

## bellavista 1000 neo For our most sensitive patients

## Maximum precision in volume and pressure control.

Ventilation of neonates requires maximum precision in volume and pressure control. So, for our smallest patients, the bellavista 1000 neo combines the latest technology with precise delivery of airflow. The clear software architecture of bellavista also allows trouble-free function extensions by means of simple software updates. bellavista 1000 neo is thus a safe, comprehensive and future-proof ventilator with unmatched ease of use.

#### **FEATURES:**

- Simple, intuitive user interface on a 13.3-inch colour touchscreen
- nCPAP and nIPPV with choice of pressure or flow-based ventilation
- High Flow Oxygen Therapy with flows up to 60 L/min
- Sensitive and precise triggering with proximal flow sensor
- Compact and light



## Target ventilation



#### TargetVent

A study has shown that in newborn patients where ventilation is metered by volume, lung damage is rarer. As such, the duration of ventilation support is reduced. At the same time, target-controlled ventilation helps to prevent pneumothorax and leads to more stable CO<sub>2</sub> levels<sup>1</sup>

For extremely low birthweight patients, bellavista's TargetVent, provides a full ventilation platform with target volumes of 2 mL tidal volume. Our TargetVent modes can also be used for noninvasive ventilation.

## Ventilation for Neonates

### TargetVent

TargetVent offers precise and fast "auto.leak" leak compensation. Our own iFlow 40 and 40 SC proximal flow sensors, are enabling target-controlled ventilation in pressuresupported, spontaneous and noninvasive ventilation modes. The sensors detect changes in ventilation flow patterns with a very high sampling rate.

### nCPAP and nIPPV modes

bellavista **nCPAP** can be used based on pressure or flow. The nCPAP mode monitors respiratory rate and provides additional safety with an apnoea alarm. With our biphasic, noninvasive **nIPPV** mode, it is possible to ventilate at high rates of up to 200 breaths per minute.

## **BACKUP VENTILATION**

Our **Burst Backup** ventilation feature gives you maximum safety in nCPAP ventilation. By setting a certain number of breaths you can prevent apnoea without switching to apnoea ventilation. The neonate can thus continue breathing at its own spontaneous respiratory rhythm.

## "Maximum precision in volume and pressure control – with incomparable user-friendliness."

### **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. So HFOT is an extremely comfortable type of therapy for your smallest patients in need for improved oxygenation.

## FRIENDLY MOOD BUTTONS

In order to help relatives take a friendlier view of the bellavista 1000 neo in an otherwise sterile environment, various relaxing mood buttons with animal motifs can be shown on the screen. In addition, the colour of the ventilator is unostentatious.













## Ventilation for Neonates

### WEANING

#### **PSVTarget**

This mode can be used for comfortable weaning with a pressure-regulated, volume-guaranteed PSVTarget and adaptive pressure support.

### OXYGEN

#### Neonatal oxygen flush

Adjustable oxygen flush allows the user prior selection of the maximum FiO<sub>2</sub> level and duration of  $O_2$  delivery.

# Technical specifications

Parameter	Specification
Patient types	Neonatal, Infant
Technology	High-performance turbine
Ventilation modes <ul> <li>Pressure-controlled</li> </ul>	CPAP, PSV, P-A/C, PCV, PC-SIMV
<ul> <li>Volume-controlled</li> </ul>	P-AC <sub>Target</sub> , PC-SIMV <sub>Target</sub> , PSV <sub>Target</sub>
• Non-invasive modes	CPAP, PSV, P-AC, PCV, PC-SIMV, P-AC <sub>Target</sub> , PSV <sub>Target</sub> , nCPAP, nIPPV
<ul> <li>Apnoea ventilation</li> </ul>	P-AC, PC-SIMV, nIPPV
• Backup modes	PSV, Burst backup
• Oxygen therapy	HFOT 1–60 L/min
Inspiratory pressure	2–60 mbar
P <sub>Support</sub>	2–45 mbar
PEEP	0–30 mbar
Tidal volume	2–250 mL
Inspiratory time	0.1-2 s
Respiratory rate	1 – 150 breaths/min 6 -200 nIPPV
I:E ratio	1:99 – 100:1
Inspiratory trigger	Flow 0.1-20 L/min, Pressure 0.1-15 mbar, Off
Expiratory trigger	5-90%
Rise time	0–400 ms, auto.rise
Leak compensation	auto.leak, full in- and expiratory compensation
Graphs	Pressure, Flow, Volume, SpO <sub>2</sub> , etCO <sub>2</sub>

Parameter	Specification
Loops	Pressure/Volume, Pressure/Flow, Flow/Volume
Monitoring	> 45 parameters
Manoeuvre	Inspiratory and Expiratory Hold, NIF (Negative Inspiration Force), Vtrapped, P0.1 (Occlusion Pressure), AutoPEEP, Manual Breath
Oxygen flush	$\operatorname{FiO}_{_2}$ and duration configurable
Graphics	TargetVent View
Trending	Monitoring parameters and curves
Oxygen	21–100 %, 0-7 bar
Options	Sidestream capnography, SpO <sub>2</sub> plethysmography
Breathing circuits	Single and dual limb breathing circuits
Dimensions (W x H x D)	350 × 220 × 330 mm / 13.78 × 8.66 × 12.99 inch
Screen	13.3" Color, Full HD capacitive glass touchscreen, TFT
Battery time	minimum 240 min. (internal)
Interfaces	2 × RS232, 2 × USB, Can Bus, Ethernet, CO <sub>2</sub> , SpO <sub>2</sub> , Nurse Call, HL7, Vuelink/Intellibridge
Weight	12.8 kg
Power supply	100–240 V AC/50–60 Hz, low-voltage supply 24 VDC/3.5 A





#### Notes

<sup>1</sup> Wheeler KI, Klingenberg C, Morley CJ, Davis PG. Volume-targeted versus pressure-limited ventilation for preterm infants: A systematic review and meta-analysis. Neonatology 2011; 100(3):219-227.

#### GLOBAL HEADQUARTERS

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