



HERSILL

Medical Devices



VITAE[®] 40

Transport ventilator
and emergency

Advanced ventilation
in the palm of your hand



Ventilation



Monitoring



Technical Features



Accessories



Spare parts



Consumables

Polyvalence that saves lives

From CPR on the field,
to the most complex transport



ERGONOMIC

All the control in the
palm of your hand



LIGHT

1.4 kg
(with battery)



COMPACT

227 x 125 x 65 mm



Ventilation

Ventilation and monitoring at ICU level

VOLUME CONTROLLED

Controlled Ventilation (VCV)

Assisted/Controlled (VC-A/C)

Synchronized Intermittent (VC-SIMV)

Synchronized Intermittent
+ Pressure Support (VC-SIMV-PS)

Adaptive Pressure with Volume
Guaranteed Ventilation (APVG)
APVG+A/C
APVG+SIMV
APVG+SIMV+PS

PRESSURE CONTROLLED

Controlled Ventilation (PCV)

Assisted/Controlled (PC-A/C)

Synchronized Intermittent (PC-SIMV)

Synchronized Intermittent
+ Pressure Support (BIPAP)

Pressure Support Ventilation (PSV)

Continuous Positive Airway Pressure (CPAP)

Compensation for leakage
Non-invasive Ventilation (NIV)



Monitoring



Estimated FiO₂

Volumetric capnography
(mainstream, Masimo™)

Real-time ventilation curves

Loop and trends



Monitoring

Certified for air ambulance



Assistants during CPR

Pressure-controlled ventilation with pre-configured settings and restrictions (CPR-PCV) during continuous cardiac massage

Assistants during CPR 30/2 or 15/2

CPR Semi-Auto:

Manual trigger of 2 breaths at the end of each massage cycle. cycle. Metronome audible and visible

CPR Auto:

Automatic trigger of 2 breaths at the end of each massage cycle. cycle. Metronome audible and visible

CPR Auto-Compressor:

Automatic trigger of 1 breath at the end of each massage cycle in a thoracic compressor

According to regulations:



Conventional and high-flow oxygen therapy (up to 80 L/min)

Bluetooth connectivity

Standard: RTCA DO-160G / EUROCAE ED-14G



Monitoring

Ventilation curves:

Real time: Pressure/time, Flow/time, CO_2 /time⁽¹⁾

Loops: Volume-Flow, Pressure-Volume, Flow-Pressure, VCO_2 (SBCO_2)⁽²⁾

Ventilation trends:

Pip, VMe, Cdyn, EtCO_2 ⁽¹⁾, $\text{V}'\text{CO}_2$ ⁽²⁾, $\text{V}'\text{alv}$ ⁽²⁾

Ventilation parameters:

Pip, VTe, F, Fspont, VMe, VTi, InCO_2 , EtCO_2 , Pplat, Pavg, Cdyn, O_2 Consumption, Leakage Rate (VTi vs VTe), Timer

Volumetric capnography parameters⁽²⁾:

ViCO_2 , VeCO_2 , VCO_2 , $\text{V}'\text{CO}_2$, VDaw, VDalv, VDphys, VD/VT, PACO_2 , FECO_2 , PECO_2 , VD/VT (Bohr), Valv, $\text{V}'\text{alv}$

FiO₂ (estimated)

Alarms: Specific interface with dedicated buttons on the touchpad

Battery level

Tidal Volume: 5 to 3000 (50 to 1500 mL in VCV modes)

Ventilation frequency: 3 to 80/min

I:E Ratio: 5:1 to 1:8

PEEP: 0 to 30 mbar

Inspiratory pressure: 5 to 60 mbar

Peak Pressure: 5 to 60 mbar

Pressure support: 5 to 60 mbar

FiO₂: 40 to 100% O₂ (in 10% increments)

Trigger: 1 to 15 L/min

Inspiratory time: 0.1 to 16 s

Inspiratory pause: 0 to 60%

Ramp: 0.1 to 2.0 s

Non-Invasive Ventilation (NIV): No / Yes

OPTIONS

(1) Capnography (Masimo™ mainstream)

(2) Volumetric capnography

New ISO 80601-2-84:2018 standard for emergency and transport ventilators.

Technical Features



Inspiratory flow:	max. 120 L/min
Breathing circuits:	Reusable, disposable, adult and paediatric*
Fresh air inlet filter:	0.65 µm (> 98% at 95 L/min)
Overpressure limiting device:	105 hPa (105 cmH ₂ O)
Gas supply:	O ₂ : 2.7 - 6 bar (internal gas consumption < 0.1 L/min)
Power supply:	12 V _{DC} ; Optional: AC/DC (100 - 240 V / 50 - 60 Hz)
Battery life:	Up to 12 hours (5 h internal battery + 7 h Pluscel*)
Consumption:	max. (battery charge)= 2.5 A (typical= 1 A (@ 12 V _{DC})
Internal battery:	NiMH lithium free, no reactive compounds, air transport standards
Display:	TFT colour 4.3" (95 x 54 mm), with night vision options
Communications:	Bluetooth*
Operating conditions:	-20 to +50 °C, 0 - 95% humidity, up to 4000 m altitude (incorporates thermometer and altimeter for corrections)
Housing protection:	IP44
Airworthiness:	Conformity with IEC, ISO, EN and RTCA standards
EMC protection:	Radiated and conducted tests helicopters, aircraft and ambulances
Mechanical resistance:	30 g (vibration and impact resistance for helicopters, aeroplanes and ambulances)
Dimensions and Weight:	227 x 125 x 65 mm; 1.4 Kg (including battery)

*Please contact us for all available options.

AS EASY TO USE AS BREATHING



Accessories



Basic Configuration

5200800

- ✦ Standard ventilation modes: VCV, VCV-ACV, VC-SIMV, PCV, PCV-ACV, PC-SIMV, CPAP, Manual
- ✦ CPR modes (CPR assistants and CPV ventilation), Oxygen therapy (high flow), Patient Circuit adult disposable
- ✦ Ambulance power cable, Batteries pack 6 x NiMH rechargeable, Oxygen therapy adapter
- ✦ Supply hose with different O₂ connections (2 m O₂ DISS)* 410005X

* Please consult all the options available.
Manual and interface available in English, French and Spanish.
(other languages on request)

OPTIONS

- | | |
|--|---------|
| Advanced ventilation modes (PSV +APVG) | 4200803 |
| Advanced volumetric capnography | 4200804 |
| Bluetooth | 4200962 |
| AC-DC charger* | 3200884 |

Trolley for VITAE® 40

Accessories not included
+ Cylinder up to 7L
+AC/DC

Ref.: 4200860



Transport Cases



3200990



4200993

Accessories



Consumables



Wall bracket XG (30 g)*	4320301
Steerable XG clamp (0°-45°-90°)	4200972
Oxygen pressure regulator (P-300 P40 - Quick-release connection)*	5501XXX
Oxygen pressure regulator with hose 1m (P-300 P40 - 1m - DISS)*	55014XX
External battery (Li-ion)	4200981
MR850 Humidifier/heater + temperature sensor + heater cable + bar adapter	4500540
Capnography (CO ₂ analyser mainstream): IRMA CO ₂ , airway adapter for IRMA and CO ₂ monitoring	4200802
DISS double valve distributor	4200980

Rechargeable NiMH battery	3200851
Pack 10 VITAE® 40 air filters	4200817
Ambulance power cable	3200885

Spare Parts



Patient circuit			
disposable		reusable	
adult	paediatric	adult	paediatric
4200892	4200893	4200897	4200898

Pack 10 Bacterial-viral filters (HMEF) Disposable	
adult	paediatric
4100500	4100501

Pack 10 Airway Adapters for IRMA CO ₂	
adult / paediatric	infant
4100502	4100503

Pack 10 Optiflow circuit kit for MR850 with humidification chamber
0500544

Pack 10 NIV face mask	
M	L
4200043	4200045

Pack High-flow nasal cannula		
S (x 10)	M (x 20)	L (x 20)
4200040	4200042	4200044

*Please contact us for all available options.

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