

OXIVENT AND MEDRAG PRODUCT CATALOGUE

2019-4

Oxi**vent**

Med**rag**



modütgrup
MÜHENDİSLİK LTD.ŞTİ

OXIVENT

LIFE
EASY
OXI2, OXI2 PLUS
OXI3

OXI4
OXI4 PLUS
BABY LITE
OXIHOME

MEDRAG

SUCTION UNIT
PVA-01

INSTRUCTIONS

OXIVENT-Life

Technical Specifications

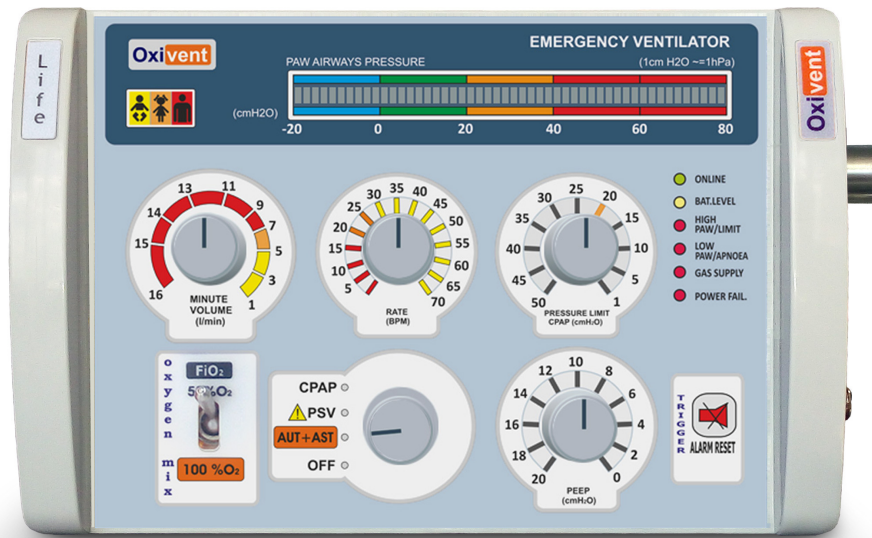
OXIVENT Life

It is an artificial ventilation device with digital pressure gauge, volumetric, time cycle, wide programmed ventilation modes and pressure limiting.

Portable Patient Transfer Ventilator has great importance in respiratory treatment, being small and lightweight.

- Oxivent Life can be use for treatment of adults and children.
- Ventilation Modes: AUT+AST, PSV + Apnea Backup, CPAP, PEEP, NIV presented to the user.
- The alarms are available which are specified in TS EN 794-3+A2 standards .

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



Technical Specifications

Property	Value / Description
Application	Emergency / First Aid /Patient Transport
Patient Type	Adult, Pediatric (Not Neonatal)
Ventilation Type	IPPV Volumetric – PSV with IPPV Cycle Time
Control Method	Electronic
Gas Supply	Oxygen or Compressed Medical Air
Gas Pressure	Oxygen Tubes or Medical Supply (2.7-6.0 bar)
Flow Rate	50 l/min (max)
Flow Mode	Constant and Decreasing at PSV Mode
Ventilation Modes	AUT-AST, PSV, Apnea Backup, CPAP and PEEP
Measurement Parameter	Airways Instant Pressure
Breath Frequency	5-70 bpm
I:E Rate	1:1.5
Inspiratory Period	40% of Breath Cycle
Inspiratory Pause	Automatic at PSV Mode
Pressure Limit	0-50 cmH2O
PEEP	0-20 cmH2O
Minute Volume	1-16 L/min
Tidal Volume	15-3000 ml
Mixer Unit	50% O2 or 100% O2
Manometer Type	Digital
Trigger Sensitivity	1 to 5 cmH2O
User Interface	Digital Manometer / Led Battery Level Indicator / External Power Failure Ind./ Led and Audible Alarms / Control Buttons
Alarm Types	Battery Level / Low and High Airways Pressure / Apnea / Gas Supply / Power Failure/ Obstruction (Low Paw Warning)
Alarm Intensity	60 dB
Power Supply	12VDC or 100-240VAC 50-60 Hz with 12VDC Adaptor
Current Consumption	0.02A @220VAC / 0.4A @ 12VDC
Power	4.5W
Working Time	With built-in battery for 10 hours continuous operation
Safety Devices	Mechanical limit of airways pressure adjustable from 0 to 50 cmH2O
Dimensions and Weight	Width : 240mm Length : 160mm Depth : 110mm / 2,2 Kg
Operating Temperature	-18°C to +60°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% to 90% (Non-Condensing)
Atmospheric Pressure	110kPa range from 70kPa
IP Rating	IP44
Product Life	5 years
Standart Accessories	Feeder 100-240Vac - 12Vdc, Supply Cable 12Vdc, Disposable Adult and Child Mask, Bacteria Filter,Test Balloon, Disposable PVC patient device with expiratory valve Oxygen Hose, Shoulder Strap, Ambulance Mounting Bracket, User Manual & Quick User Manual
Optional Accessories	Safety Kit and Bag, Oxygen Tube (Aluminium/Steel), O2 Regulator with Double Manometer, Reusable Patient Kit, Capnography
Standart Compliance	EN 60601-1, EN 794-3+A2, EN 62304, EN ISO 15223-1, EN ISO 13485, EN ISO14971:2012, TS EN 1041:2008 TS EN 14155, EN 1789+A2
Class According to EN60601Dir.	Class II Type BF



Design Variations with Bag

OXIVENT-Easy

Technical Specifications

OXIVENT Easy

It is an artificial respiratory device with analog or digital manometer. 2 types of I:E rate presented to user.

Portable Patient Transfer Ventilator has great importance in respiratory treatment, being small and lightweight.

- Oxivent Easy can be use for treatment of adults and children.
- Ventilation Modes: AUT+AST, PSV + Apnea Backup, CPAP, PEEP, NIV presented to the user.
- The alarms are available which are specified in TS EN 794-3+A2 standards .

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



Technical Specifications

Property	Value / Description
Application	Emergency / First Aid /Patient Transport
Patient Type	Adult, Pediatric (Not Neonatal)
Ventilation Type	IPPV Volumetric – PSV with IPPV Cycle Time
Control Method	Electronic
Gas Supply	Oxygen or Compressed Medical Air
Gas Pressure	Oxygen Tubes or Medical Supply (2.7-6.0 bar)
Flow Rate	50 l/min (max)
Flow Mode	Constant and Decreasing at PSV Mode
Ventilation Modes	AUT-AST, PSV, Apnea Backup, CPAP and PEEP
Measurement Parameter	Airways Instant Pressure
Breath Frequency	5-70 bpm
I:E Rate	1:1.5 and 1:1.67 options
Inspiratory Period	40% of Breath Cycle
Inspiratory Pause	Automatic at PSV Mode
Pressure Limit	0-50 cmH ₂ O
Minute Volume	3-20 L/min
Tidal Volume	42-4000 ml
Mixer Unit	50% O ₂ or 100% O ₂
Manometer Type	Analog
Trigger Sensitivity	1 to 5 cmH ₂ O
User Interface	Analog Manometer / Led Battery Level Indicator / External Power Failure Ind./ Led and Audible Alarms / Control Buttons
Alarm Types	Battery Level / Low and High Airways Pressure / Apnea / Gas Supply / Power Failure
Alarm Intensity	60 dB
Power Supply	12VDC or 100-240 VAC 50-60 Hz with 12VDC Adaptor
Current Consumption	0.02A @220VAC / 0.4A @ 12VDC
Power	4.5W
Working Time	10 hours with internal battery and more then 10 hours working time with external battery
Safety Devices	Mechanical limit of airways pressure adjustable from 0 to 50 cmH ₂ O
Dimensions and Weight	Width : 240mm Length : 160mm Depth : 110mm / 2,2 Kg
Operating Temperature	-18°C to +60°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% to 90% (Non-Condensing)
Atmospheric Pressure	110kPa range from 70kPa
IP Rating	IP44
Product Life	5 years
Standart Accessories	Feeder 100-240Vac - 12Vdc, Supply Cable 12Vdc, Disposable Adult and Child Mask, Bacteria Filter,Test Balloon, Disposable PVC patient device with expiratory valve Oxygen Hose, Shoulder Strap, Ambulance Mounting Bracket, User Manual & Quick User Manual
Optional Accessories	Safety Kit and Bag, Oxygen Tube (Aluminium/Steel), O ₂ Regulator with Double Manometer, Reusable Patient Kit, Capnography
Standart Compliance	EN 60601-1, EN 794-3+A2, EN 62304, EN ISO 15223-1, EN ISO 13485, EN ISO14971:2012, TS EN 1041:2008 TS EN 14155, EN 1789+A2
Class According to EN60601Dir.	Class II Type BF

OXIVENT-Oxi2

Technical Specifications

OXIVENT Oxi2

It is an artificial ventilation device with digital pressure gauge, volumetric, time cycle, wide programmed ventilation modes and pressure limiting.

Portable Patient Transfer Ventilator has great importance in respiratory treatment, being small and lightweight.

- Oxivent Oxi2 can be user for treatment of adults and children.
- Ventilation Modes: AUT+AST, PSV + Apnea Backup, CPAP, PEEP, NIV presented to the user.
- The alarms are available which are specified in TS EN 794-3+A2 standards .

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



Technical Specifications

Property	Value / Description
Application	Emergency / First Aid /Patient Transport
Patient Type	Adult, Pediatric (Not Neonatal)
Ventilation Type	IPPV Volumetric – PSV with IPPV Cycle Time
Control Method	Electronic
Gas Supply	Oxygen or Compressed Medical Air
Gas Pressure	Oxygen Tubes or Medical Supply (2.7-6.0 bar)
Flow Rate	50 l/min (max)
Flow Mode	Constant and Decreasing at PSV Mode
Ventilation Modes	AUT-AST, PSV, Apnea Backup, CPAP and PEEP
Measurement Parameter	Airways Instant Pressure
Breath Frequency	5-70 bpm
I:E Rate	1:1.5
Inspiratory Period	40% of Breath Cycle
Inspiratory Pause	Automatic at PSV Mode
Pressure Limit	0-50 cmH ₂ O
Minute Volume	1-16 L/min
Tidal Volume	15-3000 ml
Mixer Unit	50% O ₂ or 100% O ₂
Manometer Type	Digital
Trigger Sensitivity	1 to 5 cmH ₂ O
User Interface	Digital Manometer / Led Battery Level Indicator / External Power Failure Ind./ Led and Audible Alarms / Control Buttons
Alarm Types	Battery Level / Low and High Airways Pressure / Apnea / Gas Supply / Power Failure
Alarm Intensity	60 dB
Power Supply	12VDC or 100-240 VAC 50-60 Hz with 12VDC Adaptor
Current Consumption	0.02A @100-240VAC / 0.4A @ 12VDC
Power	4.5W
Working Time	With built-in battery for 10 hours continuous operation
Safety Devices	Mechanical limit of airways pressure adjustable from 0 to 50 cmH ₂ O
Dimensions and Weight	Width : 240mm Length : 160mm Depth : 110mm / 2,2 Kg
Operating Temperature	-18°C to +60°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% to 90% (Non-Condensing)
Atmospheric Pressure	110kPa range from 70kPa
IP Rating	IP44
Product Life	5 years
Standart Accessories	Feeder 100-240 Vac - 12Vdc, Supply Cable 12Vdc, Disposable Adult and Child Mask, Bacteria Filter,Test Balloon, Disposable PVC patient device with expiratory valve Oxygen Hose, Shoulder Strap, Ambulance Mounting Bracket, User Manual & Quick User Manual
Optional Accessories	Safety Kit and Bag, Oxygen Tube (Aluminium/Steel), O ₂ Regulator with Double Manometer, Reusable Patient Kit, Capnography
Standart Compliance	EN 60601-1, EN 794-3+A2, EN 62304, EN ISO 15223-1, EN ISO 13485, EN ISO14971:2012, TS EN 1041:2008 TS EN 14155, EN 1789+A2
Class According to EN60601Dir.	Class II Type BF

OXIVENT-Oxi3

Technical Specifications

OXIVENT Oxi3

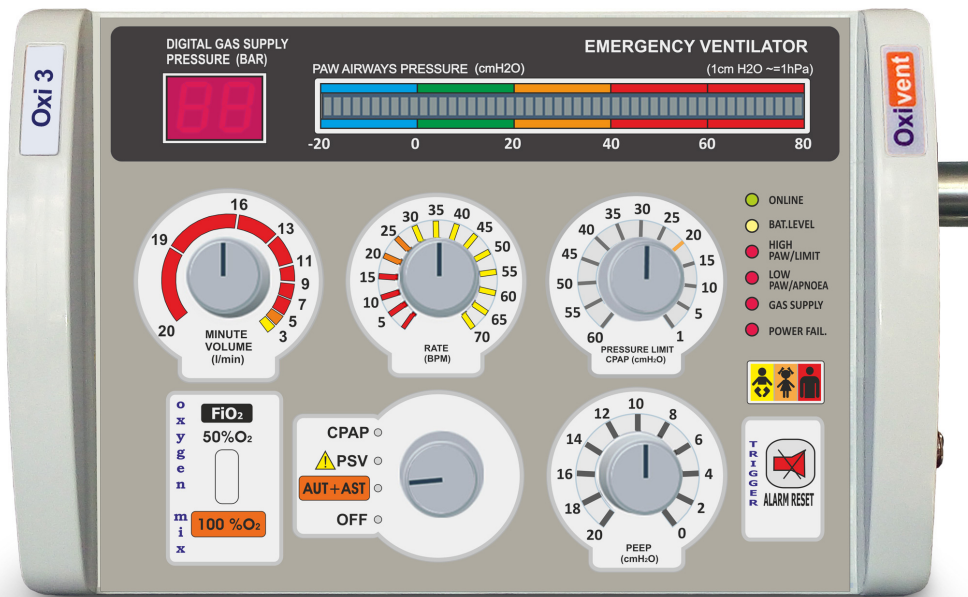
Digital gauge for gas-supply pressure,

It is a pressure limited artificial ventilation device with digital manometer, volumetric time cycle and ventilation modes of wide programs.

Portable Patient Transfer Ventilator has great importance in respiratory treatment, being small and lightweight.

- Oxivent Oxi3 can be use for treatment of adults and children.
- Ventilation Modes: AUT+AST, PSV + Apnea Backup, CPAP, PEEP, NIV presented to the user.
- The alarms are available which are specified in TS EN 794-3+A2 standards .

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



Technical Specifications

Property	Value / Description
Application	Emergency / First Aid /Patient Transport
Patient Type	Adult, Pediatric (Not Neonatal)
Ventilation Type	IPPV Volumetric – PSV with IPPV Cycle Time
Control Method	Electronic
Gas Supply	Oxygen or Compressed Medical Air
Gas Pressure	Oxygen Tubes or Medical Supply (2.7-6.0 bar)
Flow Rate	50 l/min (max)
Flow Mode	Constant and Decreasing at PSV Mode
Ventilation Modes	AUT-AST, PSV, Apnea Backup, CPAP and PEEP
Measurement Parameter	Airways Instant Pressure
Breath Frequency	5-70 bpm
I:E Rate	1:1.67
Inspiratory Period	40% of Breath Cycle
Inspiratory Pause	Automatic at PSV Mode
Pressure Limit	0-50 cmH ₂ O
Minute Volume	3-20 L/min
Tidal Volume	42-4000 ml
Mixer Unit	60% O ₂ or 100% O ₂
Manometer Type	Digital
Trigger Sensitivity	1 to 5 cmH ₂ O
User Interface	Digital Manometer / Led Battery Level Indicator / External Power Failure Ind./ Led and Audible Alarms / Control Buttons
Alarm Types	Battery Level / Low and High Airways Pressure / Apnea / Gas Supply / Power Failure
Alarm Intensity	60 dB
Power Supply	12VDC or 100-240 VAC 50-60 Hz with 12VDC Adaptor
Current Consumption	0.02A @100-240VAC / 0.4A @ 12VDC
Power	4.5W
Working Time	With built-in battery for 10 hours continuous operation
Safety Devices	Mechanical limit of airways pressure adjustable from 0 to 50 cmH ₂ O
Dimensions and Weight	Width : 240mm Length : 160mm Depth : 110mm / 3 Kg
Operating Temperature	-18°C to +60°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% to 90% (Non-Condensing)
Atmospheric Pressure	110kPa range from 70kPa
IP Rating	IP44
Product Life	5 years
Standart Accessories	Feeder 100-240Vac - 12Vdc, Supply Cable 12Vdc, Disposable Adult and Child Mask, Bacteria Filter,Test Balloon, Disposable PVC patient device with expiratory valve Oxygen Hose, Shoulder Strap, Ambulance Mounting Bracket, User Manual & Quick User Manual
Optional Accessories	Safety Kit and Bag, Oxygen Tube (Aluminium/Steel), O ₂ Regulator with Double Manometer, Reusable Patient Kit, Capnography
Standart Compliance	EN 60601-1, EN 794-3+A2, EN 62304, EN ISO 15223-1, EN ISO 13485, EN ISO14971:2012, TS EN 1041:2008 TS EN 14155, EN 1789+A2
Class According to EN60601Dir.	Class II Type BF

OXIVENT-OXI2Plus

Technical Specifications

OXIVENT OXI2 Plus

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

- High performance transport ventilator.
- Approved for ambulances, hospital, aircraft and hospital ships.
- More than 4 hours of battery operating time
- Invasive/Noninvasive ventilation and high flow oxygen therapy
- Adult, pediatric, usage opportunity with neonatal kit and software.

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



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the potential

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Technical Specifications

Usage areas

Transporter ventilator are designed to be used in hospital, ambulances, aircrafts, sea vehicles, field hospitals, land and difficult conditions.

Ventilation Modes

Type	Mode	Description	Adult	Pediatric
Pressure	PCV+	Pressure-controlled ventilation.	✓	✓
	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
	CPAP/PSV	Pressure supported ventilation	✓	✓
	Bilevel	Duo positive airway pressure	✓	✓
	MTAPS		Optional	Optional
Pressure Regulated	PRVC	Pressure Regulated Volume Control	Optional	Optional
	PRVC-SIMV	Pressure Regulated Volume Control with Synchronized intermittent mandatory ventilation	Optional	Optional
Volume	(S)CMV+	(Synchronized) controlled mandatory ventilation	✓	✓
	V-A/C	Volume - Assist Control	✓	✓
	V-SIMV	Synchronized intermittent mandatory ventilation	✓	✓
Noninvasive	PSV-S/T	Pressure supported ventilation	✓	✓
	P-A/C	Pressure - Assist Control	✓	✓
	HiFlowO ₂	High Flow Oxygen Therapy	Optional	Optional

Controls

Type	Adult / Pediatric /Infant
Special functions	Manual ventilation, O ₂ enrichment, standby mode, screen lock, apnea ventilation, inspiratory hold, configurable quick-start settings, O ₂ consumption display
Ventilation modes	See in the above table
Patient groups	Adult/Pediatric/Infant
V-A/C	1 to 80 b/min
V-SIMV	1 to 80 b/min
PCV+	1 to 120 b/min
Bilevel-ST	5 to 80 b/min
P-SIMV	5 to 120 b/min
Bilevel	1 to 80 b/min
MTAPS	4 to 80 b/min
Tidal volume	50 to 2500 ml (2 to 2500 ml with optional neonatal kit)
PEEP	0 to 25 cmH ₂ O
Oxygen	48% to 100% (21% to 100% with optional turbin system)
I:E ratio (Changing by TI)	1:10 to 4:1
Inspiratory time (TI) (Adjustable)	0.10 to 10 s
T Slope	50-1100 ms
Flowtrigger	1 to 20 lt/min
Pressure control (Adjustable)	5 to 60 cmH ₂ O, added to PEEP/CPAP
Pressure support (Adjustable)	0 to 35 cmH ₂ O, added to PEEP/CPAP

Technical Specifications

Controls

Type	Adult / Pediatric
Control method	With snap switch on front panel and digital button
Manuel Ventilation	Yes
P high (APRV/ Bilevel)	0 to 60 cmH ₂ O
P low (APRV)	0 to 35 cmH ₂ O
T high (APRV/ Bilevel)	0.1 to 10 s
T low (APRV)	0.2 to 10 s
Expiratory trigger sensitivity (ETS)	5% to 80% of peak inspiratory flow
Flow (HiFlowO ₂)	1 to 60 l/min (Optional)
Manual Ventilation Button	Yes
Inspiration Hold Buttons	Yes
Expiration Hold Buttons	Yes
O ₂ Flush Button	Yes
LIAM	No
Dual Prescription	No

Monitoring parameters

Type	Parameter	Unit	Description	Numeric monitoring	Wave-forms	Vent Status	Dyna mic Lung
Pressure	Paw	cmH ₂ O;mbar;hPa	Real-time airway pressure	✓	✓		
	Ppeak	cmH ₂ O;mbar;hPa	Peak airway pressure	✓			
	Pmean	cmH ₂ O;mbar;hPa	Mean airway pressure	✓			
	Pinsp	cmH ₂ O;mbar;hPa	Inspiratory pressure	✓		✓	
	PEEP/CPAP	cmH ₂ O;mbar;hPa	Positive end expiratory pressure/ continuous positive airway pressure	✓		✓	
	Pplateau	cmH ₂ O;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	✓			
	F Total	b/min	Total breathing rate	✓			
	fSpont	b/min	Spontaneous breathing frequency	✓			
	TI	s	Inspiratory time	✓			
	TE	s	Expiratory time	✓			
Lung mechanics	Cstat	ml/cmH ₂ O	Static compliance	✓			
	AutoPEEP	cmH ₂ O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
Lung mechanics	P0.1	cmH ₂ O;mbar;hPa	Airway obstruction pressure	✓			
Oxygen	O ₂	%	Airway oxygen concentration	✓			
Battery	Battery charge ratio	%	Battery level indicator	✓			
etCO ₂	mmHg	%	Carbon level indicator	✓			
SPO ₂	bpm		Oxygen content indicator	✓			

Technical Specifications

Main View

Vent Status	Visual representation of ventilator dependence, grouped into oxygenation, CO2 elimination, and patient activity
Graphics	Tidal volume, pressure, patient activity and graphic display of target and valid parameters for minute ventilation
Monitoring	Display of more than 40 monitoring parameters
Real-time Graphics	Paw, Flow, Volume, Plethysmogram, and Capnograph
Others	Trends: 1, 6, 12, 24, and 72 hours

Alarms

Operator adjustable	Low/high minute volume, low/high P _{AW} pressure, low/high tidal volume, low/high rate/frequency, apnea alarm,, low/high oxygen, low/high etCO ₂ , low/high SpO ₂ , low/high pulse, low/high perfusion index, flow, low/high PVI, low/high SpCO, low/high SpMet, low/high SpHb
Limits	Alarm limits can be set at ranges determined by the operator
Special alarms	O ₂ cell, disconnection, exhalation obstructed, loss of PEEP, pressure source low, flow sensor, expiratory valve, pressure limitation, performance limited, CO ₂ and SpO ₂ , battery, power supply, gas supply, oxygen concentration,leakage alarm of patient interface connection(HiFlowO ₂)
Loudness	Adjustable (1 – 6) loudness of voice

Maintenance

Device lifetime	Dynamic lifetime surveillance, typically 6 years.
Standarts	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 1789A+2

Configurations

Trolley accessories	Optional: Transportation stand, Humidifier support, cylinder holder, tubing support arm
Options	Optional:SpO ₂ , etCO ₂ module and software
Accessories	O ₂ cylinder, carrying unit for bedside carrying bag and stand for bed and stretcher , protection kit & Handle with Carrying bag, Reusable adult and pediatric flow sensor, Neonatal flow sensor, Sensor data cable, Bacteria filter , Mask, 2-3-4-5 litre optional O ₂ cylinder, Oxygen regulatory with dual manometer, 1.5 meter long oxygen hose with O ₂ prob and quick kapling

Electrical and pneumatic specifications

Input voltage	12 V DC 5 A
Power consumption	Operates with 100-240 VAC, 50/60 Hz main with 60 Watt power
Battery time	4 hours with standard battery, option of operation time until 10 hours with optional powered battery
Oxygen supply	2.7 bar to 6 bar (internal/ external cylinder or hospital central system)
Air supply	Internal turbine (Device provides dr air from environment)
Max. Air Flow	250 lt/ dk

Environmental

Operating Temperature	-18°C to 40°C
Storage	-18°C to 50°C
Humidity	%5 to %95 at operating (noncondensing humidity), %10 to %95 in storage (noncondensing humidity)
Environment operating pressure	Approximate 70 Kpa to 200 Kpa
Class of IP protection	IP44
Interface connectors	USB or COM1 (RS-232), nurse call, CO ₂ , SpO ₂ or optional Bluetooth
Event log	Storage and display of up to 2,000 events with date and time stamp

Physical dimensions

Size	285(W) x 160(H) x 116(D) (without handle)
Weight	3,5 kg (basic weight)
Display	5 inch, LCD color, touch screen
Main patient outlet	ISO 5356-1; 22OD/15ID
Oxygen inlet	DISS or NIST, with option usage of cylinder or hospital central system
Low pressure oxygen inlet	CPC quick coupling



Trolley



Carrying Bag



Adult, Pediatric Flow Sensor



Oxygen Sensor



Neonatal Flow Sensor



Patient bed or
stretcher hidden
bracket

OXIVENT-OXI4

Technical Specifications

OXIVENT OXI4

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

- High performance transport ventilator.
- Approved for ambulances, hospital, aircraft and hospital ships.
- More than 9 hours of battery operating time
- Noninvasive ventilation and high flow oxygen therapy
- Adult, pediatric and optional neonatal kit, to use with software possibility.

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



Technical Specifications

Usage areas

The Device can be suitable for ambulance, aircraft, mobile hospitals, emergency services at the hospitals, ship hospital and on the ground

Ventilation Modes

Type	Mode	Description	Adult	Pediatric
Pressure	PCV+	Pressure-controlled ventilation.	✓	✓
	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
	CPAP	Continuous Positive airway pressure	✓	✓
	APRV	Airway pressure release ventilation	✓	✓
	Bilevel	Duo positive airway pressure	✓	✓
Pressure Regulated	PRVC	Pressure Regulated Volume Control	Opt	Opt
	PRVC-SIMV	Pressure Regulated Volume Control with Synchronized intermittent mandatory ventilation	Opt	Opt
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	Opt	Opt

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
Ventilation modes	See in the table above
Patient groups	Adult / Pediatric
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 120 b/min
Bilevel	1 to 80 b/min
APRV	1 to 120 b/min
Tidal volume	50 to 2000 ml
PEEP	0 to 25 cmH2O
Oxygen	40% to 100%
I:E ratio	1:10 to 4:1
Inspiratory time (TI) (Adjustable)	0.10 to 12 s
T slope	50-1100 ms
Flow trigger	Closed, 1 to 20 lt/min
Pressure control (Adjustable)	5 to 60 cmH2O, added to PEEP/CPAP
Pressure support (Adjustable)	0 to 35 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
O2 Flush	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	✓			
Lung mechanics	Cstat	ml/cmH2O	Static compliance	✓			
	AutoPEEP	cmH2O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
	P0.1	cmH2O;mbar;hPa	Expiratory time constant	✓			
Oxygen	O2	%	Inspiratory flow resistance	✓			
Battery	Battery level percentage	%	Rapid shallow breathing index	✓			
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, and patient activity
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	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,

Maintenance

Blower lifetime	Dynamic lifetime surveillance, typically 6 years. 5-year warranty.
Standarts	ISO 9001,ISO 13485,ISO 10651-3,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.

Configurations

Trolley accessories	Trolley stand, Humidifier support, cylinder holder, tubing support arm
Options	Optional SpO2, etCO2 module with software
Accessories	Transport unit for bed or stretcher with ambulance mounting kit, O2 Cylinder, protection kit and handle with Carrying bag, Reusable Adult and Pediatric Flow Sensor, Neonatal Flow Sensor, Sensor Data Cable, Bacteria Filter, Mask, Carry Stand, 2-3-4-5-lt O2 Tube, O2 Regulator with two Manometers, 1.5 meter Oxygen Hose with Quick Coupling with O2 Prop

Electrical and pneumatic specifications

Input voltage	12 V DC 5 A
Power consumption	100-240V 50-60 Hz - 60 Watt
Backup battery time	Typical 9 hours with one internal battery. Maximum 12 hours with extra battery.
Oxygen supply	2.7 to 6 bar (internal/external cylinder or hospital central system)
Peak flow	120 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	IP44
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 dimensions

Size	241(W) x 160(H) x 116(D) (without handle)
Weight	3 kg (basic weight)
Display	7.1 in, LCD color, touch screen
Main patient outlet	ISO 5356-1; 22OD/15ID
Oxygen inlet	DISS or NIST, with the option of using O2 cylinder or hospital center system
Low pressure oxygen inlet	CPC quick coupling



Ventilator Cart



Carrying Bag



Flow Sensor



Oxygen Sensor



Neonatal Flow Sensor



Mounting Bracket with
Protection kit and Bag

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
- 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
Pressure	PCV+	Pressure-controlled ventilation.	✓	✓
	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
	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

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
- 5 hours of battery operating time
- Neonatal and Pediatric

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



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Discover
the potential

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MÜHENDİSLİK LTD.ŞTİ

Technical Specifications

Usage areas

The Device can be suitable for hospitals, ambulances, neonatal and pediatric patients.

Ventilation Modes

Type	Mode	Description	Neonatal	Pediatric
Pressure	IMV	Pressure-controlled ventilation.	✓	
	PCV+	Pressure-controlled ventilation	✓	✓
	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 - Assist 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 150 b/min	✓	
P-A/C	1 to 120 b/min	✓	✓
P-SIMV	1 to 150 b/min	✓	✓
CPAP/PSV	1 to 80 b/min	✓	✓
APRV	1 to 150 b/min	✓	✓
Bilevel	5 to 80 b/min		✓
PRVC	5 to 80 b/min		✓
PRVC-SIMV	5 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 45 cmH2O	✓	
Tidal Hacim	Neonatal: 0-60 cmH2O Pediatric : 10 to 700 ml	✓	✓
Oxygen	% 21 to %100	✓	✓
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		✓
T slope	50-1100 ms	✓	✓
Flow trigger	kapalı, 1 to 20 l/dak	✓	✓
Pressure trigger	-0.5 to -20 cm H2O	✓	✓
Pressure control	5 to 60 cmH2O	✓	✓
Pressure support	0 to 35 cmH2O	✓	✓
Peep	0 to 25 cmH2O	✓	✓
Inspiration Hold	0 to 6 s		✓
Expiration Hold	0 to 6 s		✓
O2 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	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	✓			
Lung mechanics	Cstat	ml/cmH2O	Static compliance	✓			
	AutoPEEP	cmH2O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
	P0.1	cmH2O;mbar;hPa	Expiratory time constant	✓			
Oxygen	O2	%	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	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,

Maintenance

Blower lifetime	Dynamic lifetime surveillance, typically 6 years
Standarts	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.

Configurations

Trolley accessories	Trolley stand, Humidifier support, cylinder holder, tubing support arm
Options	Optional SpO2, etCO2 module with software and optional humidifier
Accessories	Transport unit for bed or stretcher with ambulance mounting kit, O2 Cylinder, protection kit and handle with Carrying bag, Reusable Adult and Pediatric Flow Sensor, Neonatal Flow Sensor, Sensor Data Cable, Bacteria Filter, Mask, Carry Stand, 2-3-4-5-lt O2 Tube, O2 Regulator with two Manometers, 1.5 meter Oxygen Hose with Quick Coupling with O2 Prop

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.
Oxygen supply	2.7 to 6 bar (internal/external cylinder or hospital central system)
Air supply	Integrated turbine (dry air)
Peak flow	40 l/min (adult / pediatric),

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	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 dimensions

Size	241(W) x 160(H) x 116(D) (without handle)
Weight	3 kg (basic weight)
Display	7.1 inch, LCD color, touch screen
Main patient outlet	ISO 5356-1; 22OD/15ID
Oxygen inlet	DISS or NIST, with the option of using O2 cylinder or hospital center system
Low pressure oxygen inlet	CPC quick coupling



OXIVENT-OXIHome

Technical Specifications

OXIVENT OXIhome

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

- Performance of a fully featured ICU ventilator
- Approved for ambulances, hospital and home
- Noninvasive ventilation and high flow oxygen therapy
- Automatic Volume Assured Pressure Support
- Adult, pediatric

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



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Technical Specifications

Ventilation Modes

Type	Mode	Description	Adult	Pediatric
Pressure	(A)PCV+	Pressure-controlled ventilation. Biphasic breathing	✓	✓
	P-SIMV	Pressure-controlled synchronized intermittent mandatory ventilation	✓	✓
	CPAP/PSV	Pressure support ventilation	✓	✓
	APRV	Airway pressure release ventilation	✓	✓
	Bilevel	Duo positive airway pressure	✓	✓
Pressure Regulated	PRVC	Pressure Regulated Volume Control	Opt	Opt
	MTAPS	Automatic Volume Assured Pressure Support	✓	✓
	PRVC-SIMV	Pressure Regulated Volume Control with Synchronized intermittent mandatory ventilation	Opt	Opt
Volume	(A)VCV		✓	✓
	V-SIMV	Synchronized intermittent mandatory ventilation	✓	✓
Noninvasive	P-A/C	Noninvasive ventilation	✓	✓
	PSV-S/T		✓	✓
	HiFlowO2	High flow oxygen therapy	Opt.	Opt.

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
Ventilation modes	See page 2, Ventilation modes
Patient groups	adult / pediatric
Patient height	50 to 250 cm
Patient gender	male / female
Patient weight	-
V-A/C	1 to 80 b/min
V-SIMV	1 to 80 b/min
PCV+	1 to 80 b/min
Bilevel-ST	5 to 80 b/min
P-SIMV	5 to 80 b/min
Bilevel	1 to 80 b/min
MTAPS	4 to 80 b/min
Tidal volume	30 to 3000 ml
PEEP/CPAP	0 to 25 cmH2O
Oxygen	21% to 100%
I:E ratio	1:10 to 4:1
Inspiratory time (TI)	0.3 to 10 s
Flow trigger	off, 1 to 20 l/min
Pressure control	5 to 60 cmH2O, added to PEEP/CPAP
Pressure support	0 to 35 cmH2O, added to PEEP/CPAP
T slope	50-1100 ms
Apnea spare rate	5-80 b/min

Controls

Type	Adult / Pediatric
Pressure ramp	0 to 2,000 ms
P high (APRV/Bilevel)	0 to 60 cmH ₂ O
P low (APRV)	0 to 35 cmH ₂ O
T high (APRV/ Bilevel)	0.1 to 10 s
T low (APRV) ^a	0.2 to 10 s
Expiratory trigger sensitivity (ETS)	5% to 80% of peak inspiratory flow
Flow (HiFlowO ₂)	2 to 80 l/min (Optional)
Manual Ventilation	on/off
Inspiration Hold	No
Expiration Hold	No
O ₂ Flush Button	No
Dual receipt	Yes
LIAM	Yes

Monitoring parameters

Type	Parameter	Unit	Description	Numeric monitoring	Wave-forms	Vent Status	Dynamic Lung
Pressure	Paw	cmH ₂ O;mbar;hPa	Real-time airway pressure		✓		
	Ppeak	cmH ₂ O;mbar;hPa	Peak airway pressure	✓			
	Pmean	cmH ₂ O;mbar;hPa	Mean airway pressure	✓			
	Pinsp	cmH ₂ O;mbar;hPa	Inspiratory pressure			✓	
	PEEP/CPAP	cmH ₂ O;mbar;hPa	Positive end expiratory pressure/ continuous positive airway pressure	✓		✓	
	Pplateau	cmH ₂ O;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	✓			
	Vt/IBW (adult/ped)	ml/kg	Tidal volume/IBW ratio	✓			
	Vt/Weight (neonatal only)	ml/kg	Tidal volume/weight ratio	✓			
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	✓			
	%fSpont	%	Percentage of spontaneous breathing rate	✓			
Lung mechanics	Cstat	ml/cmH ₂ O	Static compliance	✓			
	AutoPEEP	cmH ₂ O;mbar;hPa	AutoPEEP or intrinsic PEEP	✓			
	RCexp	s	Expiratory time constant	✓			
	Rinsp	cmH ₂ O*s/l	Inspiratory flow resistance	✓			
	RSB	1/l*min	Rapid shallow breathing index	✓			
	PTP	cmH ₂ O*s;mbar*s	Pressure-time product	✓			

Main View

Vent Status	Visual representation of ventilator dependence, grouped into oxygenation, CO2 elimination, and patient activity Ops.
Dynamic Lung	Tidal Volume, conformity of lung, Real-time visualization of the lungs with representations of resistance and patient activity
Graphics	Tidal volume, pressure, Graphical display of target and valid parameters for patient activity and minute ventilation
Monitoring	Display of more than 50 monitoring parameters
Real-time waveforms	Paw, Flow, Volume, Plethysmogram1), and Capnograph1) Ops.
Others	SpO2, volumetric CO2, sidestream , P-V, V-Flow, P-Flow, Trends: 1, 6, 12, 24, and 72 hours Ops.

Alarms

Operator adjustable	Low/high minute volume, low/high pressure, low/high tidal volume, low/high rate, apnea time, low/high oxygen, low/high SpO2, low/high etCO2, low/high pulse, low/high perfusion index, low/high flow, low/high PVI, low/high FiO2, low/high SpMet, low/high SpHb, Alarm Reset
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.
Loudness	Adjustable (1 – 6), configurable minimum loudness

Maintenance

Blower lifetime	Dynamic lifetime surveillance, typically 6 years. 2-year warranty.
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, ISO 80601-2-72, ISO 10651-6

Configurations

Trolley accessories	Humidifier support, cylinder holder, tubing support arm
Options	Optional SpO2, etCO2 Module and software, humidifier
Accessories	Transport unit for bed or stretcher with trolley and protection kit and handle with carrying bag , 2-3-4-5 lt options with O2 cylinder, , Disposable patient circuit, reusable patient circuit pediatric/adult, Reusable or disposable adult and pediatric flow sensor, neonatal flow sensor, hygiene package, bacteria filter, single/dual patient circuits, pediatric or adult masks, O2 regulator with two manometers, 1.5 m. oxygen hose with quick coupling with O2 probe, Hepa filter

Electrical and pneumatic specifications

Input voltage	12 V DC 5 A
Power consumption	100-240 V 60 Watt
Backup battery time	Typical 4 h, 10 h 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	Integrated turbine
Peak flow	Max 300 l/min (adult / pediatric),

Environment

Temperature	Operating: 4°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	IP24
Interface connectors	USB, COM1 (RS-232), nurse call, CO2, SpO2 Opsiyonel
Event log	Storage and display of up to 2,000 events with date and time stamp
Device maintenance	Maintenance and calibration are done in the technical maintenance menu.

Physical dimensions

Size	241(W) x 160(H) x 116(D) (without handle)
Weight	3 kg except for extension
Display	7.1 in, LCD color, touch screen, night-vision compatibility
Main patient outlet	ISO 5356-1; 22OD/15ID
Oxygen inlet	DISS or NIST, with option of usage O2 cylinder or hospital central system
Low pressure oxygen inlet	CPC quick coupling



Ventilator Cart



Flow Sensor



Oxygen Sensor

MEDRAG-PVA01

Technical Specifications

- Build-in Vacuum Pump
- Safe and Precise Aspiration
- Adjustable Vacuum Pressure
- Vacuum Gauge
- Fully adjustable vacuum pressure, with a conveniently located pressure gauge that shows the vacuum level at all times. The user can easily press button to activate the vacuum.
- The collection bottle incorporates a reliable overflow protection valve that closes off the tube to the vacuum in the event of a full bottle.
- In additional, the replaceable in-line filter protects the vacuum pump from contaminants and any moisture that comes through the bottle. Graduations on the collection bottle indicate the amount of fluid collected and when its ready to emptied.

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



Technical Specifications

Property	Value / Description
Max. Flow Rate	30 liters / min
Vacuum Range	From 50 to 550mmHg
Noise Level	65 dB
Dimensions	239(w) x 159(h) x 117(D) mm
Weight	3.7 kg (bags and accessories included)
Electrical Requirements	100-240VAC 50/60Hz 2A max
Battery	2500 mAh
Working Time on Battery	30 minutes
Collection Bottle Capacity	1000 ml (cc) Disposable
Operating Temperature Range	-0,4°F (-18°C) to 140°F (60°C)
Operating Relative Humidity	0-95%
Operating Atmospheric Pressure	10.2 Psi (70 kPA) - 15.4 Psi (106 kPA)
Storage and Transport Temperature Range	-0,4°F (-18°C) to 140°F (60°C)
Storage and Transport Relative Humidity	0-95%
Storage and Transport Atmospheric Pressure	7.3 Psi (50 kPA) - 15.4 Psi (106 kPA)
Accessories	1 liter, polycarbonate collection bottle, Antibacterial hydrophobic filter, Silicone tubing, 12 V Adapter, Car Adapter

OXIVENT AND MEDRAG PRODUCT CATALOGUE



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www.oxivent.com.tr

info@oxivent.com.tr



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FAIRS TO ATTEND



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MODÜL GRUP MÜHENDİSLİK LTD. ŞTİ
ALINTERİ BULVARI GÜL-86 SİTESİ 1151.SK
NO:1/75 OSTİM / ANKARA / TURKEY
PHONE:+90 312 354 0373
info@oxivent.com.tr FAX:+90 312 354 7545