Ural Instrument
Engineering Plant JSC

Expertly
Carefully
Functionally

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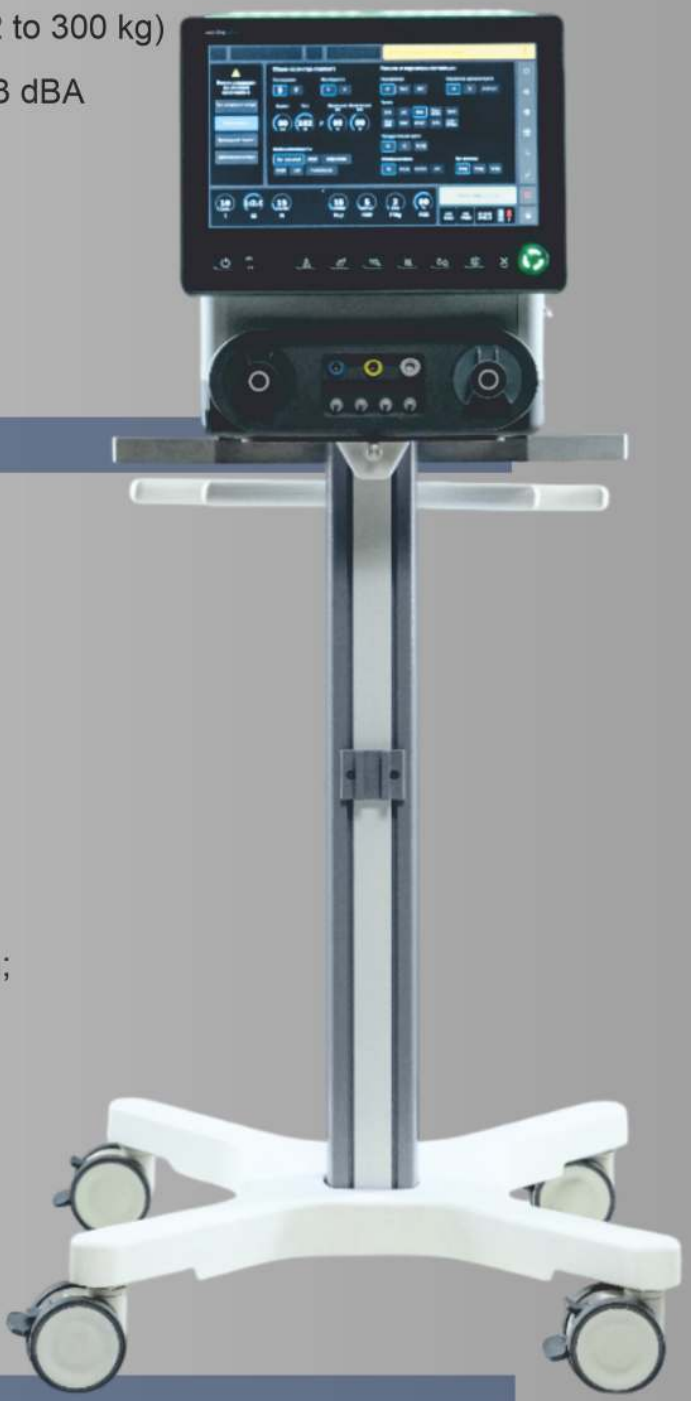
A device for controlled and assisted lung ventilation for children and

Basic specifications:

- Weight: 13.2 kg, weight on a trolley 34.5 kg
- Display: touchscreen, color, adjustable tilt angle
- Display size: 15.6"
- Drive: turbine
- Patient categories: children and adults (from 2 to 300 kg)
- Noise level during ventilator operation up to 43 dBA



Main ventilation parameters:

- Tidal volume: 10–3,000 ml
- Inspiratory pressure: 0 - 100 cm H_2O
- PEEP: 0-50 cm H_2O
- Ventilation frequency: 1–150 1/min
- I:E: 1:99–60:1
- FiO_2: 21–100%
- Trigger type: flow, pressure, volume
- Gas mixture flow in HFlow mode: 1–100 l/min;
- Plateau time: 0–3 s
- Apnea time: 2–80 s

Ventilation modes:

CMV, A/C, SIMV, Apnea, DUAL-LEVEL, APRV, Auto-MVG, CPAP, SPONT, Hflow, CPR, Auto-MVG PLUS

adults from 2 to 300 kg used as a part of resuscitation care and pulmon

Design and interface features: :

- Operating with a low-pressure oxygen source
- Setting up the initial parameters and alarms according to body mass index (BMI) for 2–300 kg
- Setting up the initial parameters and alarms for heights ranging from 50 to 250 cm
- Setting up the initial parameters and alarms according to the patient's condition
- Graphic and tabular trends up to 720 hours
- Two built-in Li-Ion batteries provide up to 15 hours of autonomous operation
- Adjusting the viewing angles of the screen
- Quick start of ventilation
- Hot-swappable internal battery
- Built-in telematics module
- The display brightness automatically adjusts depending on the lighting conditions
- Up to 10 ventilation program templates can be set up, stored and used
- Work with biaxial and monoaxial breathing circuits
- The user manual is built into the device menu

ary support.

Monitoring features:

- Digital monitoring of up to 88 parameters
- Simultaneous display of 4 curves
- A group of parameters to be monitored for the metabolism function
- A group of parameters to be monitored for CO function, including the oxygen transport index
- A group of parameters to be monitored for the functional residual capacity (FRC) function
- A group of parameters to be monitored for spontaneous breathing test (SBT)
- A group of parameters to be monitored for the volumetric capnometry function (VCO2)
- Internal trends for each function and procedure
- Alarm and event log for 10,000 messages

Main parameters to be monitored:

- Peak airway pressure, ml
- PEEP
- Expiratory tidal volume, ml
- Inspiratory tidal volume, ml
- Total respiratory minute volume, ml
- Frequency of minute ventilation, 1/min
- I:E
- Dynamic compliance, ml/cm H_2O
- Dynamic resistance, cm H_2O/ L/s
- Oxygen concentration in gas mixture, %
- Plateau pressure, cm H_2O
- Driving pressure (Ppeak - PEEP), cm H_2O
- PTP (Pressure-Time Product) index
- RSB Index, (RSB-I)
- Mean airway pressure, cm H_2O
- Residual pressure in the lungs (internal PEEP), cm H_2O
- Tidal volume per 1 kg of ideal patient weight, ml/kg
- Residual air volume in the lungs with intrinsic PEEP
- Minute volume of spontaneous breathing, l/min
- Ratio of spontaneous breathing to minute volume, %
- Forced breathing rate, 1/min
- Spontaneous breathing rate, 1/min
- Inspiratory time, s
- Expiratory time, s

Options	Version 1	Version 2	Version 3	Version 4
Oxygenation	V	V	V	V
Recruitment	V	V	V	V
Single-stage recruitment (10x40)	V	V	V	V
P/V manoeuvre	V	V	V	V
Lung Insufflation Assistance (LIAM)	V	V	V	V
Automatic Tube Compensation (ATC)	V	V	V	V
Automatic delivery of intermittent mandatory inspiration (Sigh)	V	V	V	V
Maximal inspiratory pressure (MIP)	V	V	V	V
Non-invasive ventilation (NIV)	V	V	V	V
Integration with medical information system	V	V	V	V
Remote troubleshooting	V	V	V	V
Telematics	V	V	V	V
Automatic flow reduction when disconnected (AUTO Disconnect)	V	V	V	V
CPR	V	V	V	V
Automatic closed loop FiO_2 level control (AKOR)		V	V	V
Auto-PEEP		V	V	V
$EtCO_2$, %		V	V	V
SpO_2, %		V	V	V
Plethysmography Variability Index (PVI, %)		V	V	V
Pulse Rate (PR, 1/min)		V	V	V
Oxygenation Saturation Index (OSI)		V	V	V
SpO_2/FiO_2 ratio		V	V	V
Volumetric capnometry function (VCO_2)		V	V	V
Measurement of intraesophageal pressure to record transpulmonary pressure (Ptp)			V	V
Endotracheal tube cuff pressure maintenance (Pcuff)			V	V
Measurement of functional residual capacity (FRC-C)				V
Spontaneous Breathing Trial (SBT)				V
Functionality for measuring metabolic parameters using indirect calorimetry method (REE)				V
Cardiac output calculation(CO, CI, SV/ SVI, DO_2)				V
Automatic ventilation mode maintaining the minimum required minute ventilation (Auto-MVG+ (ACLV))				V