



LUNA BELT

TECHNICAL FEATURES

GENERAL CHARACTERISTICS mouthpiece		
Applications	IV, NIV, Mouthpiece ventilation (MPV), High flow oxygentherapy (HFOT), IAPV	
Ventilation modes	PSV, APCV, PCV, CV, ACV, SIMV, SIMVp, and (only with leakage system) CPAP, IAPV	
Usable Circuits	Single limb with leakage Single limb with active valve Single limb (15mm) for MPV Single limb with HFNC (high flow nasal cannula) for HFOT PB-Air	
Multi-therapy	Up to 5	
CONTROLS		Accuracy
Pressure Support	1 – (60-PEEP) hPa (step 0.5 hPa) . The pressure above the PEEP	± (4% + 2hPa)
Ipap	(Epap +1) - 60 hPa (step 0.5 hPa)	± (4% + 2hPa)
Pbelt	4-70 hPa (step 0.5 hPa)	± (4% + 2hPa)
Expiratory pressure	0 - 25 hPa (step 0.5 hPa) with active valve systems 3-25 hPa (step 0.5 hPa) with leakage systems	± (4% + 2hPa)
Inspiratory volume	50 ml -2500 mL (50 ml-500 ml: step 10 ml; 500 ml-2500 ml: step 50 ml)	± (15% + 4ml)
Frequency	1- 60 BPM (step 1 BPM)	±1 bpm
Inspiratory controlled time	0.3 - 5.0 sec (step 0,1 sec)	± (5% + 0.2s)
Minimum inspiratory assisted time	0.3 - 3.0 sec (step 0,1 sec)	± (5% + 0.2s)
Maximum inspiratory assisted time	0.8 - 5.0 sec (step 0,1 sec)	± (5% + 0.2s)
Guaranteed Volume	OFF – 50ml to 2500ml	± (15% + 4 ml)
Flow (HFOT)	10-70 lpm (step 1 lpm)	
O2 FLOW (HFOT)	0-30 lpm (step 1 lpm)	
Flow curves	Square, decelerated	
Inspiratory trigger	Autotrack + 9 different levels (1 = most sensitive, 9 = less sensitive)	
Expiratory trigger	Autotrack, from 10% to 90% from the peak inspiratory flow (10%=less sensitive, 90%=most sensitive)	
MEASURED AND DISPLAYED PATIENT PARAMETERS		Accuracy
Tidal Volume (Vti andVte)	0-9999 ml (step 1 ml)	± (15% + 4ml)
Peak Inspiratory Pressure (PIP)	0-99.9 hPa (step 0.1 hPa)	± (4% + 2hPa)
PEEP	0-99.9 hPa (step 0.1 hPa)	± (4% + 2hPa)
Minute Volume Ventilation (VM)	0-99.9 L/min (step 0.1 L/min)	± (15% +0.1L/min)
Respiratory Rate (Freq)	0-99 BPM (step 1 BPM)	±1 bpm
Leak	0-160 L/min (step 1 L/min)	± (15% + 2L/min)
Percentage of spontaneous Triggered breaths (SPONT %)	0-100% (step 1%)	±0.5%
Inspiratory Time (Ti)	0.1 - 60.0 s (step 0.1 s)	± 0.1s
I: E Ratio	1:9.9 to 9.9:1	± 0.1
EtCO2 with accessory	0-150 mmHg (step 1mmHg)	
	0-40mmHg	
	41 - 70 mmHg	
	71 - 100 mmHg	
	101 - 150 mmHg	
	Short Term Drift	Drift over four hours shall not exceed 0.8 mmHg maximum
	Long Term Drift	Accuracy specification will be maintained over a 120-hour period

METER READING (MASIMO USPO2 MODULE +SENSORS, OR NONIN XPOD + SENSORS)		
SpO2	70%-100%	±2 %
	50% to 69%	±3 %
Pulse	25 to 240 BPM	±2 BPM
ALARMS		
Inspiratory pressure	High-Low	
Expiratory pressure	High-Low	
Respiratory rate	High-Low (apnea)	
Tidal volume	High-Low	
Minute ventilation	High-Low	
High leakage – Open circuit	High-Low	
Low level battery	High-Low	
No power supply	High-Low	
OTHER SPECIFICS		
Particle and liquid protection	IP22	
Sound pressure alarms	90dBA	
Noise	Mode PCV, Interface LkFace, Closed circuit. Front Noise 33dB@25hPa; Mode PCV, Interface Dual, connected to a real Test Lung: Front Noise 6dbA@60hPa	
Dimensions	27 x 26 x 13 cm (L x H x P)	
Weight	3.2 Kg	
Power supply	100/240V, -20%+10%, 50/60 Hz, 160VA Internal rechargeable in LiPo – 18 hours working autonomy in standard conditions (PS 15 hPa, Peep 5 hPa, Fr 15) Charging time: 8 hours from fully discharged to fully charged	
Conditions of Use	From 10 ° C to 40 ° C; Humidity: 10% to 90%, non-condensing Atmospheric pressure between 700hPa and 1060hPa	
Transportation conditions and storage	From -25°C without humidity control, to + 70°C 93% relative humidity, non-condensing	
Safety standards	EN60601-1, EN60601-1-2, EN62366, EN62304 EN60601-1-11, EN60601-1-8, ISO 80601-2-80; ISO 80601-2-72	
Conformity	93/42/ECC and 2007/47/EC	
Electrical Insulation	Class II - BF	
Risk class	2B	