



LÖWENSTEIN
medical

Anesthesia

Workstations for surgery, induction and MRI.

 With people in mind

Closer.



At the heart of our clinical products is closeness: to the people who use them every day and to the patients who depend on them. Our products are developed together with the people who rely on them every day to care for patients at the bedside. For decades, we have maintained close collaboration with physicians, nurses, and medical technology specialists around the world. Their experience directly informs our development and makes a significant contribution to ensuring that our technology proves itself in daily clinical practice.

Supporting users: To meet this standard, we do not outsource anything. Löwenstein Medical researches, develops, and manufactures in Germany. Trained specialists are deployed worldwide for training, maintenance and repairs. Our certified technicians are quickly on site and ensure the smooth operation of all devices – around the clock when it matters.

Protecting patients: Our products are engineered to provide safe and gentle ventilation in any care setting. We develop systems that adapt to the natural breathing pattern, avoid unnecessary strain, and can be individually adapted to clinical conditions. This creates the conditions for care with minimal risk, reliably aligned with patient's needs.

That's why we stay closer: to people, processes and the realities of care. We support our products over their entire life cycle. Each phase is part of an integrated concept that focuses squarely on the patient.



Table of contents

LEON plus edition	4
Leon mri	10
Accessories	12





LEON plus edition

True to itself. Ready for the future.

Anesthesia is constantly evolving – and with it the requirements for a modern anesthesia workstation. The LEON plus edition was created to keep pace with future developments.

Building on the proven concept of the Leon plus, it combines sophisticated ergonomics, flexible configuration options and a sustainable approach to the utilization of anesthetic gases for the first time. These features and significantly enhanced IT performance make the LEON plus edition a reliable partner for modern anesthesia.



LEON plus edition – made for modern anesthesia.

Ergonomics

The design of the LEON plus edition supports efficient processes from preparation to ventilation. The tilt and swivel monitor offers a clear view of all parameters and trends from any position.

Lung-protective ventilation

A wide variety of ventilation forms enable safe, individually adapted care for all age groups. Even at low tidal volumes, the LEON plus edition supports lung-protective strategies.

User friendliness

The interface follows the familiar logic of the elisa devices and LEONI 4. Its intuitive operation and flexible configuration reduce training requirements and increase safety for users and patients.

Future viability

With enhanced computing power, the LEON plus edition is prepared for new standards and future developments. The enhanced performance lays the foundation for progress in medical technology.

LEON plus edition – the most important features at a glance:

- Ventilation performance in the rebreathing system at the level of an intensive care ventilator.
- The absorber can be changed during operation.
- Types of ventilation
 - Assisted ventilation types (S-IMV and S-PCV)
 - Volume-controlled ventilation (IMV)
 - Pressure-controlled ventilation (PCV)
 - Pressure-supported ventilation (PSV)
 - Ventilation mode when using a heart-lung machine (HLM)
 - Manual ventilation (MAN), spontaneous breathing (SPONT)
 - Patient monitoring during regional anesthesia (MON)
- Tilt and swivel 15.6" TFT 16:9 display with touchscreen
- Pneumatic fan drive
- Patient system designed for efficient preparation and easy assembly
- Heated compact circuit system to prevent condensation
- Ventilation technology to care for patients of all ages
- Paramagnetic O₂ measurement
- Integrated vacuum source for bronchial suction with vacuum indicator
- Battery life at least 100 minutes
- Thanks to its network capability, the LEON plus edition offers the possibility of direct connection to common PDMS systems.
- Precise electronic gas mixing in a flow range from 200 ml/min to 18 l/min
- Option to display up to four real-time waveforms simultaneously.
- For monitoring lung function, up to three loops can be displayed simultaneously:
Flow over volume, volume over pressure, flow over pressure
- Complete data management with zoomable trend display
- User-specific configurable user interface
- Central brake
- Neo Mode VTG/Tidal Volume Guarantee
- Ecometer
- Inspiratory hold maneuver

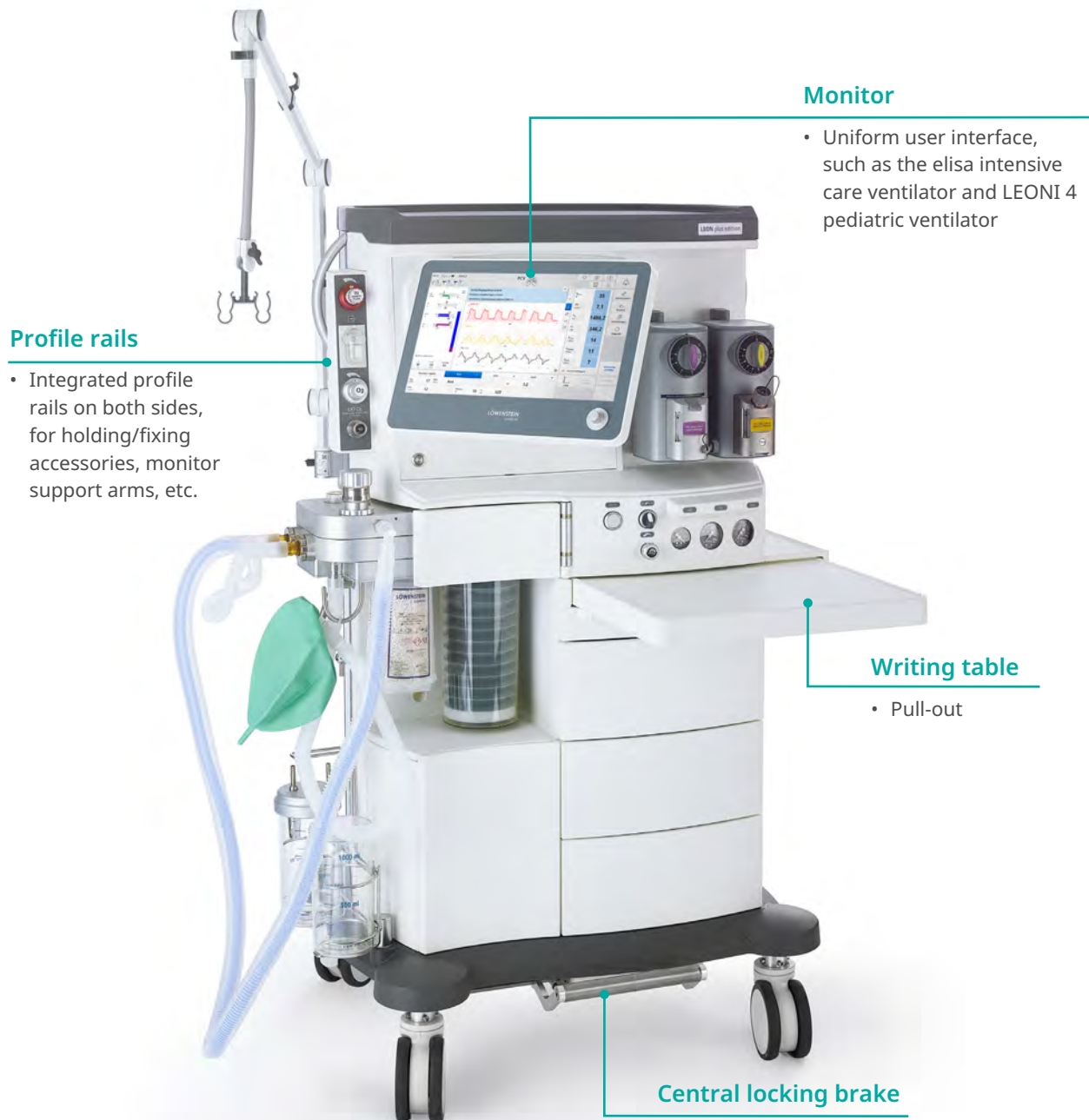
COMING
SOON

Further functions that usefully supplement everyday clinical practice are already under development. Here is a first preview:

- HL7 interface
- Recruitment maneuver
- Synchronized types of ventilation (S-PCV and S-IMV) with pressure support for spontaneous breathing



LEON plus edition – ergonomically designed.



Improved ergonomics thanks to tilt and swivel display



Integrated bronchial suction



Integrated gas monitoring, safety flowmeter and oxygen flowmeter



Holder for 2 anesthetic vaporizers



Interfaces for forwarding data for anesthesia logging or PDMS



Heated compact circuit system to prevent condensation

Leon mri

Specially designed for use in cardiac catheterization laboratories or MRI.

The Leon mri was specially developed for use in the MRI environment with field strengths of up to 40 millitesla. Operation on 1.5 Tesla and 3.0 Tesla MRI systems is guaranteed. Using an LED light that is visible from all sides, alarms and notifications are clearly displayed in different colors according to their priority, making them easily recognizable even outside the MRI field.

The most important features at a glance

- The only device in its class that can be equipped with integrated CO₂ and anesthetic gas monitoring.
- The Leon mri can optionally be connected via a fiber-optic cable to a second monitor located outside the MRI area.
- MRI-compatible touchscreen technology
- Both the performance range and the operation of the Leon mri are exactly identical, without any limitations, to those of the proven Leon.
- Another major logistical advantage lies in the interchangeability of the compact circle systems of the Leon plus, Leon, and Leon mri devices.
- The position relative to the MRI is monitored by an integrated magnetic field strength sensor.
- To secure the position, the Leon mri is equipped with a central brake system. All four wheels can be locked simultaneously using a foot lever.
- Upgrade option: Neo Mode VTG - 3ml VTG
- Upgrade option: RS232 data interface via fiber-optic cable





Accessories

Disposable absorber with high CO₂ absorption capacity.

Leonsorb plus has a very efficient absorption capacity for low and minimal flow anesthesia. Test results confirm that the absorber, with a volume of 1.15 kg, absorbs more than 150 liters of CO₂ before a 0.5% CO₂ breakthrough occurs. The ultimate benefits of this feature are cost savings associated with higher absorption.

The chemical composition of the soda lime in Leonsorb Plus ensures high CO₂ absorption capacity. A moisture content of approximately 15.5% prevents the soda lime from drying out during operation.

Leonsorb Plus

- Unique geometry: an efficient design for high CO₂ absorption capacity.
- Reduced reaction time leads to high absorption values
- Maximum soda lime utilization
- Low dust formation
- Cost savings thanks to high absorption performance and large absorber volume



Leonsorb Premium

- Low and minimal flow compatible
- No formation of compound A
- Unique geometry: an efficient design for high CO₂ absorption capacity.
- Maximum soda lime utilization
- Low dust formation
- Cost savings thanks to high absorption performance and large absorber volume
- Longer-lasting color change than with conventional soda lime





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2007 - 1. Ausgabe Plus
Einmalig gebrauchter medizinischer Vorplatz
Nicht für andere Zwecke
Gebrauch abhängig von der
Anwendung, siehe zu den
Anmerkungen

CE
2007





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