

LÖWENSTEIN
medical



Neonatology

Complete range for the smallest patients: Ventilators,
Nursing care, Thermotherapy and Phototherapy, Accessories

 With people in mind

Leoni plus

Neonatal intensive care ventilation with the highest standards



Leoni plus is suitable for the long-term ventilation of premature infants, newborns and children weighing up to 30 kg. In addition to the basic ventilation modes CPAP, IPPV/IMV, SIPPV and SIMV, the device offers two PSV modes. Moreover, the administered tidal volume can be restricted via the volume limit function. The assisted ventilation modes provide volume-controlled tidal volume.

The precise hot wire flow sensor, designed for placement near the patient, automatically tracks trigger sensitivity relative to the patient's tidal volume (VT trigger adaptation).

The powerful integrated Leoni High-frequency Oscillatory ventilation (HFO) module* uses membrane oscillation. The frequency range of 5 to 20 Hz is suitable for use with patients weighing up to 12 kg. The managed amplitude control compensates leakages and compliance changes within the adjustment range.

The device is easily and intuitively operated via the 12-inch color touchscreen or the control knob.

For optimal ergonomic organisation of the workspace in the ward, the display can be removed and attached to suit individual needs and working environments. All relevant settings, measurements, alarms and curves and loops are available in a single display. Users can freely configure the display to satisfy their own requirements by choosing the number of curves and loops and measurements.

Key product benefits at a glance:

- HFO* uses membrane oscillation
- Volume-controlled ventilation
- PSV mode
- NIV (nCPAP, s-nCPAP, nIPPV, s-nIPPV, HiFlow, nHFO with Neojet*)
- VT trigger adaptation
- 12-inch LCD color touchscreen, removable
- Simple operation – no sub-menus
- Curves and loops
- Battery operation for up to 200 minutes

Abdominal Sensor

In the first few months of a baby's life, diaphragmatic or abdominal breathing is predominant. What could be more obvious than monitoring the breathing activity of children at the diaphragm and using the resulting signals as a trigger for inspiration and expiration?

The abdominal sensor by Löwenstein Medical generates reliable trigger signals for non-invasive ventilation but does not interfere with respiratory mechanics and does not add weight to the patient interface or increase dead space.

Our neonatal ventilation device Leoni plus, together with the optional abdominal sensor, synchronizes the non-invasive ventilation forms s-nIPPV and s-nCPAP, while providing apnea monitoring in both ventilation modes.



Leoni plus CLAC 2.0

CLAC 2.0 – the reliability you expect with optimized control algorithm.



Löwenstein Medical has developed a unique algorithm for automatic oxygen control in premature and newborn babies, **CLAC: Closed-Loop Automatic Oxygen Control**, and integrated it in the Leoni plus model.

The ventilation device can be fully operated through the user interface, which visualizes measurements and alarm settings. Users can determine the current patient status with a glance at the display.

CLAC assumes the task of adapting the inspiratory oxygen in the breathing gas (FiO_2) by continuously monitoring the needs and condition of the patient and adjusting the device settings accordingly. This leaves clinicians free to focus on other tasks.

Of course, manual intervention is possible at all times.

