

STEPHANIE

THE NEW MODULAR VENTILATION SYSTEM FOR NEONATOLOGY, PEDIATRICS AND ADULTS

COMPLETE NOT COMPLICATED – THE NEW STEPHANIE

Our first STEPHANIE did nothing less than revolutionize the ventilator market.
The new STEPHANIE lives up to this same high standard. With 50 years of expertise and experience, the new STEPHANIE has been designed to meet neonatal and pediatric requirements.
The STEPHANIE is yet another example of how clinical experience and technical expertise can come together to create an outstanding product.

It not only impresses with its unique performance, but also through a modular structure that simplifies everyday hospital life and offers added flexibility.
As a fully equipped device, the STEPHANIE optimally prepares you for the ventilation of newborns and preterm infants.



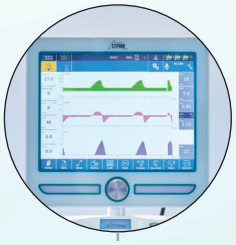


A modular design for flexible use

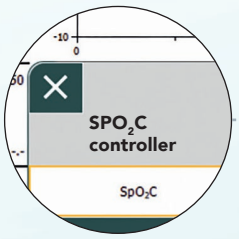
For the first time ever, you can now use our ventilator with a dead-space-free proximal dual flow sensor (PDFS) and the integrated patient gas humidification system. It is these detailed solutions that make this first-rate medical technology.
Like its predecessor, as a complete solution, the new STEPHANIE ensures optimum oxygen saturation through the integrated, fully automated SPO_2C oxygen saturation controller, which adjusts the saturation in real time.

The detachable 15-inch monitor is a new feature that enables simple handling and flexible positioning. The easy-to-use touchscreen enables ventilation parameters and treatment measures to be safely and reliably adapted to young patients' needs.

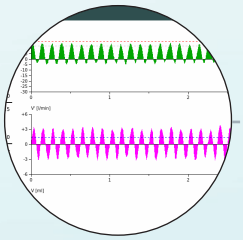
THE IMPRESSIVE KEY FEATURES OF THE NEW STEPHANIE



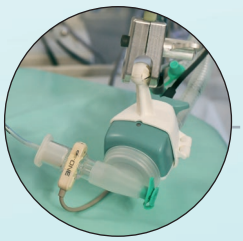
+ Detachable 15“ touchscreen monitor with various view options



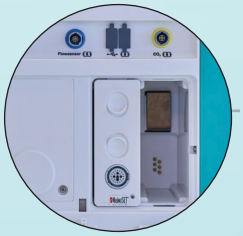
+ Integrated SPO_2C controller for optimum oxygen saturation



+ Integrated high-frequency oscillation (HFO)



+ Proximale dual flow sensor (PDFS)
+ CO_2 sensor



+ CO_2 measurement



+ Integrated patient gas humidification system



STEPHANIE

All in one –
for safe and gentle ventilation

The STEPHANIE offers all the key functions for safe and gentle ventilation in the field of neonatology. Whether invasive or non-invasive ventilation, the STEPHANIE enables you to use all conventional forms of ventilation and choose the one that best fits the specific patient's needs.
The integrated high-frequency oscillation can be activated at the push of a button and used for patients as required.

The STEPHANIE also offers proportional assist ventilation (PAV) for both invasive and non-invasive ventilation, making it possible to record and specifically support the patient's breathing effort. This back-up ventilatory support is based on a simple principle: instead of completely switching off the ventilation in the event of recurrent spontaneous breathing, the STEPHANIE enables a gradual reduction to prevent a further decline in oxygen saturation.





The STEPHANIE uses an integrated, heated patient gas humidification system allows optimal mucociliary clearance. This reduces the risk of airway clogging, atelectasis, or Pneumothorax. It is also possible to use an external humidification system. Our new, dead-space-free PDFS sensor in the STEPHANIE now enables the breathing volume to be recorded with even greater precision. The readings occur directly in the module without any delay to ensure reliable monitoring and effective ventilation. In addition to the PDFS sensor, when using invasive ventilation, a CO_2 sensor can also be integrated to monitor the CO_2 concentration and thus assess the ventilatory efficiency.

The highly sensitive young patients demand great precision and accuracy from our medical technology. The USB connection for ultrasonic nebulization enables a direct and regular supply of medication during ventilation. The STEPHANIE furthermore offers interface possibilities for existing PDMS systems to facilitate the full documentation of patient data. Thanks to the modular design, future new developments such as NO, EIT, and more can also be flexibly integrated.

See the benefits for yourself:
Contact us and find out more about the new STEPHANIE!

SPECIFICATIONS

General information	
Patient group	neonates, pediatric, adults
MPG class	II b
Dimensions	complete: 429 x 745 x 440 mm, main device: 429 x 396 x 444 mm, control unit: 366 x 339 x 90 mm
Weight	29,9 kg (without mobile stand)
Functional principle	time controlled, flow controlled, pressure controlled, volume controlled

Special functions	
Abdom. trigger	external trigger
CO_2 measurement	Masimo® Rainbow technology

Ventilation parameters	
Ventilation modes	PC-CMV; nPC-CMV; PC-SIMV; nPC_SIMV; DUOPAP; nPC-SIMV+; PC-ACV; nPC-ACV; PC-ACV+; nPC-ACV+; CPAP; PAV;nPAV; HFO; nHFO; VC-CMV; VC-SIMV; VC-ACV; VC-ACV+; High-Flow; manual
Modifications	volume limitation, leakage compensation, PSV, PAV
Maneuver functions	inspiration hold / manual, preoxygenation, medication nebulization

Flow sensor	
Single-use or multi-use sensor, electronic, heated	
PDFS	dead-space free flow sensor

Mode settings	
Ventilation frequency	1 - 300 1/min
Inspiration time	0 - 30 s
Expiration time	0 - 30 s
Tidal volume	1 - 2,000 ml
Pinsp	5 - 95 mbar
PEEP	0 - 40 mbar
Inspiration pattern	
pressure controlled	rectangle, sinus, linear
flow controlled	rectangle, sinus, decelerating
Trigger sensitivity	
Flow	0.2 - 15.0 l/min
Pressure	0.2 - 5.0 mbar
Abdominal movement	0.2 - 15 Arbs
NIV MaxFlow	Off / 40 - 6 l/min
FiO_2	21 - 100%
PSV	
Exp.-Trigger KV%	1 - 80 ETS
High frequency osc.	HFO
Frequency	5 - 25 Hz
Inspiration ratio	33 - 50%
MAP	0 - 40 mbar
Amplitude Posc	1 - 180 mbar
Base FiO_2	21 - 100%
Backup FiO_2	Base, 21 - 100%
SpO_2 UL	91 - 100%
SpO_2 LL	70 - 90%
Inspiration	Hold / manual
Tinsp holding time	1 - 10 s
Medication nebulization	
Time settings	(5 min.) 0 - 300 s
Preoxygenation	
FiO_2	FiO_2 - 100%
Duration	(3 min.) 0 - 180 s

Parameter	
Inspiration pressure	-20 - 105 mbar (Pmax)
End Exp. pressure	-20 - 105 mbar (PEEP)
Mean airway pressure	-20 - 105 mbar (Pmean)
Osc. amplitude	0 - 180 mbar (Posc)
Volume measurement	
Insp. tidal volume	0 - 5,000 ml (VTinsp)
Exp. tidal volume	0 - 5,000 ml (VTexp)
Leak volume	0 - 3,000 ml (VTleak)
Exp. minute vol.	0 - 999 l/min (MV)
Osc. minute vol.	0 - 999 l/min (MVo)
Breathing time parameters	
Respiratory rate (f)	0 - 2,000 1/min
Inspiration ratio	0 - 100% (Insp%)
O_2 measurement	
FiO_2	0 - 100%
Patient gas temperature	
close to the patient	10 - 50 ° C
Breathing mechanism	
Resistance (R)	0 - 500 mbar/l/s
Compliance (C)	0 - 900 ml/mbar
SpO_2	0 - 100%
BaseFiO_2	0 - 100%
Curve display	V(t), V'(t), E[Arb](t), Pleth(t), CO2(t); V(P), V'(V), V'(P)
Trend view	Ppeak(t), Pplat(t), Pmean(t), PEEP(t), Pplat/PEEP(T), VTe(t), Vte_spont(t), VTleak(t), MVe(t), MVe_spont(t), MVe/Mve_spont(t), f(t), fspont(t), f/fspont(t), FiO2(t), FiO2/Base_FiO2(t), SPO2/SpO2_ULtarget/SpO2_LLtarget(t), R(t), Cdynamic(t), RSBI(t), PTP, EtCO2(t), Pulse(t), PVI(t), PT(t), SpMet(t), SpCO(t), SPOC(t), SpO2/FiO2(t)
Trend duration	0,5; 1; 6; 12; 24; 48 (h)

Alarms / monitoring	
Airway pressure	high/low (Pinsp)
Exp. minute volume	high/low (MVe)
Exp. tidal volume	high/low (VTe)
End exp. pressure	high/low (PEEP)
Mean airway pressure	high/low (MAP)
Osc. amplitude	high/low (Posc)
Osc. tidal volume	high/low (VTo)
Osc. minute volume	high/low (MVo)
Base FiO_2	high
NO FiO_2Limit	
FiO_2Limit	
Respiratory rate	high (fspont)
Apnea	
Leakage	
Disconnection	
Flowlimit/disc.	
Occlusion	

Operating data	
Power supply	100-240 V AC, 50-60 Hz, 300 VA
Emerg. power supply	min. 60 minutes without humidifier (with rechargeable batteries)
Gas supply	
AIR	2.8 - 6.0 bar
O_2	2.8 - 6.0 bar

Interfaces
RS232 (Vue Link, IntelliBridge, PDMS), USB, Ethernet

Operating unit	
Screen	15" color touchscreen
Color scheme	day view/night view
Operating elements	push button, Power button, control knob, touchscreen

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