



SAFETY • RELIABILITY • COMFORT

## Intensive Care Ventilator MV200

**Treaton** continuous innovation

# MV200 | ALL-IN-ONE

MV200 is multifunctional mechanical ventilator that effectively provides all necessary functions for reliable and safety respiratory support of all patient groups: adults, children and infants.

MV200 includes large number of innovative functions that were developed in close cooperation with leading Russian medical experts. The device provides continuous monitoring of gas exchange and evaluation of metabolic needs and has mode of intellectual adaptive ventilation. MV200 provides invasive mandatory and assisted as well as non-invasive ventilation.

Friendly, intuitive interface allows using the device by medical personnel of different qualification.

## Extended respiratory monitoring

- SI – stress index,
- $P_{0.1}$  – respiratory effort index,
- $W_{spont}$  – work of the patient's breathing,
- $R_{exp}$  – resistance to exhalation,
- $C_{dyn}$  – dynamic compliance,

## Integrated functions

- Alveolar recruitment maneuver – short-term PEEP increasing to the set level,
- Leak compensation – full automatic leakage compensation in the circuit (if leak is too high and cannot be compensated, disconnection alarm is triggered),
- Tube resistance compensation – providing the airway pressure taking into account the resistance of the intubation tube,
- 100% oxygenation,
- Standby mode,
- Suction maneuver,
- Manual breath (manual ventilation),
- "Freezing" / analysis of graphs,
- Screen lock,
- Nebulizer,
- Mode of the deepen sigh,

## Trends

Saving and viewing of trends of the main monitoring parameters during 240 hours.

## 12 ventilation modes

MV200 provides a wide range of mandatory and assisted modes of invasive ventilation.

Mandatory ventilation: CMV/VCV, CMV/PCV, PCV-VG, Synchronized intermittent mandatory ventilation:

SIMM/VC, SIMM/PC, SIMM/DC,

Modes of spontaneous breathing: CPAP, BISTEP, APRV.

Non-invasive ventilation: NIV,

Apnea backup: ISV.

## Advanced patient monitoring

- Mainstream  $CO_2$ ,
- Volumetric  $CO_2$ ,
- Evaluation of patients metabolic needs,
- Auxiliary pressure,
- $SpO_2$ ,
- Respiratory mechanics,
- Cardiac output by Fick method,

## Built-in turbine

MV200 is independent from compressed air sources due to built-in turbine. Its unique design does not require special maintenance and ensures the operation of the device for 10 years or 40 000 hours.

## Reliable autoclavable exhalation valve

MV200 is equipped with exhalation valve, which can be easily disconnected from the device and processed in autoclave. Number of sterilization cycles is unlimited.

## Integrated exhalation flow sensor

Does not require any maintenance during the life time.

Alarm with viewing angle of 360°.

Simultaneous display of up to three curves and one loop at the user's choice.

Graphs:  
 $P_{aw}$  (pressure), Flow (flow), Vol (volume).

Loops:  
 volume/flow V-F, volume/pressure V-P,  
 $V/P_{max}$  with reference loops.

Advanced graphs:  
 $PCO_2$  (in mmHg or %),  
 $PO_2$  (oxigram in %),  $SpO_2$ , ISV,  
 $VCO_2$  (volume capnogram),  $P_{max}$ .

12.1" and 15" full-color touch LCD display allowing to adjust the viewing angle. Display can be fully folded for easy transportation.

Up to 6 h back-up battery

Prolonged operation without mains power ensures high level of patient safety. The rechargeable battery allows doctor to continue ventilation in desired mode up to 6 hours.

Operation of the device is guaranteed from any sources of compressed oxygen:

central  $O_2$  pipeline, cylinders, oxygen concentrator even with very low  $O_2$  pressure less than 0.5 bar.

