

SIRIO S2/T

Lung ventilator with
built-in PEEP function



Code: 09436

Rev. 13- 04/02/2022

GENERAL DESCRIPTION

SIRIO S2 / T provides the following ventilation modes:

- **AUT - AST:** intermittent positive pressure ventilation
- **PSV:** pressure support ventilation
- **CPAP:** continuous positive airway pressure

Intended use

The portable SIRIO S2/T lung ventilator is specially designed to be used in emergency, first-aid, intra-hospital transportation and it is destined to be applied on adults, children and new-born's.

NORMS



The device complies with the essential requirements and it is realized according to the references of the Annex II of 93/42/EEC Medical Devices Directive.

Class and type according to EN 60601-1

Class I Type B

National classification of medical devices

Z12030104

Class according to 93/42 EEC Directive

Class IIb, Rule 9, Type: Active according to MDD 93/42 EEC Annex IX

Electromagnetic compatibility (EMC)

Conform to the requirements of the EN 60601-1-2 and following updating's

Norms

EN 60601-1:2006/A1:2013; EN 60601-1-2:2015; IEC 60601-1- 6: 2013; EN 60601-1-8:2007 / A11:2017; EN 62304:2006/AC:2008; EN 794-3:1998+A2:2009; DIR. 2011/65/CE; D.Lgs 49/2014 ;EN ISO 14971:2012.

File number reference

2161384

Unique Device Identification (UDI) number

0 80 3373726 0 4 2 5

Basic-UDI-DI

ENVIRONMENTAL CONDITIONS

Operating

- Relative humidity: 15 al 95% non-condensing
- Temperature: from -10 to +40°C

Storage

- Relative humidity: < 95%
- Temperature: from -25 to +70°C

TECHNICAL DATA

Dimensions (W x H x D)	23 x 13 x 15 cm (W x D x H)
Weight	3.5 Kg
Electric power supply	12Vdc or feeder: 100 - 240 Vac / 12Vdc
<i>Power</i>	4.5 W
<i>Power consumption</i>	0,02 A - 220 Vac / 0,4 A - 12 Vdc
<i>Internal battery</i>	Internal Pb battery
<i>Internal battery autonomy</i>	Approx. 6 hours operation
<i>Charging time</i>	Charging time: 4 hours by feeder code G30146100

LUNG VENTILATOR FUNCTIONAL FEATURES

Type of ventilation	IPPV volumetric - IPPV time cycled with PRESSURE SUPPORT
Control modality	Electronic
Medical gas	Oxygen or compressed medical Air
Gas feeding	<ul style="list-style-type: none"> ▪ Oxygen and compressed medical Air: the gas pressure should be included between 280 kPa and 600 kPa (2,8 - 6 bar) ▪ Max. flow required by the ventilator: 50 l/min
Automatic compensation of atmospheric pressure	Automatic compensation of atmospheric pressure on measured pressure: present (max. 5000 mt)
Flow generation	Venturi system
Modes of ventilation	AUT + AST / PSV + APNOEA BACK UP / PEEP / CPAP
Breathing rate	From 5 to 70 bpm
I:E Ratio	1:1,5
Inspiratory time	40% of breathing cycle
Inspiratory pause	Automatic setting during PSV mode
Pressure support ventilation	Adjustable from 0 (SPONT.) to 50 cmH ₂ O
PEEP	Adjustable from 0 to 20 cmH ₂ O
Pressure limit	Adjustable from 0 to 50 cmH ₂ O
Tidal volume	From 15 to 3000 ml
Minute volume	From 1 to 16 l/min
Flow trend	Constant and decreasing (PSV)
Mixer device	50% O ₂ or 100% O ₂ (21% O ₂ with medical compressed Air supply)

USER INTERFACE

User's interface	<ul style="list-style-type: none"> ▪ Mechanic bronchomanometer ▪ Battery level LED ▪ External power supply indicator ▪ Leds and acoustics alarms ▪ Control knobs
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Measured parameters	Airways instant pressure
Trigger (sensitivity)	Adjustable from -1 to -5 cmH ₂ O
Bronchomanometer	Mechanical from -20 to 80 cmH ₂ O
Safety	Mechanical limit of airways pressure adjustable from 0 to 50 cmH ₂ O

ALARMS

Alarm types	Battery Level / Low and High Airways Pressure / Apnoea / Gas Supply / Power Failure
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ACCESSORIES

Standard accessories	<ul style="list-style-type: none">▪ Feeder 100 - 240 Vac / 12Vdc▪ Power supply cable 12 Vdc▪ O₂ tube▪ Disposable PVC patient circuit with expiratory valve▪ User's manual
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SIARE applies the UNI EN ISO 13485:2016 Quality System and the 93/42/EEC.

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