homecare

VENTI*logic* LS

VENTI*logic* plus

100 % Mobility and Reliability in IV and NIV

partner for life

WEINMANN medical technology

VENTI*logic* LS

Your Requirements for Reliability and Mobility are Our Benchmark.

VENTI*logic* LS and VENTI*logic* plus are the forerunners in the new generation of ventilators. They offer you a high degree of reliability and versatility every day at all times. Their practice-oriented monitoring and mobility concepts are supplemented by unique ventilation functions.

VENTI*logic* LS and VENTI*logic* plus have leakage and single patient circuits. In addition VENTI*logic* LS offers a double patient circuit system with patient valve and volume-controlled ventilation modes (VCV, aVCV).

Areas of use

- For treatment of adults and children starting with 50 ml tidal volume and 5 kg body weight
- Invasive and non-invasive ventilation
- In hospital and at home
- Stationary and mobile

Single patient circuit with patient valve

Double patient circuit with patient valve (only VENTI*logic* LS)

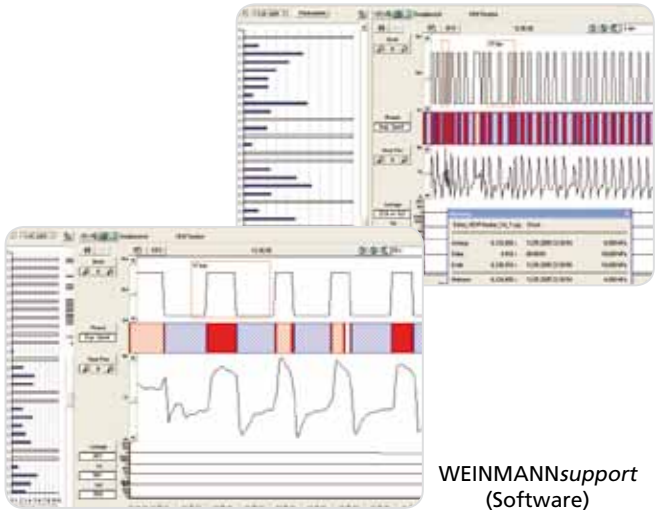
Use of several replaceable batteries allows unlimited independent operation.

gic plus

Our monitoring concept ensures safe and reliable therapy

You can rely on our new monitoring concept for VENTI*logic* LS and VENTI*logic* plus. Extensive and comprehensive, it provides ideal support of your treatment:

- intuitive operation for fast check of ventilation settings
- unique alarm management (highly visible, large alarm window) for top safety: You can concentrate completely on therapy without any stress.
- WEINMANN*support*:
  - trend analysis and expanded storage function for therapy with help of SD card
  - complete recording of course of ventilation treatment



WEINMANN*support* (Software)

Our mobility concept assures more freedom

The mobility concept in VENTI*logic* LS and VENTI*logic* plus ensures safety and reliability in the delivery of required ventilation. That gives both you and your patients more freedom.

- Mobile use for intra-hospital transfers: With eight hours of battery power (internal rechargeable battery and optional replaceable battery* each have four hours' operation), the devices can adapt to any change of location.
- Mobile use at home: VENTI*logic* LS and VENTI*logic* plus give your patients freedom of movement.
- Sure in an unsure situation: Leakage is reliably compensated for in volume and pressure controlled modes. The high-performance blower ensures continuous patient care in mobile use and difficult ventilation situations, even with imprecise fit of patient interface.

Special shock resistance

Shock and vibration resistance were specially tested against recognized standards to ensure device's compliance with demands in mobile hospital and domestic surroundings. (Shock test as per IEC 60068-2-27 and Vibration test as per IEC 60068-2-64).

* The operating range of the rechargeable battery depends on the settings of the ventilation parameters and on the battery's age and charge level. The internal battery may be used only as an emergency source of power and not as a continuous primary source.

The fast and simple way to ideal therapy settings – with innovative features by Weinmann

- LIAM (Lung Insufflation Assist Maneuver): the integrated cough support is easy to use and requires no change of masks. The patient himself or a nurse can activate the function.
- TA Mode (Timed adaptive): ideal adaptation of ventilation to the patient's breathing pattern effectively unloads the respiratory muscles. The adaptive algorithm increases patient comfort and simplifies the setting process for the doctor.
- Volume compensation: Three different speed levels can be set for the automatic regulation to target volume. Through the selection of a speed level and pressure increase, the user can make the most precise setting to reach the target volume. When the pressure reaches a corridor around the target volume, the device automatically switches to precise regulation.

Particularly suitable for COPD patients

- AirTrap Control: Exhalation pressure relief to prevent dynamic hyperinflation. Thanks to AirTrap Control, VENT*logic* LS and VENTI*logic* plus automatically regulate pressure to a frequency and expiration time ideal for the patient. The titration process is thereby significantly simplified.
- Trigger lockout: effective protection from false triggering and trigger artefacts at higher trigger sensitivity. The fast way to perfectly synchronized ventilation.
- Expiratory pressure ramp: temporary pneumatic splint in airways at the start of expiration to counteract expiratory collapse of airways. The expiratory flow remains larger on average, the volume can be exhaled more easily and respiratory position can be lowered.

Fast and simple monitoring of ventilation settings

Pressure and volume curves with auto-scaling function

Pressure/volume Loop with auto-scaling axes

1


2


3


4


5


6


7


8


9


10


11


12


Accessories for VENTI*logic* LS and VENTI*logic* plus

1 **Replaceable battery**
WM 27919

2 **Bacteria filter (for leakage circuit)**
WM 24148

3 **Bacteria filter (for valve system)**
WM 24476

4 **O_2 measurement set**
WM 15732
consists of:
- **O_2 sensor connection line – WM 27792**
- **O_2 sensor – WM 27128**
- **O_2 sensor T-piece – WM 27143**

5 **VENTI*remote* alarm (10 m)**
WM 27745 (10 m)
WM 27755 (30 m)

6 **Connection cable for nurse call**
WM 27780 (10 m)
WM 27790 (30 m)

7 **Adapter for automobile**
WM 24616

8 **Analogbox D/A**
WM 27560

9 **Leakage circuit**
WM 24130 (can be disinfected)
WM 24120 (can be sterilized)

10 **Single patient circuit with patient valve**
WM 27181

11 **Double patient circuit with patient valve**
WM 27182

12 **Water-resistant transport bag**
WM 27976
for mobile usage of VENTI*logic* LS and VENTI*logic* plus

Test adapter, packed (not shown)
WM 27140

WEINMANN*support* USB (not shown)
WM 93305

Technical data VENTI*logic* LS and VENTI*logic* plus

CE 0197

Product class as per directive 93/42/EEC:	II b
Dimensions (W x H x D):	240 x 153 x 340 mm
Weight	
■ without replaceable battery:	about 5.9 kg
■ with replaceable battery:	about 6.5 kg
Temperature range	
■ Operation:	+5 °C to +35 °C
■ Storage:	-40 °C to +70 °C
Air pressure range:	600 – 1100 hPa (below 700 hPa leakage is to be kept low because the device may not be able to compensate for high ventilation pressures)
Electrical connections:	115 – 230 V AC, 50 – 60 Hz Tolerance -20 %, +10 %

Power consumption at	**230 V**	**115 V**
■ Operation:	0,35 A	0,70 A
■ Standby:	0,05 A	0,10 A

Maximum power consumption:	120 W
Switching capacity Remote alarm connection:	60 V DC/2 A; 42 V AC/2 A
Battery capacity*)	
■ internal rechargeable battery:	4 hours
■ replaceable/rechargeable battery:	4 hours

*) The capacity depends on the ventilation parameter settings and the battery's age and state of charge.

Classification as per EN 60601-1	
■ Protection from electric shock:	Protection class II
■ Degree of protection from electric shock:	Type BF
Time required to charge battery:	
■ Charge via ventilator:	about five hours per battery
■ Charge via charger cable:	about three hours per battery
Leakage modes in both devices: and only VENTI*logic* LS:	CPAP, S, ST, T, TA SX, SXX
Valve ventilation modes in both devices: and only VENTI*logic* LS:	PSV, PCV, aPCV, SIMV VCV, aVCV

Special therapeutic functions:
- AirTrap Control
- Trigger lockout
- Expiratory pressure ramp
- LIAM
- Volume compensation

Electromagnetic Compatibility	
■ Radio interference suppression:	EN 55011
■ Radio interference resistance:	EN 61000-3-2, EN 61000-3-3, EN 61000-4-2 to 6, EN 61000-4-8, EN 61000-4-11
Mean sound level / operation as per EN ISO 17510 with 1 m distance between device and patient position:	about 28 dB(A) at 10 hPa
Sound level of alarm:	about 69 dB(A) as per EN 60601-1-8

IPAP pressure range:	6 to 35 hPa (leakage circuit) 4 to 45 hPa (valve system)
PEEP/EPAP pressure range:	4 to 20 hPa (leakage circuit) 0 to 20 hPa (valve system)
CPAP pressure range:	4 to 20 hPa (leakage circuit)
Pressure accuracy:	to 35 hPa ± 0.8 hPa from 35 hPa ± 1.5 hPa
Increment:	0.2 hPa (1 hPa = 1 mbar ≈ 1 cm H_2O)
Tidal volume:	50 – 3000 ml
Minimum pressure limit stability (PLS$_{min}$) (min. pressure in case of device failure):	≥ 0 hPa
Maximum pressure limit stability (PLS$_{max}$) (max. pressure in case of device failure):	≤ 60 hPa
Respiratory rate:	5 to 45 1/min
Accuracy:	± 0.2 1/min
Increment:	0.5 1/min
I:E-ratio	
■ Inspiration time:	15 % to 67 % of breathing period
■ Increment:	1 %
■ Accuracy:	±1 %
Trigger level:	can be set in 8 levels, separate for inspiration and expiration in ST-Mode trigger for expiration can be disabled
Pressure increase speed:	Can be set in 6 levels
Pressure decrease speed	
■ Leakage system:	Can be set in 6 levels
■ Valve system:	One permanently set level
Accuracy Volume measurement:	at 23 °C: ± 20 %
Max. allowable flow with oxygen feed:	15 l / at ≤ 1000 hPa
Max. heating of respiratory air at 35°C ambient temperature:	41°C
Pressure constancy measured as per DIN EN ISO 17510 in CPAP mode:	< 10 hPa: Δp ≤ 0.5 hPa > 10 hPa: Δp ≤ 1.0 hPa
Fine filter separation level to 2 µm:	≤ 99.7 %
Fine filter service life:	1000 hours in normal ambient air
Allowable humidity Operation and storage:	≤ 95 % rF (no condensation)
Flow at max. speed at 0 hPa:	300 l/min (leakage circuit) 280 l/min (single patient circuit with patient valve) also only VENTI*logic* LS: 260 l/min (double patient circuit with patient valve)
Tolerance:	± 15 l/min

WEINMANN medical technology