

MEDUVENT Standard

Ventilate Wherever You Go







10 Independent Thanks to Turbine Technology



Long distances and transport times can be a logistical challenge for emergency response in remote areas. In such situations, the battery runtime of a medical device is just as critical as its oxygen supply. Especially in challenging emergency situations, it should be possible to concentrate fully on the patient without worrying about the technology.

MEDUVENT Standard allows ventilation independently of oxygen cylinders. The turbine-driven emergency ventilator requires no external gas supply and maintains ventilation for an average of 8 hours on one battery charge*. The patient can still be supplied with supplemental oxygen at any time, with all the oxygen supplied then benefiting the patient.

The innovative supply method using the globally compatible oxygen inlet tube enables you to generate concentrations of 21 % to 100 %.



21 % - 100 % FiO₂



Mix in O₂ at any time



Rapid start



Contamination protection



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Lightweight and compact

Intuitive and ergonomic



Your Benefits at a Glance

More safety for patient and staff

- The built-in visual and acoustic alarm system alerts medical staff in critical situations such as high and low airway pressure, patient disconnection, high PEEP and more.
- A fixed ventilation rate and volume in combination with a pressure limit reduce the risk of hyperventilation and gastric insufflation compared to BVM ventilation.
- The hygiene filter protects patient, staff and ventilator from contamination.
- Automatic function check means always on the safe side.

Compact, lightweight and ergonomic

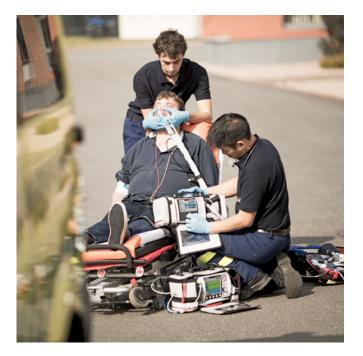
- MEDUVENT Standard weighs just 2 kg and has a volume of 3.5 l, making it one of the smallest and lightest emergency and transport ventilators in its class.
- Whether in air rescue or in ground emergency medical service – MEDUVENT Standard can also be installed in emergency vehicles with little space or requiring lightweight equipment.

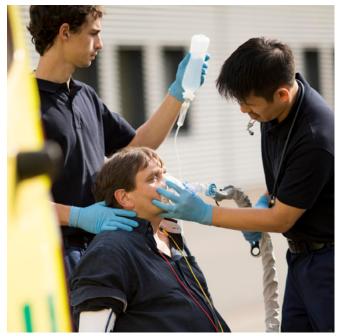
Wide variety of potential applications

- MEDUVENT Standard is perfectly suitable for use at the emergency site and in emergency vehicles of all kinds: ambulances, helicopters, airplanes etc.
- Consistent serviceability on the ground and in the air: Tested to EN 13718-1, RTCA/DO 160G and EN 60601-1-12, EN 13718-1, EN 1789, RTCA/DO 160G and EN 60601-1-12
- Extremely rugged: Evidence from successful shock and vibration tests to MIL-STD 810 G, RTCA/DO 160G and EN 1789
- Specifically designed for use in emergency response and patient transport: Tested to EN 794-3 and ISO 10651-3

Higher performance and efficiency

- Long operating time: Average 8 hours on one battery charge*
- Short charging time: From 0 % to 95 % charge in just 2.5 hours
- Flexible charging options: Either via a 230 V power supply unit and charger or directly from the 12 V on-board power supply
- Software updates: Simple and convenient to perform using the SD card





Ventilate Wherever You Go

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- Thanks to the turbine drive of MEDUVENT Standard, you can ventilate the patient at an FiO₂ of 21 % to 100 %.
- The oxygen is supplied simply via a conventional oxygen inhalation facility.
- The oxygen supplied is for the entire benefit of the patient, as the device does not require any oxygen for operation.
- Just use one of the preset emergency modes or enter the patient's height to begin ventilating safely at once, leaving you more time to focus on the patient.

1 Clear and Simple





- **1. Ideal monitor layout** displays all the key measurements and settings
- **2. Connection for O₂ supply** via O₂ cylinders, O₂ concentrators and gas supply systems
- **3. Connection for measuring circuit** enables pressure to be measured and PEEP to be controlled, as well as oxygen to be routed to the patient
- 4. Accessories connection accessible from the front for MEDUtrigger
- **5. Connection for ventilation hose** connects the device to the breathing circuit
- **6. Hygiene filter** protects the device from viral and bacterial contamination
- 7. Data storage and updates SD memory card makes it easy to transfer device configurations and to perform software updates yourself
- 8. User-friendly operation navigation knob for swift navigation in the menus
- 9. Li-ion rechargeable battery with an average battery life of 8 hours*



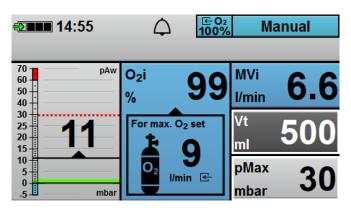
*Assuming typical ventilation settings for an adult patient

Depared for Anything with the Right Functions

MEDUVENT Standard provides ventilation modes for invasive and non-invasive ventilation. The intuitive menu navigation and simple selection of the right mode make it easy to use. For more information about the individual ventilation modes, go to our website at www.WEINMANN-Emergency.de

Manual mode

Supports cardiopulmonary resuscitation, anesthesia induction or manual ventilation.



IPPV mode

For mandatory volume-controlled ventilation of the patient at a fixed tidal volume.

∉Σ■■■ 14:58	¢	E O₂ 100%	IF	PPV
70 pAw 60 - 50 - 40 -	O ₂ i %	74	MVi I/min	5.0
30 25 20 15 10	pMax mbar	30	PEEP mbar	0
10 5 0 _5 mbar	Vt ml	500	Freq. /min	10

SIMV mode (optional)

For volume-controlled ventilation at a fixed mandatory minute volume.



CPAP mode

Increases the bottom pressure level during spontaneous breathing.

∉∑∎∎∎ 10:59	¢	⊡ O₂ 100%	CPAP
70 pAw 60 - 50 - 40 -	′ O ₂ i %	35	MVi I/min 5.0
30			PEEP 5
10 + 5 - -5 - mba	r		

S-IPPV mode (optional)

For volume-controlled ventilation at a variable mandatory minute volume.

€2∎∎∎ 16:45	¢	<u>100%</u>	S-	IPPV
70 pAw 60 - 50 - 40 -	0 ₂ i %	21	MVi I/min	5.0
30 25 20 15	pMax mbar	30	PEEP mbar	5
10 5 0 5 -5 mbar	Vt ml	500	Freq. /min	10

Equipped with Bluetooth®

Already equipped with the hardware required for tomorrow's applications!





11 Technical Data

Device dimensions	W: 206 mm x H: 137 mm x D: 130 mm		
Weight	Without battery: 1.75 kg With rechargeable battery: 2.10 kg		
Product class according to Directive 93/42/EEC	llb		
Operating conditions	 Temperature range: -20 °C to + 50 °C Humidity: 5 % rh to 95 % rh, no condensation Air pressure: 540 hPa to 1,100 hPa Altitude above MSL: Up to 5,000 m 		
Lithium ion battery	Runtime: Average 8 hours (assuming adult lung parameters) Charging time (0 % - 95 %): 2.5 h		
Display	TFT color display 4.3"		
Data storage	Internal device memory and SD card		
Ventilation modes	Volume-controlled: IPPV, S-IPPV (optional), SIMV (optional), Manual Spontaneous breathing: CPAP		
Operating gas	Ambient air, medical oxygen (100 % O_2) or concentrator oxygen (93 % O_2) be supplied additionally		
Operating pressure range	0.3 bar to 6 bar		
Monitoring	 Measured values displayed: MVi, O₂i Bar graph: Pressure with pAW 		
Maximum outlet flow rate	150 l/min (BTPS)		
Tidal volume	50 ml to 2,000 ml		
Ventilation rate	5 min ⁻¹ to 40 min ⁻¹		
PEEP	0 mbar to 20 mbar		
Pressure limit (Pmax)	10 mbar to 65 mbar		
I:E	1:2 fixed / 1:1 in Manual mode		
Standards applied	• Consistent serviceability confirmed on the ground and in the air to EN 13718-1, RTCA/DO 160G, EN 60601-1-12		
	 Ruggedness confirmed by successful shock and vibration testing to MIL-STD 810 G, RTCS/DO 160G and EN 1789 		
	• Emergency and transport ventilator confirmed		

to EN 794-3 and ISO 10651-3

CE 0197



We reserve the right to make changes to the technical specifications without notice.





1 Always Within Reach

MEDUVENT Standard can be fitted to our LIFE-BASE portable unit and thus be safely mounted on the wall or ceiling of an emergency vehicle - always within reach.









Portable unit	LIFE-BASE light XS	LIFE-BASE 1 NG XS	LIFE-BASE 1 NG XL	LIFE-BASE 3 NG
Built-in charging interface	×	~	~	\checkmark
BASE-STATION mounting	×	~	~	\checkmark
Space for defibrillator	×	×	~	\checkmark
Space for O ₂ cylinder	×	×	×	~
Matching protective and accessories bag	×	~	~	~
Matching accessories	~	~	~	\checkmark
Standards applied	×	EN 1789, RTCA DO 160	EN 1789, RTCA DO 160	EN 1789, RTCA DO 160
Dimensions (W x H x D in mm)	218 x 244 x 125 mm	220 x 230 x 136 mm	427 x 240 x 140 mm	465 x 295 x 145 mm
Handling size** (W x H x D in mm)	260 x 280 x 280 mm	460 x 315 x 250 mm	670 x 315 x 250 mm	760 x 440 x 300 mm
Weight (in kg)	0.7 kg	Approx. 1.0 kg	2.2 kg	3.2 kg

** Handling size is the space required which has to be taken into account when planning modifications. The details relate to the space required by the portable unit when fully equipped, including extra space for removal and operation.

More Consistent Mask Ventilation

MEDUtrigger enables one EMS field provider to use both hands to seal the ventilation mask whilst simultaneously ventilating the patient. MEDUtrigger is fixed in position between the ventilation mask and the breathing system filter. Pressing the MEDUtrigger button with the thumb manually triggers individual mechanical breaths at the set tidal volume.

Once a supraglottic airway or tracheal tube is in place, MEDU-VENT Standard can be used for continuous ventilation at a fixed ventilation volume and pressure limit. This allows the EMS field provider to perform tasks other than ventilation.



1 Convincing Combinations

MEDUVENT Standard on LIFE-BASE light XS

Compact and lightest variant if no automatic charging, wall mounting or protective bag are required. Consisting of MEDUVENT Standard on the LIFE-BASE light XS portable unit. Total weight approx. 2.8 kg. Article no.: WM 9901





MEDUVENT Standard on LIFE-BASE 1 NG XS

Smallest, lightest variant if resistance to crashing, rapid removal and accommodation of accessories are the key criteria. Consisting of MEDUVENT Standard on the LIFE-BASE 1 NG XS portable unit including protective bag. Total weight approx. 3.1 kg***. Article no.: WM 9911

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MEDUVENT Standard with O₂ cylinder on LIFE-BASE 3 NG

Compact variant if the O₂ cylinder is to be available in every situation. Consisting of MEDUVENT Standard and O₂ cylinder on the LIFE-BASE 3 NG portable unit and the protective bag. Total weight approx. 5.3 kg***. Article no.: WM 9938







MEDUVENT Standard with MEDUCORE Standard² on LIFE-BASE 1 NG XL

Compact variant if a ventilator with a defibrillation and monitoring device on a portable unit is required. Consisting of MEDUVENT Standard and MEDUCORE Standard² on the LIFE-BASE 1 NG XL portable unit including protective bag. Total weight approx. 6.9 kg***.

Article no.: WM 9915



MEDUVENT Standard with MEDUCORE Standard² and O₂ cylinder on LIFE-BASE 3 NG

Complete therapy solution which leaves nothing out. Consisting of MEDUVENT Standard, MEDUCORE Standard² and O₂ cylinder on the LIFE-BASE 3 NG portable unit including protective bag. Total weight approx. 7.9 kg***. Article no.: WM 9935

Configure Your Own Solutions to Suit your Requirements



Accessories and Replacement Parts





11.SD card

2 GB memory

12. EasyLung test lung

For the function check

4. MEDUtrigger
for 2 m breathing circuitWM 28992

5. 2 m reusable breathing circuit

Individual article
 WM 35850

WM 29791

WM 28625

WEINMANN medical technology

Ø Our Global Service Network

Service data: MEDUVENT Standard

Manufacturer's warranty	Various options
Safety check interval	Every 2 years
Maintenance interval	Every 4 years
Automatic function check with brief summary	~
Duration of function check	Approx. 25 seconds
Software update can be performed by operator/user	\checkmark
User training without O_2 consumption (free simulation software on PC)	\checkmark
Password-protected operator menu	\checkmark
Rechargeable battery simple for operator/ user to replace	~
Telesupport	\checkmark
Service reminder in device display	E.g. scheduled safety check/mainte- nance
Electrical Safety Check to DGUV V3 (IEC 62353)	Not necessary
Turbine check during general function check	\checkmark

Perform Software Updates Yourself – Your Benefits as an Operator:

- Always up-to-date with the latest software
- You decide when to update
 no deadline pressure, no waiting
- Remain ready for use no need to ship device for update
- You decide who performs the update thanks to password-protected operator menu
- No risk performing the update is simple and safe

Never miss a safety check or service interval again

MEDUVENT Standard reliably helps you plan required servicing. Every device reminds you about due maintenance/safety checks in good time. At the end of the function check, the device tells the user about upcoming maintenance/safety check dates. If the recommended interval is exceeded, MEDUVENT Standard also displays a small spanner symbol on the start-up screen. MEDUVENT Standard uses these reminders to support you in your responsibility as the legal operator of the device.

Remote diagnosis (telesupport) in the event of a fault - safety and reliability day in, day out

With the fast, simple function check, you can always be confident that your device is fault-free and ready for use. This is possible even without connecting to an external gas source. In approx. 25 seconds, MEDUVENT Standard performs the automatic function check and gives the user a status report. Should a device malfunction ever occur, its cause may not be immediately apparent. For reporting purposes, MEDUVENT Standard lets you save the log files from the device to an SD card and e-mail them to WEINMANN Emergency. Ideally, these files alone will be sufficient to enable our service technicians to resolve the problem with you via telesupport. Should this not be the case, we will take a closer look at your device and, if necessary, you will be provided with a replacement device to cover this down time.

Active support of your quality management and documentation processes

Important information is saved automatically and can be exported to the SD card quickly and easily. Data included:

- Up to 6,000 function checks, including many details
- Documentation sheet as evidence of software update history
- Error-free standardization: Customized device configurations can be transferred from one device to others by SD card



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1 We Simplify Saving Lives

WEINMANN Emergency is a family-owned, internationally active medical technology company. With our mobile system solutions for emergency, transport and disaster medicine, we set standards for saving human lives. In close collaboration with professional users in emergency medical services, hospitals and military medical corps, we develop innovative medical products for ventilation and defibrillation. For more than 100 years we have offered our customers a high degree of reliability, extensive experience and quality made in Germany.

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