

VITAE[®] 40

TRANSPORT AND EMERGENCY VENTILATOR

Advanced ventilation in the palm of your hand



ANNIVERSARY
HERSILL 50

FROM THE IDEA
TO THE PATIENT



VITAE® 40

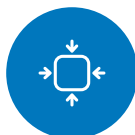
Polyvalence that saves lives

From CPR on the field
to the most complex transport



ERGONOMIC

All the control in the
palm of your hand



COMPACT

227 x 125 x 65 mm



LIGHT

1.4 kg
(with batteries)

VITAE® 40

Ventilation and monitoring at ICU level

Ventilation

VOLUME CONTROLLED	PRESSURE CONTROLLED
Controlled ventilation (VCV)	Controlled ventilation (PCV)
Assisted/Controlled (VC-A/C)	Assisted/Controlled (PC-A/C)
Synchronized Intermittent (VC-SIMV)	Synchronized Intermittent (PC-SIMV)
Synchronized Intermittent + Pressure Support (VC-SIMV-PS)	Synchronized Intermittent + Pressure Support (BIPAP)
Adaptive Pressure with Volume Guaranteed Ventilation (APVG) APVG + A/C APVG + SIMV APVG + SIMV + PS	Pressure Support Ventilation (PSV)
	Continuous Positive Airway Pressure (CPAP)
	Compensation for leakage Non-Invasive Ventilation (NIV)

Monitoring

Estimated FiO_2
Volumetric capnography (main stream, Masimo™)
Real-time ventilation curves
Loops and trends



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. Audible and visible metronome.

CPR Auto:

Automatic trigger of 2 breaths at the end of each massage cycle. Audible and visible metronome.

CPR Auto-Compressor:

Automatic trigger 1 of 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)



Connectivity (Bluetooth)



RTCA / EUROCAE ED-14G

VITAE® 40

TECHNICAL DATASHEET



Designed according to the new ISO standard 80 601-2-84:2018 for emergency and transport ventilator.

OPTIONS

- (1) Capnography (Masimo™ main stream)
- (2) Volumetric capnography
- (3) Pluscel battery (Lithium)
- (4) Bluetooth

MONITORIZATION:

Ventilation curves:

Real time: Pressure/time, Flow/time, CO₂/time⁽¹⁾

Loops: Volume-Flow, Pressure-Volume, Flow-Pressure, VCO₂ (SBCO₂)⁽²⁾

Ventilation trends:

Pip, VMe, Cdyn, EtCO₂⁽¹⁾, V'CO₂⁽²⁾, V'alv⁽²⁾

Ventilation parameters:

Pip, VTe, F, Fspont, VMe, VTi, InCO₂, EtCO₂, Pplat, Pavg, Cdyn, O₂ Consumption, Leakage Index (VTi vs VTe), Timer

Volumetric capnography parameters⁽²⁾:

ViCO₂, VeCO₂, VCO₂, VCO₂, VDaw, VDalv, VDphys, VD/VT, PACO₂, FECO₂, PECo₂, VD/VT (Bohr), Valv, Valv

FiO₂ (estimated)

Alarms: Specific interface with dedicated buttons on the touchpad

Battery level

VENTILATION ADJUSTMENTS:

- Tidal volume: 5 to 3000 mL (50 to 1500 mL in VCV modes)
- Ventilation frequency: 3 to 80/min
- I:E relation: 5:1 to 1:8
- PEEP: 0 to 30 mbar
- Inspiratory pressure: 5 to 60 mbar
- Maximum 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

Inspiratory flow:	max. 120 L/min
Breathing circuit options:	Reusable, Disposable, Adult and Paediatric
Power supply:	12 V _{DC} Optional: AC/DC (100 - 240 V / 50 - 60 Hz)
Consumption:	max. (battery charge)= 2.5 A (typical= 1 A (@ 12 V _{DC}))
Gas supply:	O ₂ : 2.7 - 6 bar (internal gas consumption < 0.1 L/min)
Battery autonomy:	Up to 12 hours (5 h internal bat. ⁽⁴⁾ + 7 h Pluscel bat. ⁽³⁾)
Display:	TFT colour 4,3" (95 x 54 mm), with night vision options
Communications ⁽⁴⁾ :	Bluetooth
Enclosure protection:	IP44
Dimensions and Weight:	227 x 125 x 65 mm; 1.4 Kg (including battery)
Fresh air inlet filter:	0.65 µm (> 98% at 95 L/min)
Overpressure limiting device:	105 hPa (105 cmH ₂ O)
Operating conditions:	-20 to +50 °C, 0 - 95% humidity, up to 4600 m altitude (built-in thermometer and altimeter for corrections)
Mechanical strength:	30g (normative vibrations and impact for helicopters, airplanes and ambulances)
EMC protection:	Radiated and conducted tests of helicopters, airplanes and ambulances
Airworthiness:	In accordance with IEC, ISO, EN and RTCA standards
Lithium-free battery ⁽⁴⁾ :	Internal NiMH battery, without reactive compounds, compliance with new air transport regulations

VITAE® 40 ACCESSORIES/ CONSUMABLES/ SPARES

01_BASIC CONFIGURATION

VITAE®40	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 VITAE®40 – disposable adult, Ambulance supply cable, Batteries pack 6 x NiMH rechargeable, Oxygen therapy adapter (ref. 0220011)	
Power hose O ₂ (2m O ₂ DISS) (*)	410005X

02_OPTIONS

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

03_ACCESSORIES

External battery (Li-ion)	4200981
Test Lung (1L)	0142020
Oxygen regulator with 1m hose (P-300 P40 – 1m – DISS) (*)	55014XX



Transport case
VITAE®40
Ref.: 3200990



Transport bag for
cylinder 2/3 L (PAX)
Ref.: 4200996



Backpack transport
Oxy Compact for
VITAE®40
Ref.: 4200990



Cart for VITAE®40
Accessories (not included):
AC/DC, Cylinder up to 7L.
Ref.: 4200860



Capnography (CO₂ analyser
main-stream): IRMA CO₂,
airway adapter for IRMA and
CO₂ monitoring
Ref.: 4200802



Wall support XG (30g)
Ref.: 4320301



Steerable XG clamp
(0°- 45°- 90°) VITAE®40
Ref.: 4200972



Double distributor
DISS valve
Ref.: 4200980



MR850 Humidifier/
heater + temperature sensor
+ heating cable +
adapter to bar
Ref.: 0500540



Oxygen regulator
(P-300 P40 – With
quick-release
connection) (*)
Ref.: 5501XXX

(*) Consult with us all available options.

Manual and interface available in English, French and Spanish (other languages please check availability).

VITAE® 40 ACCESSORIES/ CONSUMABLES/ SPARES

04_CONSUMABLES

Pack 10 Bacterial-viral filters (HMEF) – single use – paediatric _____ 4100501
 Pack 10 Airway adapters for IRMA CO₂ - infant _____ 4100503



Patient circuit
 VITAE®40 Reusable
 adult
 Ref.: 4200897



Patient circuit
 VITAE®40 Reusable
 paediatric
 Ref.: 4200898



Patient circuit
 VITAE®40 single use
 adult
 Ref.: 4200892



Patient circuit
 VITAE®40 single use
 paediatric
 Ref.: 4200893



Pack 10 Bacterial-viral
 filters (HMEF)
 Disposable adult
 Ref.: 4100500



Pack 10 Airway adapter
 for IRMA CO₂
 Adult/paediatric
 Ref.: 4100502



Oxygen therapy
 and capnography kit
 Ref.: 4200811



Pack 10 Optiflow circuit
 kit for MR850
 with humidification chamber
 Ref.: 0500544



Pack 10 NIV face mask
 Size S
 Ref.: 4200041



Pack 10 NIV face mask
 Size M
 Ref.: 4200043



Pack 10 NIV face mask
 Size L
 Ref.: 4200045



Pack 10 high flow
 nasal cannula Size S
 Ref.: 4200040



Pack 10 high flow
 nasal cannula Size M
 Ref.: 4200042



Pack 10 high flow
 nasal cannula Size L
 Ref.: 4200044

05_SPARES

Rechargeable NiMH battery _____ 3200851
 Pack of 10 VITAE®40 air filters _____ 4200817
 Ambulance supply cable _____ 3200885



**AS EASY TO USE
AS BREATHING**



MANUFACTURERS SINCE 1973

Puerto de Navacerrada, 3
28935 Mostoles,
Madrid, SPAIN

T: +34 91 616 6000
info@hersill.com
www.hersill.com

