

# °LAUDA

NEW



**THE FIRST MOBILE  
ULTRA-DEEP-FREEZE CHEST FREEZER**  
LAUDA Mobifreeze

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# MOBILE, BATTERY-POWERED AND PRECISELY TEMPERATURE-CONTROLLED



## The first mobile ultra-deep-freeze chest freezer in the world

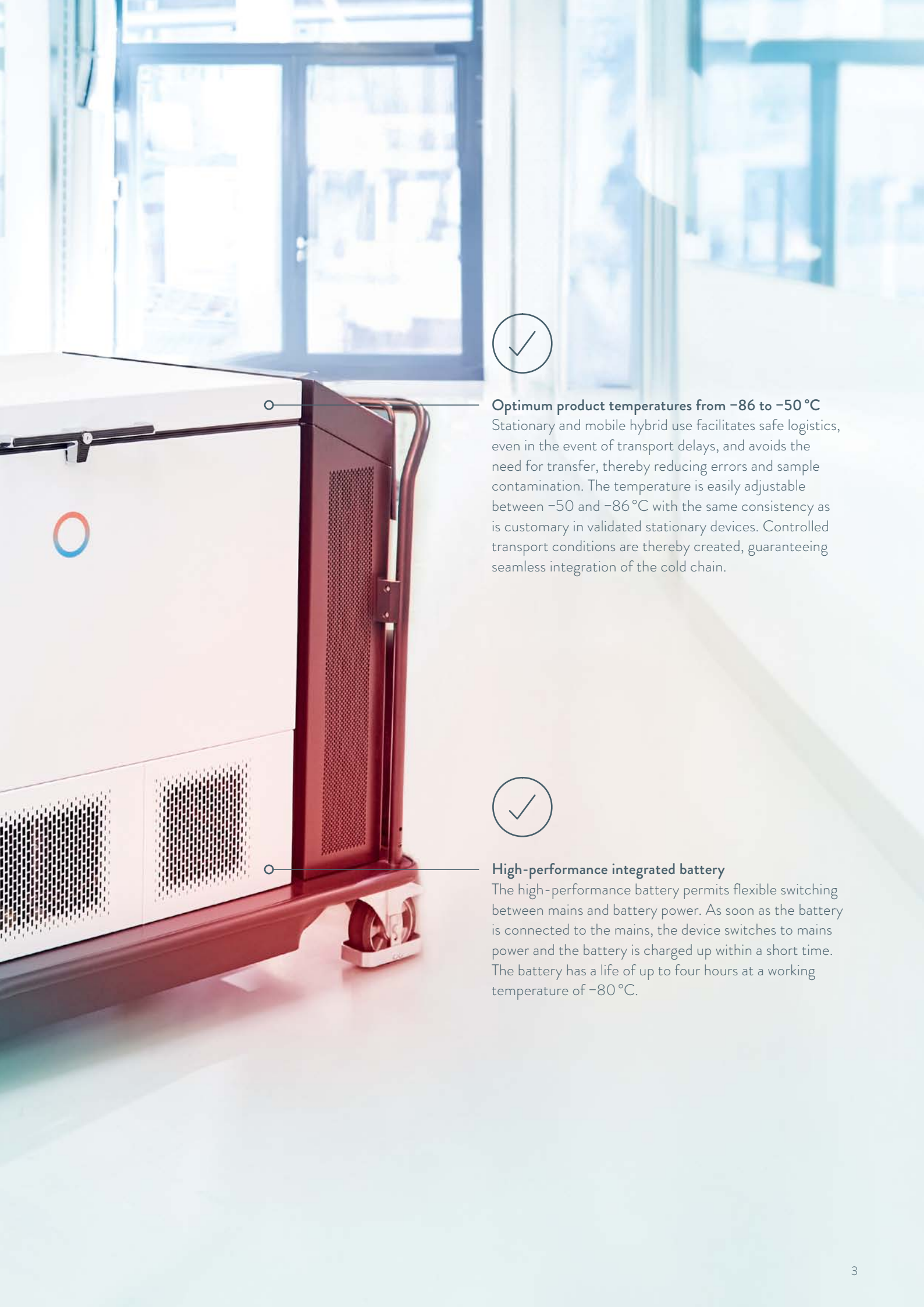
Welcome to the world of professional cooling. Ultra-freezers from LAUDA guarantee safe and reliable deep-freezing. The mobile ultra-deep-freeze chest freezer with active temperature control ensures that the cold chain is reliably maintained in intralogistics and for inter-factory transport in road logistics. Thanks to excellent insulating properties, the ultra-deep-freeze chest freezer is the perfect solution for transporting delicate and temperature-sensitive materials. Many extremely sensitive samples not only have to be stored under validated conditions, but also have to be transported under identical conditions. Our ultra-deep-freeze chest freezer guarantees mobile, low-temperature transport.



## Dispensing with dry ice

The mobile ultra-deep-freeze chest freezer is the logistics solution for the transport of temperature-sensitive samples – entirely without dry ice. Dispensing with hazardous dry ice and its requirements (aeration, health protection) not only protects the environment, but also eliminates health risks, as well as the costs incurred when using dry ice. This provides increased safety for your personnel.





**Optimum product temperatures from  $-86$  to  $-50^{\circ}\text{C}$**

Stationary and mobile hybrid use facilitates safe logistics, even in the event of transport delays, and avoids the need for transfer, thereby reducing errors and sample contamination. The temperature is easily adjustable between  $-50$  and  $-86^{\circ}\text{C}$  with the same consistency as is customary in validated stationary devices. Controlled transport conditions are thereby created, guaranteeing seamless integration of the cold chain.



**High-performance integrated battery**

The high-performance battery permits flexible switching between mains and battery power. As soon as the battery is connected to the mains, the device switches to mains power and the battery is charged up within a short time. The battery has a life of up to four hours at a working temperature of  $-80^{\circ}\text{C}$ .

# Fields of application according to sector

Intralogistics, cold chain logistics and hybrid use



## INTRALOGISTICS

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Intralogistics includes all processes from incoming goods and storage to internal transport and outgoing goods. Our mobile ultra-deep-freeze chest freezers secure the cold chain during transport.

### Typical fields of application

- Short-distance transport for sensitive, valuable materials
- Controlled transport conditions identical to storage conditions

## COLD CHAIN LOGISTICS

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The transport of temperature-sensitive goods poses major challenges for everyone involved. The temperature-controlled mobile ultra-deep-freeze chest freezer provides significant advantages in this segment of low temperature management.

### Typical fields of application

- Transport without dry ice
- Ideal product temperature
- Active cooling

## HYBRID USE

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The bridging of transport phases is guaranteed by the active, powered deep-freeze storage and excludes the health risks of continuous filling with dry ice. Flexible changing from storage to transport without transfer processes allows product-friendly logistics without the risk of damage and contamination.

### Typical fields of application

- Pharmaceutical companies engaged in research and production
- Long-term storage and transport in pharmaceutical environments
- Sample storage and transport in research and development laboratories

›UP TO  $-86^{\circ}\text{C}$   
FOR OPTIMUM  
TEMPERATURE-  
CONTROLLED  
TRANSPORT‹



°LAUDA



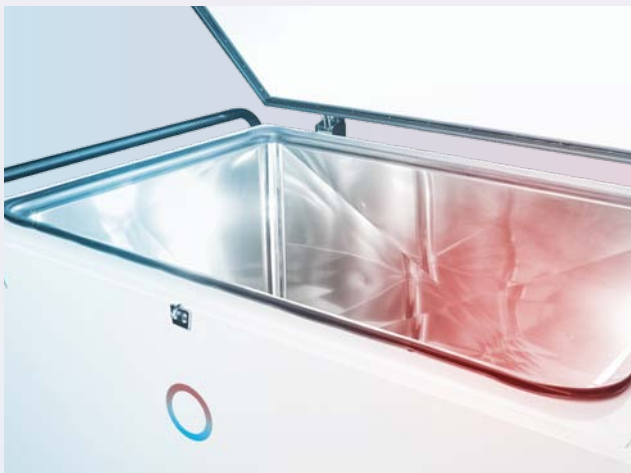
# Functions

## The ultra-deep-freeze chest freezer for pharmaceutical logistics requirements



### High-performance battery technology

The requirements of Good Distribution Practice (GDP) for the safe transport of pharmaceutical products at an ideal storage temperature are guaranteed by the high-performance battery with enhanced ignition protection (lithium-ion phosphate battery technology). The battery buffer maintains the display and alarm function, even during a power failure.



### Modern refrigeration technology and high insulation quality

Vacuum panels with impermeable foamed polyurethane insulation provide high temperature stability with low power consumption. The interior consists completely of high-grade stainless steel and reliably prevents the cover seals from freezing on. The environmentally friendly, future-proof operating principle using natural refrigerants without dry ice protects the environment and reduces risks for personnel. The innovative technology guarantees independence from consumables and phase-change materials (PCM/PWM), which provides flexibility and cost savings.



### Logistics optimization

The mobile ultra-deep-freeze chest freezer creates ideal conditions for controlled transport and perfect integration in the cold chain, both in intralogistics and inter-factory transport in road logistics. The easily adjustable temperatures between  $-86$  and  $-50$  °C comply with GDP pharmaceutical logistics requirements. If the limit values are exceeded, a warning with an acoustic and visual signal is displayed. This includes an integrated data logger for the storage of temperature and alarm data. Risks that could be caused by transfer, damage or confusion are prevented by the possibility of stationary and mobile hybrid use.



# Equipment

Comfort and flexibility – for higher performance and safety



### User-friendly touch screen operation

The bright 4.3-inch touch screen can even recognize the touch gestures of users wearing gloves – an invaluable benefit in the laboratory. The digital display guarantees ease of operation for the input and retrieval of all relevant values. Password-protected user management guards against unauthorized access to configuration parameters.



### Simple and safe maneuverability

The mobile ultra-deep-freeze chest freezer is equipped with two heavy-duty rotating casters, which simplify movement and steering. The ergonomic handles provide a secure grip, while the dead man's brake offers additional safety. In addition to this, the bottom panel and wheels are safeguarded by ram and impact protection.



### Flexible use for mains and battery power

The powerful battery has a life of up to four hours, whereby safe inter-factory transport can be guaranteed. The option of permanent mains operation and the back-up battery offer maximum flexibility. The battery can be recharged via the mains supply and maintains all display and alarm functions, even in the event of a power failure.



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# LAUDA Mobifreeze M 270

## Features at a glance

### Advantages for transport and logistics

- Mobile ultra-deep-freeze chest freezer with active temperature control for reliable maintenance of the cold chain in intralogistics and for inter-factory transport in road logistics
- Logistics solution without dry ice for the transport of temperature-sensitive samples, APIs or vaccines at the validated/prescribed storage temperature
- Prevention of risks caused by transfer, contamination, damage or confusion

### Natural refrigerants instead of dry ice

- Dispensing with hazardous dry ice and its requirements (aeration, health protection)
- Environmentally friendly, future-proof operation with natural refrigerants

### Mains and battery mode switch-over

- High-performance battery with increased protection against overheating (lithium-ion phosphate battery technology)
- Flexible switching between mains and battery power possible, automatic charging with mains supply

### High-quality design

- Interior consists completely of high-grade stainless steel
- High-grade vacuum insulation (VIP) for optimized temperature maintenance

### Alarm and display function

- Acoustic and visual alarm if limit values are exceeded
- Integrated data logger for the storage of temperature and alarm data
- User-friendly 4.3" touch screen operating unit with digital display for the input and retrieval of all safety-critical values
- Protection against unauthorized access to set points by way of password-protected user management

### Technical features

Working temperature range	-86... -50 °C
Temperature stability	±3 K
Ambient temperature range	15...28 °C
Interior dimensions (W × D × H)	900 × 600 × 500 mm
Dimensions (W × D × H)	1471 × 933 × 1217 mm
Weight	325 kg
Refrigerant level 1	R-290 (GWP 3); 0.145 kg; <0.1 t CO <sub>2</sub> -eq
Refrigerant level 2	R-170 (GWP 6); 0.068 kg; <0.1 t CO <sub>2</sub> -eq
Power supply	230 V; 50 Hz
Mains plug	Power cord with angled grounding plug (CEE7/7)
Part Number	L003678

