OXIVENT-BabyLite
Technical Specifications

OXIVENT BabyLite
Ensures the optimal ventilation therapy in transport situations for neonatal and pediatric.

- High performance transport ventilator.
- Optional internal turbine system
- 4 hours of battery operating time
- Neonatal and Pediatric

For more information, visit our website: www.labcore.com.tr

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Technical Specifications

Usage Areas
The BabyLite Ventilator is produced for use on incubators, in hospitals, in ambulances, neonatal and pediatric patients.

Ventilation Modes

Type	Mode	Description	Neonatal	Pediatric
Invasive Modes	IMV	Pressure-controlled ventilation.	✓	
	PCV+	Pressure-controlled ventilation	✓	✓
Pressure	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
	CPAP/PSV	Continuous positive airway pressure / Pressure support ventilation	✓	✓
	APRV	Airway pressure release ventilation	✓	✓
	Bilevel	Duo positive airway pressure		✓
Pressure Regulated	PRVC	Pressure Regulated Volume Control		Optional
	PRVC-SIMV	Pressure Regulated Volume Control with Synchronized intermittent mandatory ventilation		Optional
Volume	(S)CMV	(Synchronized) controlled mandatory ventilation		✓
	V-SIMV	Synchronized intermittent mandatory ventilation		✓
	V-A/C	Volume - Assist Control		✓
Noninvasive	PSV-S/T	Pressure supported ventilation	✓	✓
	P-A/C	Pressure - Asist Control	✓	✓
	nCPAP	Nasal pressure support ventilation	✓	
	HFNC	High flow nasal cannula	Optional	Optional

Controls

Type	Neonatal / Pediatric	Neonatal	Pediatric
Ventilation modes	See in the table above		
Patient groups	Pediatric / Neonatal	✓	✓
PCV+	1 to 150 b/min		✓
IMV	1 to 120 b/min	✓	
P-A/C	1 to 120 b/min	✓	✓
P-SIMV	1 to 150 b/min	✓	✓
APRV	1 to 120 b/min	✓	✓
Bilevel	Neonatal: 10 to 120 b/min Pediatric: 2 to 120 b/min		✓
PRVC	1 to 80 b/min		✓
PRVC-SIMV	1 to 80 b/min		✓
(S)CMV	1 to 80 b/min		✓
V-SIMV	1 to 80 b/min		✓
V-A/C	1 to 80 b/min		✓
PSV-S/T	1 to 80 b/min	✓	✓
nCPAP	0 to 60 cmH_2O	✓	
Tidal Volume	Neonatal: 0-60 cmH_2O Pediatric : 2 to 700 ml	✓	✓
Oxygen	% 21 to %100	✓	✓
I:E Ratio	1:9 to 4:1	✓	✓
Inspiration Time (Ti) (Neonatal)	Ti 0.10 to 3 s	✓	
Expiration Time (Te) (Neonatal)	Te 0.20 to 3 s	✓	
Inspiration Time (Ti) (Pediatric)	Ti 0.10 to 12 s		✓
Expiration Time (Te) (Pediatric)	Te 0.20 to 12 s		✓
Inspiratory Flow (Pediatric)	0-200 l/min		
Inspiratory Flow (Neonatal)	0-40 l/min		
T slope	50-1100 ms	✓	✓
Flow trigger	Closed, 1 to 20 l/min	✓	✓
Pressure trigger	-0.5 to -20 cm H_2O	✓	✓
Pressure control	5 to 60 cmH_2O	✓	✓
Pressure support	0 to 35 cmH_2O	✓	✓
Peep	0 to 25 cmH_2O	✓	✓
Inspiration Hold	0 to 6 s		✓
Expiration Hold	0 to 6 s		✓
O_2 Flush	0 to 3/min		✓
Manual Ventilation	0.1 to 12 s	✓	✓

Monitoring parameters

Type	Parameter	Unit	Description	Numeric monitoring	Wave-forms	Vent Status	Dynamic Lung
Pressure	Paw	cmH_2O;mbar;hPa	Real-time airway pressure	✓	✓		
	Ppeak	cmH_2O;mbar;hPa	Peak airway pressure	✓			
	Pmean	cmH_2O;mbar;hPa	Mean airway pressure	✓			
	Pinsp	cmH_2O;mbar;hPa	Inspiratory pressure	✓		✓	
	PEEP/CPAP	cmH_2O;mbar;hPa	Positive end expiratory pressure/ continuous positive airway pressure	✓		✓	
	Pplateau	cmH_2O;mbar;hPa	Plateau or end inspiratory pressure	✓			
Flow	Flow	l/min	Real-time inspiratory flow	✓	✓		
	Insp Flow	l/min	Peak inspiratory flow	✓			
	Exp Flow	l/min	Peak expiratory flow	✓			
Volume	Volume	ml	Real-time tidal volume	✓	✓		
	VTE/VTE NIV	ml	Expiratory tidal volume	✓			
	VTI/VTI NIV	ml	Inspiratory tidal volume	✓			
	ExpMinVol/MinVol NIV	l/min	Expiratory minute volume	✓			
	MVSpont/MVSpont NIV	l/min	Spontaneous expiratory minute volume	✓			
	Leak/MV Leak	%l/min	Leakage minute volume Leakage percentage at the airway	✓			
Time	I:E		Inspiratory-expiratory ratio	✓			
	fTotal	b/min	Total breathing frequency	✓			
	fSpont	b/min	Spontaneous breathing frequency	✓			
	TI	s	Inspiratory time	✓			
	TE	s	Expiratory time	✓			
Lung mechanics	Cstat	ml/cmH_2O	Static compliance	✓			
	AutoPEEP	cmH_2O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
	P0.1	cmH_2O;mbar;hPa	Expiratory time constant	✓			
Oxygen	O_2	%	Inspiratory flow resistance	✓			
Battery	Battery level	%	Rapid shallow breathing index	✓			
etCO2		mmHg	Carbon dioxide level indicator	✓			
spO2		bpm	O2 level indicator	✓			

Main View

Graphics	Graphic image of target and valid parameters for tidal volume, pressure, patient activity and minute ventilation
Monitoring	Display of more than 50 monitoring parameters
Real-time automatic waveforms	Paw, Flow, Volume, Plethysmogram, and Capnograph
Others	P-V, V-Flow, P-Flow, Trends: 1, 6, 12, 24, and 72 hours

Alarms

Operator adjustable	Low/high minute volume, low/high pressure, low/high tidal volume, low/high rate/frequency, apnea time, low/high oxygen, low/high FIO2, low/high SpO2, low/high pulse, low/high perfusion index, flow, low/high PVI, low/high SpCO, low/high SpMet, low/high SpHb, low battery, Alarm reset
Alarm Limits	Alarm limits can be set at intervals determined by the operator
Special alarms	O_2 cell, disconnection, exhalation obstructed, loss of PEEP, pressure not released, flow sensor, expiratory valve, pressure limitation, performance limited, CO_2 and SpO_2, battery, power supply, gas supply, oxygen concentration, check patient interface ($HiFlowO_2$, SpeakValve)
Loudness	Adjustable (1 – 6), configurable minimum loudness,

Maintenance

Product Life	**10 years**

Standards

Standarts	**ISO 9001, ISO 13485, EN ISO 14971, ISO 14001, OHSAS 18001, IEC 60601-1, IEC 60601-1-2, EN 794-3, EN ISO 15223-1, TS EN 1041,TS EN 14155, EN 62304**

Configurations

Trolley accessories	Trolley stand, Humidifier support, cylinder holder, tubing support arm
Options	Optional SpO_2, $etCO_2$ module with software and optional eksernal humidifier
Accessories	Transport unit for bed or stretcher with ambulance mounting kit(Optional), O_2 Cylinder, protection kit and handle with Carrying bag (Optional), Reusable Adult and Pediatric Flow Sensor(Optional), Neonatal Flow Sensor(Standard), Sensor Data Cable(Standard), Bacteria Filter (Standard), Mask (Standard), Carry Stand – Trolley (Optional), 2-3-4-5-lt O_2 Tube (Optional) , O_2 Regulator with two Manometers (Optional) , 1.5 meter Oxygen Hose with Quick Coupling with O_2 Prop (Standard)

Electrical and pneumatic specifications

Input voltage	12 V DC 5 A
Power consumption	100-240 V 50-60 Hz - 60 Watt
Backup battery time	Typical 4 hours with one internal battery. Maximum 12 hours with extra battery. (Battery Using Time Can Be Change By Patient Type, Using Modes and Parameters Also)
Oxygen supply	2.7 to 6 bar (internal/external cylinder or hospital central system)
Air supply	Integrated turbine (dry air)
Peak flow	Neonatal: 40 l/min Pediatric: 200 l/min

Environment

Temperature	Operating: -15°C to 50°C (adult / pediatric) Storage: -18°C to 60°C
Humidity	5% to 95% noncondensing (operating), 10% to 95% noncondensing (storage)
Altitude	Up to approx 70 to 200 Kpa
Degree of protection	IP44
Interface Connectors	USB, COM1 (RS-232), nurse call, CO_2, SpO_2 or optional bluetooth
Event log	Storage and display up to 2,000 events with date and time stamp

Physical dimensions

Size	241(W) x 160(H) x 116(D) (without handle)
Weight	3.5 kg (basic weight)
Display	7.1 inch, LCD color, touch screen
Main Patient Output	ISO 5356-1; 22OD/15ID
Oxygen Input	DISS or NIST, with the option of using O_2 cylinder or hospital center system
Low Pressure Oxygen Input	CPC quick coupling