

OXIVENT-OXI4Plus

Technical Specifications

OXIVENT OXI4 Plus

Ensures the optimal ventilation therapy in transport situations for all patient groups from pediatric to adult

- High performance transport ventilator
- Approved for ambulances, hospitals, aircrafts and hospital ships
- 5 hours of battery operating time
- Invasive/Noninvasive ventilation and high flow oxygen therapy
- Adult, pediatric and optional neonatal kit software

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



Technical Specifications

Usage area

The OXIVENT™Oxi4Plus transportable lung ventilator is designed to be used in ambulances, aircrafts, mobile hospitals, emergency services at the hospitals, ship hospitals and during ground transportation.

Ventilation Modes

Type	Mode	Description	Adult	Pediatric
Invasive Modes	PCV+	Pressure-controlled ventilation.	✓	✓
	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
Pressure	PSV+ Apnea Backup	Pressure supported apnea ventilation	✓	✓
	CPAP/PSV	Continuous Positive airway pressure	✓	✓
	APRV	Airway pressure release ventilation	✓	✓
	Bilevel	Duo positive airway pressure	✓	✓
Pressure Regulated	PRVC	Pressure Regulated Volume Control	✓	✓
	PRVC-SIMV	Pressure Regulated Volume Control with Synchronized intermittent mandatory ventilation	✓	✓
Volume	(S)CMV	(Synchronized) controlled mandatory ventilation	✓	✓
	V-A/C	Volume - Assist Control	✓	✓
	V-SIMV	Synchronized intermittent mandatory ventilation	✓	✓
Noninvasive	P-A/C	Pressure - Assist Control	✓	✓
	PSV-S/T	Pressure supported ventilation	✓	✓
	HiFlowO2	High flow oxygen therapy	Optional	Optional


Controls

Type	Adult / Pediatric	
Special functions	Manual breath, O2 enrichment, standby, sigh, screen lock, apnea backup ventilation, inspiratory hold, print screen, suctioning tool, dimmable screen, configurable quick-start settings, startup settings based on patient height and gender, integrated pneumatic nebulizer, O2 consumption display	
Patient groups	Adult / Pediatric / Infant / Optional Neonatal	
Respiratory frequency	1 to 120 b/min	
V-A/C	1 to 80 b/min	
(S)CMV	1 to 80 b/min	
V-SIMV	1 to 80 b/min	
PCV+	1 to 150 b/min	
Bilevel-ST	5 to 80 b/min	
P-SIMV	5 to 150 b/min	
Bilevel	1 to 80 b/min	
APRV	1 to 120 b/min	
Tidal volume	50 to 2500 ml (1 to 2500 ml with optional neonatal kit)	
PEEP	0 to 25 cmH2O	
Oxygen	21% to 100%	
I:E ratio	1:10 to 4:1	
Inspiratory time (TI) (Adjustable)	0.10 to 12 s	
Flow trigger	Closed, 1 to 20 l/min	
Pressure trigger	-0.5 to -20 cmH2O	
Tslope	50 ms to 1100 ms	
Pressure control (Adjustable)	4 to 60 cmH2O, added to PEEP/CPAP	
Pressure support (Adjustable)	0 to 60 cmH2O, added to PEEP/CPAP	

Controls

Type	Adult / Pediatric
Control method	Front panel with rotary knob and digital button
Manual ventilation	Yes
Inspiration hold	Yes
Expiration hold	Yes
Adjustable Flow Rate	Yes
Adjustable Current Termination	Yes
Adjustable Time Termination	Yes
O2 Flush	Yes
Pressure Control Flow Termination	Yes
P high (APRV / Bilevel)	0 to 60 cmH2O
P low (APRV)	0 to 35 cmH2O
T high (APRV)	0.1 to 12s
T low (APRV)	0.2 to 12s
Expiration trigger sensitivity (ETS)	5% to 80% inspiratory peak flow
Flow (HiFlowO2)	2 to 80 l/min (optional)

Monitoring parameters

Type	Parameter	Unit	Description	Numeric monitoring	Wave-forms	Vent Status	Dynamic Lung
Pressure	Paw	cmH2O;mbar;hPa	Real-time airway pressure	✓	✓		
	Ppeak	cmH2O;mbar;hPa	Peak airway pressure	✓			
	Pmean	cmH2O;mbar;hPa	Mean airway pressure	✓			
	Pinsp	cmH2O;mbar;hPa	Inspiratory pressure	✓		✓	
	PEEP/CPAP	cmH2O;mbar;hPa	Positive end expiratory pressure/ continuous positive airway pressure	✓		✓	
	Pplateau	cmH2O;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	✓			
	Cstat	ml/cmH2O	Static compliance	✓			
Lung mechanics	AutoPEEP	cmH2O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
	P0.1	cmH2O;mbar;hPa	Expiratory time constant	✓			
Oxygen	FiO2	%	Delivered oxygen concentration	✓			
Battery		%	Battery level percentage	✓			
etCO2		mmHg	Carbon dioxide level indicator	✓			
spO2		bpm	O2 level indicator				

Main View

Dynamic Lung	Real-time visualization of lungs with tidal volume, lung compliance, resistance and representations of patient activity
Vent Status	Visual representation of ventilator dependence, grouped into oxygenation, CO2 elimination, patient activity
Graphics	Graphic image of target and valid parameters for tidal volume, pressure, patient activity and minute ventilation, square wave form at pressure modes, decreasing wave form at volume controlled forms.
Monitoring	Display of more than 40 monitoring parameters, alarms
Real-time automatic waveforms	Airway pressure, inspiratory flow
Others	P-V, V-Flow, P-Flow, Trends: 1, 6, 12, 24, and 72 hours

Alarms

Monitoring operator adjustable	Visual and audible device alarm, Low/high minute volume, low/high pressure, low/high tidal volume, low/high rate/frequency, apnea/back-up ventilation, 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	O2 cell, disconnection, exhalation obstructed, loss of PEEP, pressure not released, flow sensor, expiratory valve, pressure limitation, performance limited, CO2 and SpO2, battery, power supply, gas supply, oxygen concentration, check patient interface (HiFlowO2, SpeakValve)
Loudness	Adjustable (1 – 6), configurable minimum loudness, silence reset button (for 2 min)

Compliance with Standards

Standards	ISO 9001, ISO 13485, 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, EN 1789 for ambulances
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Accessories

Trolley accessories	Trolley stand with tube holder, cylinder holder
Optional software and hardware	SpO2, etCO2, Neonatal Kit, HiFlow therapy, O2 sensor
Accessories	Transport unit for bed or stretcher with ambulance mounting kit, O2 cylinder, protection kit and handle with carrying bag, Disposable patient circuit, reusable patient circuit pediatric/adult, Reusable or disposable adult and pediatric flow sensor, neonatal flow sensor, disposable patient valve, bacteria filter, pediatric or adult masks, O2 regulator with two manometers, 1.5 m. oxygen hose with quick coupling with O2 probe

Electrical and pneumatic specifications

Input voltage	12 V DC 5 A
Power consumption	100-240 V 50-60 Hz - 60 Watt
Battery	Standard 5 hours, optional 12 hours operating time with amplified battery
Oxygen supply	2.7 to 6 bar (internal/external cylinder, hospital central system, compatible manufacturer's approved equipment), optional operating with 0.5 bar low pressure source
Air supply	Built-in turbine (ambient air)
Peak flow	240 l/min (adult / pediatric)

Environment

Temperature	Operating: -15°C to 40°C (adult / pediatric) Storage: -18°C to 50°C
Humidity	5% to 95% noncondensing (operating), 10% to 95% noncondensing (storage)
Altitude	Up to approx. 70 to 200 Kpa
Degree of protection	IP24
Interface Connectors	USB, COM1 (RS-232), nurse call, CO2, SpO2 or optional bluetooth
Event log	Storage and display up to 2,000 events with date and time stamp

Physical parameters

Size	241(W) x 160(H) x 116(D)
Weight	4 kg
Display	7.1 inch, LCD color touch screen
Main patient outlet	ISO 5356-1; 22OD/15ID
Oxygen inlet	DISS or NIST
Low pressure oxygen inlet	CPC quick coupling



Ventilator Cart with tube holder



Carrying Bag



Flow Sensor



Oxygen Sensor



Neonatal Flow Sensor



Mounting Bracket with
Protection kit and Bag

