h/R 600a

220-240V~/50 Hz 2.0 A/190 W

forced-air/automatic

400 kWh

49 dB(A)

+5°C

3.1°C/2.6°C

steel/white

least 12 hrs

1/1

550/520

50 kg / 300 kg

### HMFvh 5501 ver. H63 Perfection

5	58/361 litre
7	47/769/1793
6	00/536/1460
1	79 kWh
+	10 °C to +35 °C
2	46 kJ/h/R 600a
4	9 dB(A)
2	20-240V~/50 Hz
2	.0 A/190 W
fo	orced-air/automatic
+!	5°C
2	.8°C/2.3°C
st	teel/white
st	teel/white
0	ommercial grade moulded polystyrene
2	.4" touch & swipe colour display
in	nmediately upon power failure for at
le	east 12 hrs
vi	isual and audible / yes
ye	es/SmartModule
in	tegrated, removable / WiFi/LAN
in	itegrated, USB interface
LI	ED lighting column, left
1	/1
7	/ wire shelves plastic-coated
5	50/520
5	0 kg / 300 kg
Ci	astors with brake at the front,
fi	xed castors at the rear
aı	ntimicrobial handle with opening mechanis
1	xØ10mm/yes
el	lectronic, with remote control
ri	ght, reversible on site
1	08/120 kg
-	117710
_	113310 113314/9291929
-	
_	/7435210
4	086926/-

7113310	7113310
7113314/9291929	7113314/9291929
-/7435210	-/7435210
9086926/-	9086926 / -
9080022/9086924	9080022 / 9086924
9017739	9017739
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.

### Pharmaceutical refrigerators compliant with DIN 13277 with organisational system



### HMFvh 4011 ver. H63 Perfection

420/239 litre
597/654/1884
460/423/1660
409 kWh
+10 °C to +35 °C
463 kJ/h/R 600a
49 dB(A)
220-240V~/50 Hz
2.0 A/180 W
forced-air/automatic
+5 °C
4.1°C/2.2°C
steel/white
Insulated glass door with plastic frame/white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible/yes
yes / SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
vertical LED light strip recessed in left
wall with separate switch
1/1
8/wire shelves plastic-coated
400/420
50 kg / 225 kg

antimicrobial handle with opening mechanism
1 x Ø 10 mm/yes
electronic, with remote control
right, reversible on site
102/96 kg

7113308	
7113312/9293493	
9029022/7435208	
-/-	
9080022/9086924	
9006786	
6123395/9086958	



### HMFvh 4001 ver. H63 Perfection

394/239 litre
597/654/1884
460/423/1660
172 kWh
+10 °C to +35 °C
250 kJ/h/R 600a
49 dB(A)
220-240V~/50 Hz
2.0 A/180 W
forced-air/automatic
+5 °C
4.9°C/2.6°C
steel/white
steel/white
commercial grade moulded polystyrene
2.4" touch & swipe colour display
immediately upon power failure for at
least 12 hrs
visual and audible/yes
yes / SmartModule
integrated, removable / WiFi/LAN
integrated, USB interface
LED lighting column, left

### 1/1

1/1
8/wire shelves plastic-coated
400/420
50 kg / 225 kg

antimicrobial handle with opening mechanism 1 x Ø 10 mm/yes electronic, with remote control right, reversible on site 86/80 kg

7113308	
7113312/9293493	
9029022/7435208	
9086926/9080023	
9080022/9086924	
9006786	
6123395/9086958	

### 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.



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

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.



Height-adjustable feet The height-adjustable feet create the necessary clearance for easy cleaning under the appliance. With an individually adjustable

unevenness on the floor.

height, they perfectly compensate for any.



### 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.



### 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.



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.



The sturdy castors facilitate transport and



### 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.



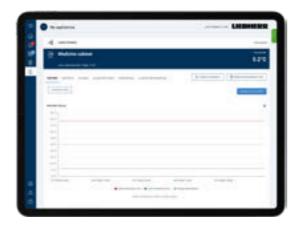
# SmartMonitoring saves you work. And worry.

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

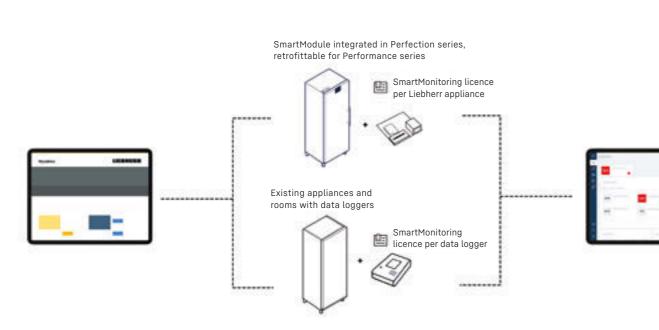
# SmartMonitoring it's that easy to be on the safe side

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.

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
- Authorisation for any number of users
- available

### 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



Licence key 36 months (7080648)

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



### Data logger, temperature (6145363)

The standard online data logger reliably records temperature data and transmits it directly to SmartMonitoring via a WiFi connection.



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.



### 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.

### Get your licence to chill.

- No automatic extension
- One licence per monitored appliance (fridge/freezer)
- User and appliance management (role-based)
- · Additional alerts via text message and phone optionally
- Register your appliance now and get a free 6-month trial licence.





### 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, 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
- Documenting storage conditions and clearly presenting all the relevant data on the SmartMonitoring dashboard
- Ensuring that the stored medicines are refrigerated at a constant, precise temperature and are always available for use

"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.







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!"





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

- Continuously monitoring temperature stability
- Sending alarms via email, text message or phone if deviations occur
- 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



Scientific and Healthcare 2025 home.liebherr.com

