

LUNA 100 - 150

Luna 100/150 is a high-tech pressure & volume ventilator operating with different circuits. Equipped with a 7" touchscreen display, it allows easy setting across a wide range of ventilation modes for patients with diverse needs, and features a rechargeable battery.

MODELS AVAILABLE

- **LUNA 100:** Pressure & Volume Ventilator **single limb** (active valve, leakage/whisper system + MPV)
- **LUNA 150:** Pressure & Volume Ventilator **Dual limb** (active valve), single limb (active valve, leakage/whisper system + MPV).

FIELD OF APPLICATION

- Hospitals
- Home Care
- Respiratory Therapy Clinics

SUITABLE FOR

- Ideal for patients with acute/chronic respiratory failure
- Not designed to be used as an emergency ventilator
- It can be used for both invasive and non-invasive ventilation
- Provides continuous or intermittent ventilatory support for the care of subjects requiring mechanical ventilation
- Adult and pediatric up to 2.5 kg (10 ml)

OUTSTANDING FEATURES

- Wide therapeutic versatility: Invasive and non-invasive ventilation, with active valve circuits and leakage circuits
- Accurate volume and trigger sensitivity
- Wide range of settings and alarms for each specific requirement
- "Easy to use" interface
- Measurement of expiratory volumes with "dual limb" circuit,
- Storing and download of the stored therapies and alarm event

TECHNICAL FEATURES

General characteristics		
Applications	IV, NIV, Mouthpiece ventilation (MPV), High flow oxygen therapy (HFOT)	
Ventilation modes	PSV, APCV, PCV, CV, ACV, SIMV, SIMVp, and (only with leakage system) CPAP, S, ST, T	
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 Dual limb with active valve (available only with Luna 150)	
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)
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 sentive, 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		
Tidal Volume (Vti and VtE)	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% + 2 L/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	± 3 mmHg
	41 - 70 mmHg	± 5% of reading
	71 - 100 mmHg	± 8% of reading
	101 - 150 mmHg	± 10% of reading
	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	
OXIMETER READING (Masimo uSpO2 module +Sensors, or Nonin Xpod + Sensors)		
SpO2	70%-100%	±2 %
	50% to 69%	±3 %
Pulse	25 to 240 BPM	±2 BPM

TECHNICAL FEATURES

O2 READING (PE00000285 chemical cell)		
O2	0%-100%	±3 %
ALARMS		
Inspiratory pressure	High-Low	
Expiratory pressure	High-Low	
Respiratory rate	High-Low (apnea)	
Tidal volume	High-Low	
Minute ventilation	High-Low	
Expiratory Volume	High-Low (only with Luna 150)	
EtCO2	High-Low	
SpO2	High-Low	
HR	High-Low	
O2	High-Low	
High leakage – Open circuit		
Low level battery		
No power supply		
Other Specifics		
Particle and liquid protection	IP22	
Sound pressure alarms	90dBA	
Noise	Mode T, Interface LkFace, Closed circuit. Front Noise 33dB@25hPa; Mode PCV, Interface Dual, connected to a real Test Lung : Front Noise 66dB@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	