bellavista™ 1000e

Optimal patient comfort

vyaire™
M E D I C A L

Sometimes bigger is simply better …

The display on the **bellavista™ 1000e** leads the way towards a unique user experience. That's because the bellavista™ 1000e features an easy-to-read, easy-to-use, high-resolution 17.3" glass touchscreen, making it simple to view parameters and waveforms even in complex and challenging situations. Clinicians will find the capacitive touchscreen interface is intuitive and natural right from the start, delivering an excellent user experience. Performing both invasive and non-invasive ventilation, the bellavista™ 1000e is powerful, flexible and reliable in the intensive care unit (ICU) and intensive monitoring care, for patients ranging from neonates to adults.

With customizable software solutions, the decision how to effectively use the bellavista™ 1000e is completely in the clinician's hands, a practical and unique advantage of the bellavista™ family.

Features:

- ICU ventilator with 17.3" glass touchscreen, full high-definition screen resolution
- Care solutions for premature neonates to adults
- Adaptive Ventilation Mode
- High Flow Oxygen Therapy
- Expanded non-invasive features
- Lung Recruitment Tool
- Esophageal Pressure Monitoring
- Battery time three-hours minimum

Ventilation features

AVM

Adaptive Ventilation Mode (AVM) is a smart ventilation mode that considerably reduces the number of ventilation settings required. By constantly measuring lung mechanics, AVM adapts breath by breath to the patient's needs, whether the patient is being ventilated or breathing spontaneously. AVM always calculates the optimal ventilation pattern at the lowest possible ventilation pressure and supports patients safely from intubation to extubation.
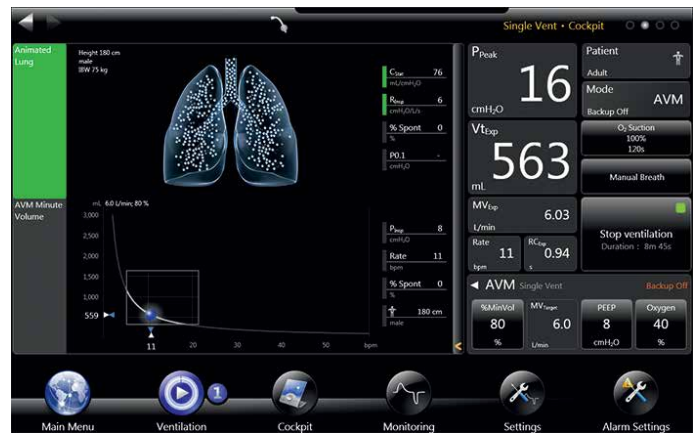
HFOT

High Flow Oxygen Therapy (HFOT) is a type of therapy that is able, in combination with an actively humidified tubing system, to effectively improve the oxygenation of patients while enhancing patient comfort. This is achieved by high flow rates that build up a positive pressure in the nasopharyngeal space. In contrast to conventional, noninvasive types of ventilation, patients can drink, eat and speak while undergoing HFOT.

Lung Recruitment Tool

The Lung Recruitment Tool (LRT) is an automated maneuver that provides the clinician with all the necessary information for lung recruitment in a reliable, reproducible and simple way. In a first step, measurements are taken in order to find out whether a patient's lung is recruitable. If that is the case, collapsed alveoli or lung areas can be reopened in a second step.

Optimizing workflow and patient interaction

AnimatedLung

AnimatedLung is a dynamic tool that visualises the mechanical state of a patient's lung. An easily comprehensible graphic display helps to detect at a glance any changes in lung compliance or resistance, as well as the patient's spontaneous activity.
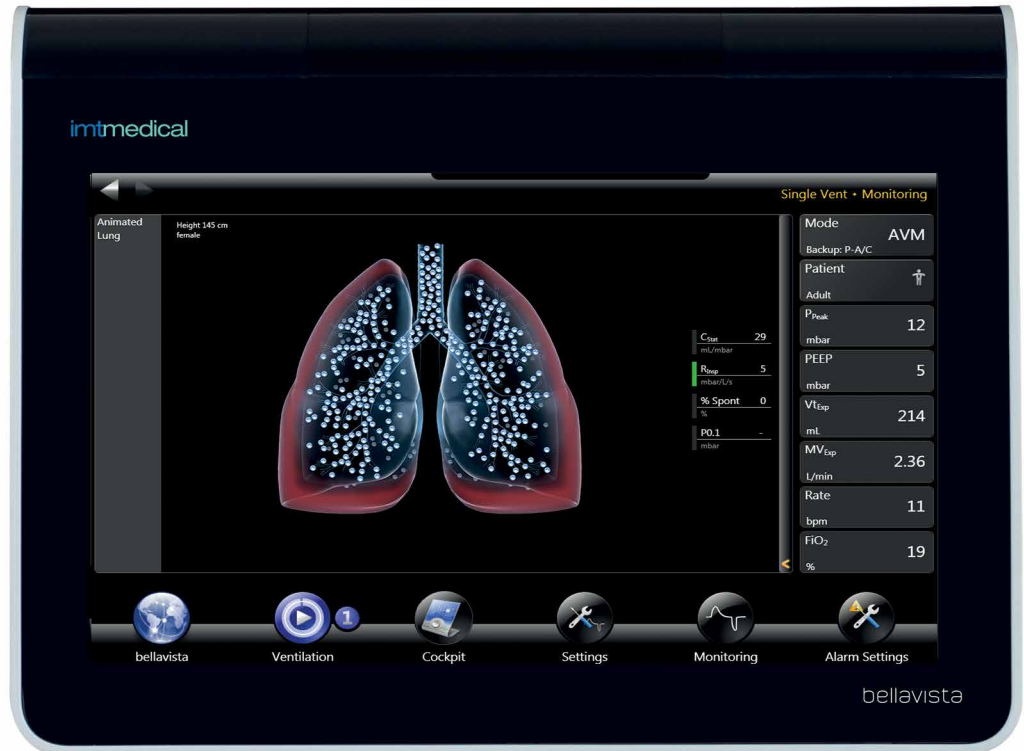
Advanced Synchrony

Automated tools save a clinician time and ensure optimal ventilation. We offer three automated tools to help the clinician—and patients. auto.sync relieves the patient of a fixed manual expiratory setting and optimises the synchronisation of a patient during spontaneous breathing. auto.rise adapts and optimises the pressure rise time (ramp) by performing continuous breath analysis while simultaneously avoiding pressure peaks. In addition, our fully automatic adaptive leak compensation system, auto.leak, reliably compensates for inspiratory and expiratory leaks up to 120 L/min.

The versatile solution

Customizable User interface

The bellavista™ 1000e user interface offers many options to customize your user experience. Either if it's for adult or neonatal patients, invasive or non-invasive use, screens and monitoring values can be individually configured for each application or mode.

Accessories

bellavista™ ventilators offer a wide range of accessories, such as a vertically adjustable cart or custom diagnostic packages, to enhance the efficiency and effectiveness of care.

"An outstanding user experience due to a brilliant, high-resolution display."

Technical specifications

Parameter	Specification
Patient types	Adult, Pediatric, Neonatal
Areas of application	Intensive care unit (ICU), Neonatal Intensive Care Unit (NICU), Intensive monitoring care (IMC), Emergency room (ER), Intra-hospital transfer
Ventilation modes	
Pressure-controlled	CPAP, P-A/C, PC-SIMV, PSV, beLevel, APRV, S, S/T, T
Volume-controlled	V-A/C, VC-SIMV, PLV (Pressure Limited Ventilation),
Flow pattern	Square, 50% decelerating, decelerating
Volume Target modes	$P-AC_{Target}$, $PC-SIMV_{Target}$, PSV_{Target}, S/T_{Target}, S_{Target}
Adaptive mode	AVM
Non-invasive modes	CPAP, PSV, P-A/C, PC-SIMV, beLevel, APRV, $P-A/C_{Target}$, $PC-SIMV_{Target}$, PSV_{Target}, nCPAP, nIPPV
bellavista modes	DualVent, Day/Night
Apnea ventilation	P-AC, PC-SIMV, V-AC, VC-SIMV, $P-A/C_{Target}$, $PC-SIMV_{Target}$, S/T_{Target}
Backup modes	PSV
Oxygen therapy	HFOT 2-50 L/min Adult/Pediatric, 1-50 L/min Neonatal
Features	
Peak inspiratory flow	260 L/min
Inspiratory pressure, IPAP	2-95 mbar
$P_{Support}$	0-95 mbar
PEEP, EPAP	0–50 mbar
Tidal volume	40-2500 mL Adult/Pediatric; 2-250 mL Neonatal
Inspiratory time	0.1-10 s
Respiratory rate	1-100 breaths per minute Adult/Pediatric; 1-150 breaths per minute Neonatal*
I:E ratio	1:99 – 100:1
Inspiratory trigger	Flow 0.1-20 L/min, pressure 0.1-15 mbar, Off
Expiratory trigger	auto.sync, 5-90% manual
Rise time	0–2000 ms, auto.rise

Parameter	Specification
Leak compensation	auto.leak, automatic inspiratory/ expiratory leak compensation up to 120 L/min
Tube compensation	ATC, in-expiratory, inspiratory
Graphs	Pressure, Flow, Volume, ATC, SpO_2, Pulse, $etCO_2$, AVM, $Target_{Graph}$, AnimatedLung
Loops	Pressure/Volume, Pressure/Flow, Flow/Volume, Volumetric CO_2
Monitoring	>60 online parameters
Trending	14-day real-time trending 1-year parameter trending
Maneuvers	Lung Recruitment Tool, Manual breath, configurable Sigh, Hold Inspiration, Hold Expiration, NIF, $V_{Trapped}$, P0.1, Auto-PEEP
Weaning protocol	VentSummary
Oxygen	21–100 %
Nebulizer	Internal, pneumatic
Interfaces	3 × RS 232, Ethernet*, 2 × USB, Nurse call, CO_2, SpO_2, bellavista bus*, Display Port*
Additional pressure measurement	P_{Aux} (internal)
Dimensions (w x h x d)	440 × 250 × 360 mm/ 17.32 × 9.84 × 14.18 inch
Screen	17.3" Color Full HD, capacitive glass touchscreen, TFT
Battery time	minimum 180 min. (internal)
Oxygen supply	0–7 bar, 21.75–101.5 psi, 0–110 L/min
Weight	15.4 kg
Power supply	100-240 VAC ± 20 % / 50–60 Hz, low-voltage input 24 VDC / max 6 A

* Service only

Dimensions

250 mm/9.84"

360 mm/14.18"

440 mm/17.32"

1170–1320 mm/46.06"–51.96"

575 mm/22.63"

545 mm/21.46"

For more information, please contact your local dealer or Vyaire representative.

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