



MEDICAL EQUIPMENT AND HEALTHCARE APLIANCES

 **INTEGRAL** |  In Medical

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Branch "Kamerton" of JSC "INTEGRAL"- "INTEGRAL" Holding Managing Company

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INTEGRAL 12 patient monitor

Marketing Authorization in the Republic of Belarus dated 27.05.2021 No.IM-794502/2105
FKSN.941118.001TU-2008



The monitor is designed to measure and evaluate vital physiological parameters of patients (adults and children), process, store and transmit real-time information about the state of body functions.

The monitor is used to control:

- blood pressure (BP);
- heart rate (HR);
- body temperature (TEMP) via two channels;
- hemoglobin oxygen saturation (SpO₂);
- electrocardiogram (ECG);
- respiratory rate (RR);
- capnography, mainstream and side stream (CO₂);
- gas mixture analysis in the breathing scheme (MULTIGAS);
- anesthesia depth (CSM).

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required.

A 12-inch color LCD screen and an intuitive interface provide maximum user convenience, and the availability of a carrying handle and hooks for attaching to the bed allows the monitor to be used when transporting patients.

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
ECG unit	
ECG patient cable	3 wire/5 wire
Number of ECG measurement leads	3/7
<i>ECG monitoring by leads</i>	
with 3-wire patient cable	I, II, III
with 5-wire patient cable	I, II, III, aVR, aVL, aVF, V
Display rate, mm/s	12.5; 25.0; 50.0
<i>Heart rate measurements</i>	
Heart rate measurement range, heart beats per minute	from 25 to 250
Non-invasive blood pressure	
Blood pressure measurement range for adults, mm Hg	from 20 to 250
Blood pressure measurement range for children, mm Hg	from 20 to 180
Invasive blood pressure	
Number of channels	2
for adults, mm Hg	from 20 to 280
for children, mm Hg	from 20 to 180
Temperature unit	
Temperature display range, °C	from +15 to + 45
Temperature measurement range, °C	from +32 to + 43
Maximum absolute error of temperature measurement, °C	± 0.1
SPO₂ unit	
<i>Two-wave method</i>	
SPO ₂ monitoring range	from 70% to 100%
Breathing unit	
BR monitoring range, breaths per minute	from 6 to 150
Anesthesia depth monitoring unit	
Display range of the anesthesia depth index, CSI, %	from 0 to 100
Display range of the electromyographic activity index	from 0 to 100 logarithmically
Display range of the noise and artifact suppression index, SQI, %	from 0 to 100
Display range of the burst suppression, BS, %	from 0 to 100
Power supply	
The supply voltage from 50 Hz AC network, V	230±23
Supply voltage from the built-in power supply (battery) with a capacity of 3.3 A*h, V	12±2
Minimum continuous operation at full charge of the battery, h	4.0
Weight and size specifications	
Overall dimensions, mm	315X295X235
Max. weight, kg	6.0

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MPP portable patient monitor

Marketing Authorization in the Republic of Belarus dated 06.05.2021 No.IM-7.102367/2105
TU BY 100386629.165-2015



Portable patient monitor (MPP) is designed to measure, continuously display and analyze the parameters of the physiological state of patients (adults and children, including newborns) in real time, processing and accumulation of measurement results.

It is used in the conditions of emergency care when transporting patients in ambulances and for intrahospital transportation.

User interface is a 7 inch touch color LCD screen with control keys.

The monitor contains input signal filters to reduce the impact of distortion and interference from various equipment, as well as built-in protection against the influence of electro-surgical instruments and a defibrillator.

The monitor has the ability to connect additional information display devices and output data regardless of the information that is displayed on the screen.

- ECG by leads: I, II, III, aVR, aVL, aVF, V;
- arrhythmia analysis and heart rate indication;
- pulse rate;
- respiratory rate;
- invasive blood pressure measurement (IBP) (SYS, DIA, MAP);
- non-invasive blood pressure measurement (NIBP) (SYS, DIA, MAP);
- temperature (T1, T2, ΔT);
- hemoglobin oxygen saturation (SpO₂);
- carboxyhemoglobin saturation (SpCO);
- methoglobin saturation (SpMet)
- hemoglobin concentration (SpHb);
- composition of the gas mixture in the patient's circuit – determination of CO₂; O₂, N₂O

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
ECG unit	
ECG patient cable	3 wire/5 wire
Number of ECG measurement leads	3/7
<i>ECG monitoring by leads</i>	
with 3-wire patient cable	I, II, III
with 5-wire patient cable	I, II, III, aVR, aVL, aVF, V
Display rate, mm/s	12.5; 25.0; 50.0
<i>Heart rate measurements</i>	
Heart rate measurement range, heart beats per minute	from 30 to 200
Heart rate measurement range for newborns, heart beats per minute	from 30 to 250
Non-invasive blood pressure	
Blood pressure measurement range for adults, mm Hg	from 20 to 250
Blood pressure measurement range for children, mm Hg	from 20 to 125
Invasive blood pressure	
Blood pressure measurement range, mm Hg	from 50 to 300
Temperature unit	
Temperature measurement range, °C	from +25 to + 45
Maximum absolute error of temperature measurement, °C	± 0,2
SPO₂ unit	
<i>Two-wave method</i>	
SPO ₂ monitoring range	from 50 to 100
SpMet monitoring range, %	from 1 to 15
SpCO monitoring range, %	from 1 to 40
SpHb monitoring range, g/l	from 8 to 17
Breathing unit	
BR monitoring range, breaths per minute	from 6 to 150
Capnography unit	
Co2 concentration range, vol %	from 0 to 10
Power supply	
The supply voltage from 50 Hz AC network, V	230±23
Supply voltage from the on-board network, V	12±2
Supply voltage from the built-in power supply (battery), V	12±2
Minimum continuous operation at full charge of the battery, h	1.5
Weight and size specifications	
Overall dimensions, mm	100x240x230
Max. weight, kg	3.0

MM-18I patient monitor

Marketing Authorization in the Republic of Belarus dated 15.01.2025 No.IM-116930/2505
TU BY 100386629.177-2015



The monitor is designed for long-term monitoring of the state of vital body functions of patients (adults and children, including newborns) with real-time display of physiological state data on an 18.5-inch LCD screen, as well as their processing, storage and transmission to the local network.

The monitor is used to perform the following measurements:

- electrocardiogram (ECG);
- heart rate (HR);
- noninvasive blood pressure (NIBP);
- invasive blood pressure (IBP);
- body temperature (TEMP);
- respiratory rate (RR);
- hemoglobin oxygen saturation (SpO₂)
- pulse rate (PR);
- intracranial pressure (ICP);
- cardiac output (CO);
- oxygen saturation (SpOC);
- carboxyhemoglobin saturation (SpCO);
- methemoglobin saturation (SpMet);
- total hemoglobin in the blood (SpHb);
- carbon dioxide concentrations (CO₂);
- concentrations of O₂, NO₂, anesthetic (halothane, enflurane, isoflurane, sevoflurane, desflurane);
- anesthesia depth.

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
ECG unit	
ECG patient cable	3 wire/5 wire/ 10 wire
Number of ECG measurement leads	3/7/12
<i>ECG monitoring by leads</i>	
with 5-wire patient cable	I, II, III / I, II, III, aVR, aVL, aVF; V
with 10-wire patient cable	I, II, III, aVR, aVL, aVF; V, C2, C3, C4, C5, C6
Display rate, mm/s	12.5; 25.0; 50.0
<i>Heart rate measurements</i>	
Heart rate measurement range for adults, heart beats per minute	from 15 to 300
Heart rate measurement range for newborns, heart beats per minute	from 15 to 350
Non-invasive blood pressure	
Blood pressure measurement range for adults, mm Hg	from 15 to 250
Blood pressure measurement range for newborns, mm Hg	from 15 to 125
Invasive blood pressure	
Blood pressure measurement range, mm Hg	from 50 to 300
Number of channels	from 2 to 4
Temperature unit	
Temperature display range, °C	from +5 to + 50
Temperature measurement range, °C	from +32 to + 43
Maximum absolute error of temperature measurement, °C	± 0.1
SPO₂ unit	
<i>Two-wave method</i>	
SPO ₂ monitoring range	from 30 to 100 from 70 to 80
Accuracy, %	±2 ±4
<i>Multi-wave method</i>	
SpMet monitoring range, %	from 0 to 100
SPO ₂ monitoring range, %	from 0 to 100
SCO monitoring range, %	from 0 to 100
SHb monitoring range, g/dl	from 0 to 100
SOC monitoring range, ml/dl	from 0 to 40
PI monitoring range, %	from 0 to 20
PVI monitoring range, %	from 0 to 100
Breathing unit	
BR monitoring range, breaths per minute	from 6 to 150
ECG unit	
CSI/BFI index display range, %	from 0 to 100
Display range of the electromyographic activity index, EMG, %	from 0 to 100 logarithmically

MAIN SPECIFICATIONS

MM-18I patient monitor

Parameter, measuring unit	Value
Display range of the noise and artifact suppression index, SQI, %	from 0 to 100
Display range of the burst suppression, BS, %	from 0 to 100
ICP monitoring unit	
ICP monitoring range, mm Hg	from -10 to +100
CO monitoring unit	
CO monitoring range, l/min	from 0.5 to 18
Power supply	
The supply voltage from 50 Hz AC network, V	230 ± 23
Power supply voltage from the built-in power supply (battery) with a capacity of 3.3 A*h, V	12 ± 2
Minimum continuous operation at full charge of the battery, h	2
Weight and size specifications	
Overall dimensions, mm	450 x 360 x 180
Max. weight, kg	7.0



The monitor is designed to measure and evaluate vital physiological parameters of patients (adults, children and newborns) in real time, to process, store and transmit the measurement results to computer networks of hospitals and polyclinics. Patient parameter information can be displayed, viewed, saved, and printed.

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required (adults, children, newborns).

The monitor provides the medical staff with the most accurate information about the physiological condition of the patient in real time.

The ability to monitor the ECG physiological parameters (including ST segment measurement and arrhythmia analysis), respiration, blood oxygen level, pulse rate, non-invasive and invasive blood pressure, temperature and hemoglobin oxygen saturation (CO₂).

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Temperature measurement channel	
Channel	Single-channel
Temperature display range, °C	from plus 0 to plus 50
Accuracy, °C	± 0.1
HR	
Heart rate measurement range, heart beats per minute:	
- for adults;	from 15 to 300
- for children and newborns	from 15 to 350
Accuracy	± 1 % or ± 1 beats per minute, whichever is greater
NIBP	
The operating mode	Manual, Automatic, Continuous
Measurement interval in automatic mode, min.	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, 480
Measurement interval in continuous mode, min.	5
Pressure measurement range, mm Hg:	
- for adults	from 30 to 270
- for children	from 10 to 235
- for newborns	from 10 to 135
The accuracy of the cuff pressure	± 3 mmHg
ECG	
Lead mode	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V
Sensitivity, mm/mV	2.5, 5, 10, 20
Display rate, mm/s	12.5, 25, 50
SPO₂	
Monitoring range, %	from 30 to 100
Accuracy, %	+2 from 70% to 100%
Pulse rate monitoring range, beats/min.	from 25 to 250
Accuracy	± 2 % or ± 2 beats per minute, whichever is greater
CO₂	
Measurement parameters	CO₂ (end-tidal carbon dioxide concentration) InsCO₂ (concentration of carbon dioxide when inhaled) RR (respiratory rate through the airways)
Measuring range CO ₂ by the main and side stream method, mm Hg	from 0 to 150

MAIN SPECIFICATIONS

MM-18I patient monitor

Parameter, measuring unit	Value
CO₂	
Accuracy	+4 mm Hg - from 0 to 40 mm Hg; +10% of readings – from 41 to 100 mm Hg; +20% of readings – from 101 to 150 mm Hg.
BR	
BR monitoring range, breaths per minute	from 7 to 150
Accuracy, breaths per minute	± 2% or +2 breaths per minute, the larger value is taken as a deviation from the readings

Parameter, measuring unit	Value
Max. overall dimensions, mm	170×60×100
Max. weight, kg	1
Screen size, inch	5
Screen resolution, minimum	800×480
Type of protection against electric shock	CF
Class of protection against electric shock	II
Ingress protection code	IP20
AC power supply	230±23 V / 50 Hz
Maximum power consumption, W	50
Battery capacity, mAh	2500
Operation from a built-in and fully charged battery, h	3
Thermal printer	Available
Record mode	Available
Freeze mode	Available





The monitor is designed to measure and evaluate vital physiological parameters of patients (adults, children and newborns) in real time, to process, store and transmit the measurement results to computer networks of hospitals and polyclinics. Patient parameter information can be displayed, viewed, saved, and printed.

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required (adults, children, newborns).

The monitor provides the medical staff with the most accurate information about the physiological condition of the patient in real time.

The ability to monitor the ECG physiological parameters (including ST segment measurement and arrhythmia analysis), respiration, blood oxygen level, pulse rate, non-invasive and invasive blood pressure, temperature and hemoglobin oxygen saturation (CO₂).

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Temperature measurement channel	
Channel	Double-channel
Temperature display range, °C	from plus 0 to plus 50
Accuracy, °C	± 0.1
HR	
Heart rate measurement range, heart beats per minute:	
- for adults;	from 15 to 300
- for children and newborns	from 15 to 350
Accuracy	± 1 % or ± 1 beats per minute, whichever is greater
NIBP	
The operating mode	Manual, Automatic, Continuous
Measurement interval in automatic mode, min.	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, 480, 960
Measurement interval in continuous mode, min.	5
Pressure measurement range, mm Hg:	
- for adults	from 30 to 270
- for children	from 10 to 235
- for newborns	from 10 to 135
The accuracy of the cuff pressure, mm Hg	± 3
IBP	
Number of channels	2
Pressure measurement range, mm Hg	from -50 to +300
Accuracy	± 2 % or ± 1, whichever is greater
ECG	
Lead mode	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V
Sensitivity, mm/mV	2.5, 5, 10, 20, 40
Display rate, mm/s	12.5, 25, 50
SPO₂	
Monitoring range, %	from 30 to 100
Accuracy, %	+2 from 70% to 100%
Pulse rate monitoring range, beats/min.	from 25 to 250
Accuracy	± 2 % or ± 2 beats per minute, whichever is greater

MAIN SPECIFICATIONS

MM-12I patient monitor

Parameter, measuring unit	Value
CO₂	
Measurement parameters	CO₂ (end-tidal carbon dioxide concentration) InsCO₂ (concentration of carbon dioxide when inhaled) RR (respiratory rate through the airways)
Measuring range CO ₂ by the main and side stream method, mm Hg	from 0 to 150
Accuracy	+4 mm Hg - from 0 to 40 mm Hg; +10% of readings – from 41 to 100 mm Hg; +20% of readings – from 101 to 150 mm Hg.
RR apnea signal delay, s	from 10 to 40
BR	
BR monitoring range, breaths per minute	from 7 to 150
Accuracy, breaths per minute	± 2% or +2 breaths per minute, the larger value is taken as a deviation from the readings

Parameter, measuring unit	Value
Max. overall dimensions, mm	320x200x320
Max. weight, kg	3
Screen size, inch	12.1
Screen resolution, minimum	800x600
Type of protection against electric shock	CF
Class of protection against electric shock	I
Ingress protection code	IP20
AC power supply	230±23 V / 50 Hz
Maximum power consumption, W	150
Battery capacity, mAh	5000
Operation from a built-in and fully charged battery, h	3
Thermal printer	Available
Record mode	Available
Freeze mode	Available

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The monitor is designed to measure and evaluate vital physiological parameters of patients (adults, children and newborns) in real time, to process, store and transmit the measurement results to computer networks of hospitals and polyclinics. Patient parameter information can be displayed, viewed, saved, and printed.

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required (adults, children, newborns).

The monitor provides the medical staff with the most accurate information about the physiological condition of the patient in real time.

The ability to monitor the ECG physiological parameters (including ST segment measurement and arrhythmia analysis), respiration, blood oxygen level, pulse rate, non-invasive and invasive blood pressure, temperature and hemoglobin oxygen saturation (CO₂).

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Temperature measurement channel	
Channel	Double-channel
Temperature display range, °C	from plus 0 to plus 50
Accuracy, °C	± 0.1
HR	
Heart rate measurement range, heart beats per minute: - for adults; - for children and newborns	from 15 to 300 from 15 to 350
Accuracy	± 1 % or ± 1 beats per minute, whichever is greater
NIBP	
The operating mode	Manual, Automatic, Continuous
Measurement interval in automatic mode, min.	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, 480, 960
Measurement interval in continuous mode, min.	5
Pressure measurement range, mm Hg: - for adults - for children - for newborns	from 30 to 270 from 10 to 235 from 10 to 135
The accuracy of the cuff pressure, mm Hg	± 3
IBP	
Number of channels	2
Pressure measurement range, mm Hg	from -50 to +300
Accuracy	± 2 % or ± 1, whichever is greater
ECG	
Lead mode	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V
Sensitivity, mm/mV	2.5, 5, 10, 20, 40
Display rate, mm/s	12.5, 25, 50
SPO₂	
Monitoring range, %	from 30 to 100
Accuracy, %	+2 from 70% to 100%
Pulse rate monitoring range, beats/min.	from 25 to 250
Accuracy	± 2 % or ± 2 beats per minute, whichever is greater

MAIN SPECIFICATIONS

MM-15I patient monitor

Parameter, measuring unit	Value
CO₂	
Measurement parameters	CO₂ (end-tidal carbon dioxide concentration) InsCO₂ (concentration of carbon dioxide when inhaled) RR (respiratory rate through the airways)
Measuring range CO ₂ by the main and side stream method, mm Hg	from 0 to 150
Accuracy	+4 mm Hg - from 0 to 40 mm Hg; +10% of readings – from 41 to 100 mm Hg; +20% of readings – from 101 to 150 mm Hg.
RR apnea signal delay, s	from 10 to 40
BR	
BR monitoring range, breaths per minute	from 7 to 150
Accuracy, breaths per minute	± 2% or +2 breaths per minute, the larger value is taken as a deviation from the readings

Parameter, measuring unit	Value
Max. overall dimensions, mm	370x180x340
Max. weight, kg	5
Screen size, inch	15.7
Screen resolution, minimum	1024x768
Type of protection against electric shock	CF
Class of protection against electric shock	I
Ingress protection code	IP20
AC power supply	230±23 V / 50 Hz
Maximum power consumption, W	150
Battery capacity, mAh	5000
Operation from a built-in and fully charged battery, h	3
Thermal printer	Available
Record mode	Available
Freeze mode	Available

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MM-16SI patient monitor

Marketing Authorization in the Republic of Belarus dated 15.01.2025 No.IM-116930/2505
TU BY 100386629.177-2015



The monitor is designed to measure and evaluate vital physiological parameters of patients (adults, children and newborns) in real time, to process, store and transmit the measurement results to computer networks of hospitals and polyclinics. Patient parameter information can be displayed, viewed, saved, and printed.

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required (adults, children, newborns).

The monitor provides the medical staff with the most accurate information about the physiological condition of the patient in real time.

The ability to monitor the ECG physiological parameters (including ST segment measurement and arrhythmia analysis), respiration, blood oxygen level, pulse rate, non-invasive and invasive blood pressure, temperature and hemoglobin oxygen saturation (CO₂).

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Temperature measurement channel	
Channel	Double-channel
Temperature display range, °C	from plus 0 to plus 50
Accuracy, °C	± 0.1
HR	
Heart rate measurement range, heart beats per minute:	
- for adults;	from 15 to 300
- for children and newborns	from 15 to 350
Accuracy	± 1 % or ± 1 beats per minute, whichever is greater
NIBP	
The operating mode	Manual, Automatic, Continuous, Serial
Measurement interval in automatic mode, min.	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, 480
Measurement interval in continuous mode, min.	5
Pressure measurement range, mm Hg:	
- for adults	from 30 to 270
- for children	from 10 to 235
- for newborns	from 10 to 135
The accuracy of the cuff pressure, mm Hg	± 3
IBP	
	2
	from -50 to +300
	± 2 % or ± 1, whichever is greater
ECG	
Lead mode	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V 12-lead: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6
Sensitivity, mm/mV	2.5, 5, 10, 20
Display rate, mm/s	6.25, 12.5, 25, 50
SPO₂	
Monitoring range, %	from 30 to 100
Accuracy, %	+2 from 70% to 100%
Pulse rate monitoring range, beats/min.	from 25 to 250
Accuracy	± 2 % or ± 2 beats per minute, whichever is greater

MAIN SPECIFICATIONS

MM-16SI patient monitor

Parameter, measuring unit	Value
CO₂	
Measurement parameters	CO₂ (end-tidal carbon dioxide concentration) InsCO₂ (concentration of carbon dioxide when inhaled) RR (respiratory rate through the airways)
Measuring range CO ₂ by the main and side stream method, mm Hg	from 0 to 150
Accuracy	+4 mm Hg - from 0 to 40 mm Hg; +10% of readings – from 41 to 100 mm Hg; +20% of readings – from 101 to 150 mm Hg.
RR apnea signal delay, s	from 10 to 40
BR	
BR monitoring range, breaths per minute	from 7 to 150
Accuracy, breaths per minute	± 2% or +2 breaths per minute, the larger value is taken as a deviation from the readings
ESU	
Display rate, mm/s	12.5, 25, 50

Parameter, measuring unit	Value
Max. overall dimensions, mm	400x200x330
Max. weight, kg	5
Screen size, inch	15.7
Screen resolution, minimum	1920x1080
Type of protection against electric shock	CF
Class of protection against electric shock	I
Ingress protection code	IP20
AC power supply	230±23 V / 50 Hz
Maximum power consumption, W	150
Battery capacity, mAh	5200
Operation from a built-in and fully charged battery, h	6
Thermal printer	Available
Record mode	Available
Freeze mode	Available

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MM-17SI patient monitor

Marketing Authorization in the Republic of Belarus dated 15.01.2025 No.IM-116930/2505
TU BY 100386629.177-2015



The monitor is designed to measure and evaluate vital physiological parameters of patients (adults, children and newborns) in real time, to process, store and transmit the measurement results to computer networks of hospitals and polyclinics. Patient parameter information can be displayed, viewed, saved, and printed.

The main scope of application of the monitor is operating rooms, critical care units, intensive care units, birthing suites and other departments of medical facilities where long-term monitoring of the condition of patients is required (adults, children, newborns).

The monitor provides the medical staff with the most accurate information about the physiological condition of the patient in real time.

The ability to monitor the ECG physiological parameters (including ST segment measurement and arrhythmia analysis), respiration, blood oxygen level, pulse rate, non-invasive and invasive blood pressure, temperature and hemoglobin oxygen saturation (CO₂).

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Temperature measurement channel	
Channel	Double-channel
Temperature display range, °C	from plus 0 to plus 50
Accuracy, °C	± 0.1
HR	
Heart rate measurement range, heart beats per minute:	
- for adults;	from 15 to 300
- for children and newborns	from 15 to 350
Accuracy	± 1 % or ± 1 beats per minute, whichever is greater
NIBP	
The operating mode	Manual, Automatic, Continuous, Serial
Measurement interval in automatic mode, min.	1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 240, 480
Measurement interval in continuous mode, min.	5
Pressure measurement range, mm Hg:	
- for adults	from 30 to 270
- for children	from 10 to 235
- for newborns	from 10 to 135
The accuracy of the cuff pressure, mm Hg	± 3
IBP	
Number of channels	2
Pressure measurement range, mm Hg	from -50 to +300
Accuracy	± 2 % or ± 1, whichever is greater
ECG	
Lead mode	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V 12-lead: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6
Sensitivity, mm/mV	2.5, 5, 10, 20
Display rate, mm/s	6.25, 12.5, 25, 50
SPO₂	
Monitoring range, %	from 30 to 100
Accuracy, %	+2 from 70% to 100%
Pulse rate monitoring range, beats/min.	from 25 to 250
Accuracy	± 2 % or ± 2 beats per minute, whichever is greater

MAIN SPECIFICATIONS

MM-17SI patient monitor

Parameter, measuring unit	Value
CO₂	
Measurement parameters	CO₂ (end-tidal carbon dioxide concentration) RR (respiratory rate through the airways)
Measuring range CO ₂ by the main and side stream method, mm Hg	from 0 to 150
Accuracy	+4 mm Hg - from 0 to 40 mm Hg; +10% of readings – from 41 to 100 mm Hg; +20% of readings – from 101 to 150 mm Hg.
RR apnea signal delay, s	from 10 to 40
BR	
BR monitoring range, breaths per minute	from 7 to 150
Accuracy, breaths per minute	± 2% or +2 breaths per minute, the larger value is taken as a deviation from the readings
ESU	
Display rate, mm/s	12.5, 25, 50

Parameter, measuring unit	Value
Max. overall dimensions, mm	420x200x340
Max. weight, kg	5
Screen size, inch	17.7
Screen resolution, minimum	1920x1080
Type of protection against electric shock	CF
Class of protection against electric shock	I
Ingress protection code	IP20
AC power supply	230±23 V / 50 Hz
Maximum power consumption, W	150
Battery capacity, mAh	5200
Operation from a built-in and fully charged battery, h	6
Thermal printer	Available
Record mode	Available
Freeze mode	Available

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Tel.: +375 (17) 371 00 07



Portable emergency ventilator

Marketing Authorization in the Republic of Belarus dated 16.09.2021 No.IM-7.103121/2308
TU BY 100386629.163-2015



Portable emergency ventilator is designed to provide respiratory support for children and adults in emergency situations. The device is used in emergency medical vehicles, in intra-hospital transportation, in critical care units and intensive care units.

Ventilation modes:

- continuous forced ventilation synchronized with spontaneous patient activity (IPPV);
- assisted ventilation with pressure support (PSV);
- ventilation providing constant positive airway pressure (CPAP).

MAIN TECHNICAL PARAMETERS OF VENTILATION MODES

Parameter, measuring unit	Value
Respiratory rate, min ⁻¹	from 5 to 70
Pressure limit, mbar	from 5 to 50
Positive end-of-exhalation pressure (PEEP), mbar	from 0 to 20
Minute volume (Vi), l/min.	from 1 to 16
Respiratory volume (Vt), ml	from 20 to 3000
The ratio of inhalation time to exhalation time (I:E)	1:1.5
Oxygen concentration FiO ₂ , %	50 100

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Power supply:	
- from the DC network, V	12
- from 50 Hz AC network, V	230
Maximum ready-to-work time, min.	3
Minimum battery life, h	6
Pressure in the gas supply network, kPa	from 280 to 600
Maximum overall dimensions, mm	320 x 220 x 160
Weight, kg	5

ESU INTEGRAL electrosurgical unit

Marketing Authorization in the Republic of Belarus dated 23.12.2025 No.IM-7.98435/2512
TU BY 100386629.142-2011



ESU INTEGRAL electrosurgical unit is designed for cutting and coagulation of tissues and vessels when performing operations on organs and systems of patients with surgical, traumatological, urological, oncological, gynecological, cardiac, neurosurgical and other pathologies.

Distinctive features of the unit: the device combines monopolar, bipolar and legation modes; activation of output power from the electrode holder keys and from the two-key foot switch; continuous analysis of the built-in microprocessor system of resistance of biological tissues and continuous monitoring of output power; self-diagnosis function and monitoring of leakage currents; programmable settings of output power by modes; 10 programmable memory cells to save individual settings of the surgeon for each mode; protection against defibrillator discharges; user-friendly menu; error warnings with text messages; support for connecting a double neutral electrode with the function of continuous quality control of contact with the patient's body.

OPERATING MODES

Operating mode	Maximum output voltage amplitude, V	Maximum output power, W	Cross ratio at maximum power	Load at maximum output power, Ohms
Pure cut	650	360 ± 54.0	1.5 ± 3	350 ± 3.5
Blended cut 1	1400	330 ± 49.5	2.0 ± 0.3	450 ± 4.5
Blended cut 2	1550	300 ± 45.0	2.5 ± 0.3	500 ± 5.0
Blended cut 3	1900	270 ± 40.5	2.8 ± 0.5	500 ± 5.0
Rapid coagulation	1725	200 ± 30.0	3.3 ± 0.5	500 ± 5.0
Forced coagulation	1900	140 ± 21.0	4.5 ± 0.5	500 ± 5.0
Surface coagulation	2250	120 ± 18.0	from 5.5 to 7.5	700 ± 7.0
Gentle coagulation	300	100 ± 20.0	1.5 ± 0.3	150 ± 1.5
Bipolar coagulation	275	80 ± 16.0	1.5 ± 0.3	50 ± 0.5
Automatic bipolar coagulation	275	50 ± 10.0	1.5 ± 0.3	50 ± 0.5
Vessel sealing 1	275	160 ± 24.0	1.5 ± 0.3	50 ± 0.5
Vessel sealing 2	200	80 ± 16.0	1.5 ± 0.3	50 ± 0.5

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Supply voltage, V, frequency 50 Hz	230 ± 23
Maximum power consumption, W	800
Maximum output power at monopolar outputs 1 and 2, W	360
Rated frequency of alternating voltage at the outputs, kHz	410 ± 8.2
Maximum permissible electrical resistance between the two terminals of the neutral double flexible electrode connector, Ohms	150
Maximum auxiliary current of the neutral electrode, mA	300
Maximum current consumption in standby mode, mA	120
Max. weight, kg	9.0
Overall dimensions, mm	470x380x160

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ESU-02 INTEGRAL electrosurgical unit

Marketing Authorization in the Republic of Belarus dated 23.12.2025 No.IM-7.98435/2512
TU BY 100386629.142-2011



The electrosurgical unit is used to cutting tissues and stopping bleeding during both open (traditional) surgical, traumatological, urological, neurosurgical, oncological, cardiac, gynecological, thoracic and other types of surgical interventions, as well as endovideosurgical (laparoscopic, thoracoscopic, arthroscopic, etc.) operations.

The main field of application of ESU is surgical and dressing hospitals and polyclinics, where traditional open, endosurgical and outpatient operations are required.

УЫГ generates a high-frequency signal of a given shape in a frequency range (at least 400 kHz) that does not adversely affect the endogenous electrical potentials of the human body.

During surgical procedures, ESU provides, when electrosurgical instruments are activated, the generation of thermal energy in the tissues of the human body sufficient to perform monopolar cutting, mono- and bipolar tissue coagulation and vessel sealing.

MAIN SPECIFICATIONS

Parameter	Value, measuring unit
Protection class	Class I, type BF for internal power supply
Degree of protection against water penetration	IPX2
Operating frequency	from 360 to 532 kHz
The maximum power consumption	not more than 1100 VA
AC power supply	(230+23) V, 50/60 Hz
Output power	Clean cutting from 1 to 250 W (500 Ohm load) Mixed cutting 1 from 1 to 250 W (500 Ohm load) Mixed cutting 2 from 1 to 200 W (500 Ohm load) Spray coagulation 1 from 1 to 80 W (500 Ohm load) Soft coagulation 2 from 1 to 120 W (500 Ohm load) Bipolar coagulation from 1 to 70 W (100 Ohm load)
Maximum overall dimensions	545x452x265 mm
Max. weight	6 kg
Service life	5 years

Electronic automatic dispenser EAD-5

Marketing Authorization in the Republic of Belarus dated 31.07.2025 No.IM-7.117758
TU BY 100386629.268-2025



The dispenser is designed for accurate and long-term dosed administration of liquid drugs and infusion solutions intravenously, intraarterially and subcutaneously. The dispenser is designed for various uses in clinical practice (without limitation of use in other applications):

- intensive care and maternity wards;
- intensive care units;
- hospitals;
- pediatrics (neonatology);
- oncology departments;
- burn centers.
- patient transportation, including in ambulances.

The dispenser has a liquid crystal display that can accurately display all kinds of operating parameters in real time, sound, light and text alarm functions, convenient control, stable operation, high accuracy and automatically determines the technical characteristics of the syringe, and also has a built-in rechargeable battery.

The use of the dispenser will significantly reduce the risks of possible complications and side effects when administering medications, and facilitate the work of medical personnel. Its use implies the exact dosage and selection of the necessary regimen and rate of infusion of medicinal or nutrient solutions. The use of dispensers is especially important when the drug for administration requires a strict and precise dosage, a certain number of injections and speed control.

MAIN SPECIFICATIONS

Parameter	Value, measuring unit
Nominal volume of the syringe	10 ml, 20 ml, 30 ml, 50 ml
Injection rate range	from 0.1 to 200 ml/h (10 ml syringe) from 0.1 to 400 ml/h (20 ml syringe) from 0.1 to 600 ml/h (30 ml syringe) from 0.1 to 1200 ml/h (50 ml syringe) Discreteness: 0.1 ml/h
Fast injection rate	200 ml/h (10 ml syringe) 400 ml/h (20 ml syringe) 600 ml/h (30 ml syringe) 1200 ml/h (50 ml syringe)
Injection accuracy	+ 3 %
Occlusion limit level	Low level: 40 kPa+16 kPa Average level: 70 kPa+30 kPa High level: 100 kPa+35 kPa

Parameter	Value, measuring unit
Protection against electric shock	Class II, type BF for internal power supply
Ingress protection	IPX2
Operating mode	continuous operation
Maximum power consumption	25 V·A, at least 4 hours of continuous operation when the syringe rate is 5 ml/h after full charging
AC power supply	(230 ± 23) V, 50/60 Hz
Rechargeable lithium-ion battery	7.4V/5000mAh
Max. overall dimensions	(305x135x115) mm
Max. weight	2 kg

TI-01 infrared thermometer

Marketing Authorization in the Republic of Belarus dated 15.01.2025 No.IM-7.116929
TU BY 100386629.267-2025



Infrared thermometers are used to measure the temperature of a human body and a variety of objects instantly and accurately with no direct physical contact.

Measuring temperature in adults and children in the forehead and temporal artery areas of the body.

Parameter	Value, measuring unit
Temperature meas. unit	°C /°F
Body temperature range	32°C to 43°C
Maximum permissible error	± 0.2°C
Measurement time	1 sec
Body temperature measurement distance	3 cm minimum
Device memory storage	30 measurements

Parameter	Value, measuring unit
Power supply	3V batteries (two AAA type batteries)
Safety class	Class I, type BF
Protection level	IPX0
Dimensions, max.	40x70x140 mm
Weight, max.	130 g



INTEGRAL TE-04 electronic digital thermometer

Marketing Authorization in the Republic of Belarus dated 15.01.2025 No.IM-7.4716/2501
TU BY 10024593.035-2004



INTEGRAL TE-04 electronic digital thermometer (hereinafter referred to as the thermometer) is used for measurement of human body temperature at home and in medical institutions.

MAIN SPECIFICATIONS

The readings of the measured temperature are displayed on a five-digit liquid crystal display (LCD) in digital form.

The thermometer provides the following functions:

- measurement and indication of human body temperature in the range from 32.00 to 42.00°C with 0.01°C resolution;
- automatic performance testing;
- storing the last value of the measured temperature;
- switching on/off temperature measurement mode by pressing the control button;
- automatic shutdown in the absence of any manipulations with the thermometer for no more than 30 min;
- audible indication at switching on/off and at the end of temperature measurement;
- indication of battery discharge;
- indication of the measured temperature in Celsius and Fahrenheit scale degrees (as reference value).

The term of energy autonomy of the thermometer (battery life) – at least 2 years

Weight of the thermometer is no more than 20 g

Overall dimensions - 121.6x6.9x17.2 mm

The thermometer is operable when exposed to:

- ambient temperatures from 10 to 50°C;
- increased air humidity up to 98% at 35°C.

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Peak flow meters

Marketing Authorization in the Republic of Belarus dated 04.07.2023 No.IM-7.3117/2307
TU BY 37409416.005-99



Peak flow meters (PFM) are designed for relative indication of peak expiratory flow rate values of a patient.

The meters are used for daily individual use at home by patients with lung diseases. With the help of this device the patient can independently monitor the course of the disease and timely contact the attending physician.

Devices are manufactured in two versions: for adults (PFM-1) and pediatric patients (PFM-2). Each device is equipped with a removable mouthpiece, which can be ordered separately. Readings of peak expiratory flow rate are determined by the shift of the slider (pointer) on the relative color scale of the device.

Parameter, measuring unit	Value	
	PFM-1	PFM-2
Type of device	Mechanical volumetric	
Reading range	Color scale (not standardized)	
Scale division value	Not standardized	
Minimum inner diameter of the mouthpiece, mm	16	
Overall dimensions, (length x width x height), mm	186x61x38,2	
Weight, g	70 ± 10	
Service life not less than, years	3	

DPF peak flow meter

Marketing Authorization in the Republic of Belarus dated 27.12.2024 No.IM-7.116819
TU BY 100386629.269-2024



The device is designed to detect the fetal heart rate (hereinafter referred to as HR).
It can be used in a hospital and clinic or for daily self-checking by pregnant women in a home setting, being effective for early monitoring and life care.

Parameter	Value, measuring unit
Heart rate (HR) measurement/display range	50 to 240 bpm
Accuracy, max.	± 0.2 bpm
Rated frequency	2.5 MHz
Ultrasound output power, max.	20 MW
Operating mode	pulsed-wave dopplerif
Automatic shut-down	no input signal is detected within 60 seconds

Parameter	Value, measuring unit
Power supply	3V batteries (two AA type batteries)
Safety class	CF (ultrasonic probe)
Protection level	Ip22
Overall dimensions, max.	60x50 x150 mm
Weight, max.	150 g

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INTEGRAL KMB hospital beds INTEGRAL KMB (four-section)

Marketing Authorization in the Republic of Belarus dated 13.01.2023 No.IM-7.105902/2301
TU BY 100386629.204-2017



INTEGRAL KMB hospital beds are used in medical institutions. Beds provide comfortable conditions for the patient rest during hospital stay and medical procedures.

MAIN SPECIFICATIONS

Parameter, measuring unit	KMB
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- urine bag holder, pcs.	2
Bed dimensions:	
- length (on guards), mm	not less than 2000
- width (on guards), mm	not more than 1080
- bed height above the floor level, mm	not more than 540
Bed adjustment:	
- tilt angle of the back support, deg.	from 0° to 85°
- tilt angle of the thigh support, deg.	from 0° to 30°
- tilt angle of the tibia support, deg.	from 0° to 15°
Maximum load capacity, kg	170
Bed weight, kg	not more than 100
Average service life	not less than 5 years

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

Parameter, measuring unit	KMB
Balkan frame, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1

INTEGRAL KMB hospital beds INTEGRAL KMB-02 (two-section)

Marketing Authorization in the Republic of Belarus dated 13.01.2023 No.IM-7.105902/2301
TU BY 100386629.204-2017



MAIN SPECIFICATIONS

Parameter, measuring unit	KMB-02
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- urine bag holder, pcs.	2
Bed dimensions:	
- length (on guards), mm	not less than 2000
- width (on guards), mm	not more than 1080
- bed height above the floor level, mm	not more than 540
Bed adjustment:	
- tilt angle of the back support, deg.	from 0° to 85°
Maximum load capacity, kg	170
Bed weight, kg	not more than 100
Average service life	not less than 5 years

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25° C.

ADDITIONAL COMPONENT PARTS

Parameter, measuring unit	KMB-02
Balkan frame, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1

INTEGRAL KMB hospital beds INTEGRAL KMB-03 (single-section)

Marketing Authorization in the Republic of Belarus dated 13.01.2023 No.IM-7.105902/2301
TU BY 100386629.204-2017



MAIN SPECIFICATIONS

Parameter, measuring unit	KMB-03
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- urine bag holder, pcs.	2
Bed dimensions:	
- length (on guards), mm	not less than 2000
- width (on guards), mm	not more than 1080
- bed height above the floor level, mm	not more than 540
Maximum load capacity, kg	170
Bed weight, kg	not more than 100
Average service life	not less than 5 years

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

Parameter, measuring unit	KMB-03
Balkan frame, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1

INTEGRAL KMB hospital beds

INTEGRAL KMB-04 (single-section, adolescent)

Marketing Authorization in the Republic of Belarus dated 13.01.2023 No.IM-7.105902/2301
TU BY 100386629.204-2017



MAIN SPECIFICATIONS

Parameter, measuring unit	KMB-04
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- urine bag holder, pcs.	2
Bed dimensions:	
- length (on guards), mm	not less than 2000
- width (on guards), mm	not more than 1080
- bed height above the floor level, mm	not more than 540
Maximum load capacity, kg	170
Bed weight, kg	not more than 100
Average service life	not less than 5 years

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

Parameter, measuring unit	KMB-04
Balkan frame, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1

INTEGRAL KBE-P hospital bed (ward)

Marketing Authorization in the Republic of Belarus dated 13.01.2023 No.IM-7.97168/2601
TU BY 100386629.148-2010



KBE-P ward bed is a four-section ward bed with electromechanical adjustment of the position of the sections and the height of the bed designed for patient care in therapeutic departments.

MAIN SPECIFICATIONS

Parameter, measuring unit	KBE-P
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- side guards, pcs.	not available
- handle for emergency lowering of the back support, pcs.	1
- X-ray cassette tunnel, pcs.	not available
- urine bag holder, pcs.	2
- control unit, pcs.	1
- battery, pcs.	1
Patient control panel, pcs.	1
Nurse control panel, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Bed dimensions:	
- length (on guards), mm	not less than 2100
-width (on guards), mm	not more than 980
Bed adjustment:	
- extension possibility, mm	up to +200
- bed height above the floor level, mm	from 500 to 730
Tilt angle of the back support, deg.	from 0° to 85°
Tilt angle of the thigh support, deg.	from 0° to 30°
Tilt angle of the tibia support, deg.	from 0° to 15°
Trendelenburg angle, deg.	not less than 10°
Anti-Trendelenburg angle, deg.	not less than 10°
Maximum load capacity, kg	210
Required network parameters, Hz, V	50+0.4; 230+23
Electric shock protection parameters	Type B, Class I
Maximum power consumption, W	150 W
Protection	IP20
Bed weight, kg	not more than 150
Average service life, years	not less than 5

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

INTEGRAL KBE-P hospital beds (ward)

Parameter, measuring unit	KBE-P
Balkan frame, pcs.	1
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1
Anti-bedsore system, pcs.	1



INTEGRAL KBE-R hospital bed (resuscitation and intensive care)

Marketing Authorization in the Republic of Belarus dated 19.01.2026 No.IM-7.97168/2601
TU BY 100386629.148-2010



KBE-R ward bed is a four-section resuscitation bed with electromechanical adjustment of section position and bed height, designed for patient care in resuscitation and intensive care departments.

MAIN SPECIFICATIONS

Parameter, measuring unit	KBE-R
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- side guards, pcs.	2
- handle for emergency lowering of the back support, pcs.	1
- X-ray cassette tunnel, pcs.	1
- urine bag holder, pcs.	2
- control unit, pcs.	1
- battery, pcs.	1
Patient control panel, pcs.	1
Nurse control panel, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Bed dimensions:	
- length (on guards), mm	not less than 2100
-width (on guards), mm	not more than 980
Bed adjustment:	
- extension possibility, mm	up to +200
- bed height above the floor level, mm	from 500 to 730
Tilt angle of the back support, deg.	from 0° to 85°
Tilt angle of the thigh support, deg.	from 0° to 30°
Tilt angle of the tibia support, deg.	from 0° to 15°
Trendelenburg angle, deg.	not less than 10°
Anti-Trendelenburg angle, deg.	not less than 10°
Maximum load capacity, kg	210
Required network parameters, Hz, V	50+0.4; 230+23
Electric shock protection parameters	Type B, Class I
Maximum power consumption, W	150 W
Protection	IP20
Bed weight, kg	not more than 150
Average service life, years	not less than 5

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

INTEGRAL KBE-R hospital bed (resuscitation and intensive care)

Parameter, measuring unit	KBE-R
Balkan frame, pcs.	1
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1
Anti-bedsore system, pcs.	1



INTEGRAL KBE-R hospital bed (resuscitation and intensive care, with central breaking system)

Marketing Authorization in the Republic of Belarus dated 19.01.2026 No.IM-7.97168/2601
TU BY 100386629.148-2010



INTEGRAL KBE-R hospital bed is a electromechanical, four-sectional bed, with manually adjustable position of sections and Trendelenburg angles, provides comfortable conditions for patient's rest during hospitalization and medical procedures. The bed has side railings, handrail frames, a multi-purpose table, drip bulb holder and urine bag holder. It can optionally be equipped with X-ray cassette tunnel, a bed-pan holder, etc.

MAIN SPECIFICATIONS

Parameter, measuring unit	KBE-R
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- side guards, pcs.	2
- handle for emergency lowering of the back support, pcs.	1
- X-ray cassette tunnel, pcs.	1
- urine bag holder, pcs.	2
- control unit, pcs.	1
- battery, pcs.	1
- patient control panel, pcs.	1
- nurse control panel, pcs.	1
- castors with central locking system (diameter not less than 125 mm), pcs.	4
Bed dimensions:	
- length (on guards), mm	not less than 2200
- width (on guards), mm	not more than 980
Bed adjustment:	
- extension possibility, mm	up to +200
- bed height above the floor level, mm	from 500 to 730
Tilt angle of the back support, deg.	from 0° to 85°
Tilt angle of the thigh support, deg.	from 0° to 30°
Tilt angle of the tibia support, deg.	from 0° to 15°
Trendelenburg angle, deg.	not less than 10°
Anti-Trendelenburg angle, deg.	not less than 10°
Maximum load capacity, kg	21050±0.4; 230±23
Required network parameters, Hz, V	Type B, Class I
Electric shock protection parameters	150 W
Maximum power consumption, W	IP20
Bed weight, kg	not more than 150
Average service life, years	not less than 5

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 °C.

ADDITIONAL COMPONENT PARTS

INTEGRAL KBE-R hospital bed (resuscitation and intensive care) with central breaking system)

Parameter, measuring unit	KBE-R
Balkan frame, pcs.	1
Side safety guards, pcs.	2
Drip bulb holder, pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1
Anti-bedsore system, pcs.	1



INTEGRAL KBM-01 hospital bed (ward)

Marketing Authorization in the Republic of Belarus dated 19.01.2026 No.IM-7.97168/2601
TU BY 100386629.148-2010



INTEGRAL KBM-01 hospital bed is a mechanical, four-sectional bed with manually adjustable position of sections and Trendelenburg angles, provides comfortable conditions for patient's rest during hospitalization and medical procedures.

MAIN SPECIFICATIONS

Parameter, measuring unit	KBM-01
Products included in the main composition of the bed:	
- frame, pcs.	1
- four-section mattress base, pcs.	1
- foot board, pcs.	1
- head board, pcs.	1
- urine bag holder, pcs.	2
Bed dimensions:	
- length (on guards), mm	not less than 2000
- width (on guards), mm	not more than 1080
- bed height above the floor level, mm	not more than 540
Bed adjustment:	
- tilt angle of the back support, deg.	from 0° to 85°
- tilt angle of the thigh support, deg.	from 0° to 30°
- tilt angle of the tibia support, deg.	from 0° to 15°
Trendelenburg angle, deg.	from 0° to 15°
Anti-Trendelenburg angle, deg.	from 0° to 15°
Maximum load capacity, kg	170
Bed weight, kg	not more than 100
Average service life	not less than 5 years

Transportation conditions: ambient temperature from 5°C to 40°C, relative humidity not more than 80% at 25°C.

Storage conditions: in heated rooms at a temperature from 5 °C to 40° C with a relative humidity of not more than 80%, at 25 ° C.

ADDITIONAL COMPONENT PARTS

Parameter, measuring unit	KBM-01
Balkan frame, pcs.	1
Castors (diameter not less than 125 mm), pcs.	4 (2 with brakes, 2 without brakes)
Side safety guards, pcs.	2
Drip bulb holder (stand for internal infusions), pcs.	1
General-purpose table, pcs.	1
Bed-pan holder, pcs.	1
Handrail frame for the patient lifting up, pcs.	1
Mattress, pcs.	1
Tablet for displaying information, pcs.	1
Basket for drainage bottle, pcs.	1

Please read the User Manual before use. Medical equipment. Advertising Dpt.

Tel.: +375 (17) 371 00 07

MALYSHKA neonatal therapy table

Marketing Authorization in the Republic of Belarus dated 13.05.2025 No.IM-7.94669/2505
TU BY 100386629.067-2008

Marketing Authorization in the Russian Federation dated 26.02.2015 No.RZN 2015/2429

Marketing Authorization in the Kyrgyz Republic dated 27.06.2024 No.MI-KS-3367-219



Therapy table is designed for use in pediatric medical institutions. The table provides comfortable conditions for medical procedures with newborns and infants, including medical examination, diagnostic procedures, sanitary and drug treatment, phototherapy, massage, swaddling and dressing of the child.

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Overall dimensions (without hinged trays), mm, max.	
Length, mm	770±20
Width, mm	700±20
Height, mm	1900±50
Mattress dimensions, mm, max.	640x720
Height from the floor to the mattress, mm, max.	935±20
Temperature range of the bed surface, °C	25-38
Bed load capacity, kg, max.	25
Recovery time, min, max.	30
Average MTBF, hours, min.	2000
Supply voltage, V	230
Frequency, Hz	50
Table weight, kg, max.	55

SASHENKA neonatal functional bed

Marketing Authorization in the Republic of Belarus dated 28.01.2025 No.IM-7.95539/2501
TU BY 100386629.108-2009



Functional neonatal bed with a cuvette bath made of transparent plastic is designed to equip maternity wards and children's wards of maternity hospitals, hospitals, paramedic and midwifery stations. The bed creates ideal conditions for mothers and medical staff to care for newborns. A high raised cuvette bath allows the bed to be placed above the mother's ward bed, which greatly facilitates the mother's access to her baby.

MAIN SPECIFICATIONS

- the bed frame is made of steel tubing and coated with polymer powder paint, resistant to multiple treatment with disinfectants.
- the bed has 4 self-aligning Ø100 mm wheels, 2 wheels equipped with individual brakes.
- the bed cuvette bath is made of transparent plexiglass with a pocket for the baby's name plate.
- the mattress is made of 50 mm thick foam and is placed in a removable cover made of waterproof fabric.
- the cart has a tilt angle adjustment within ± 12 degrees.

PARAMETERS

Parameter, measuring unit	Value
Overall dimensions of the bed, mm, max.	
-Length	900
-Width	550
-Height	1030
Overall dimensions of the cuvette bath, mm, max.	
-Length	750
-Width	450
-Height	220
Mattress dimensions, mm, max.	
-Length	620
-Width	320
-Height	40
Adjustments of the tilt angle of the cuvette bath, deg.	
Trendelenburg	12
Anti-Trendelenburg	12
Weight of the bed, kg, max.	15
Permissible loading capacity, kg, max.	15

In Medical blood pressure meter

Marketing Authorization in the Republic of Belarus dated 10.10.2024 No.IM-7.116462
TU BY 100386629.264-2024



In Medical blood pressure meter is designed for non-invasive measurement of systolic and diastolic blood pressure (BP) by oscillometric method on the brachial artery, as well as pulse rate. The device is intended for use in medical institutions and for individual use.

The delivery kit includes:

- Measuring unit
- Cuff or set of cuffs (22-43) cm and (or) (18-26) cm and (or) (22-32) cm
- User manual
- Batteries of (AA) type, 4 pcs.
- Network adapter
- Storage bag

MAIN SPECIFICATIONS

Parameter, measuring unit	Value
Weight with battery (without cuff), g	400
Dimensions (without cuff), mm	135 x 110 x 85
Measurement method	oscillometric method
Pressure measurement range, mm Hg	20 - 280
Heart rate range, beats per minute	40 - 240
Resolution, mm Hg	1
Maximum inflation pressure, mm Hg	280
Permissible absolute error of measurement, mm Hg	± 3
Memory capacity, values	199
Power supply Batteries (4 pcs), AA/ 1.5 V or the mains adapter	

Bactericidal wall-mounted irradiator

Marketing Authorization in the Republic of Belarus dated 17.09.2025 No.IM-7.118045
TU BY 100386629.160-2010

OBN-150K, OBNP-150, OBNP-100



The irradiator is designed for disinfection of air and surfaces in the premises of hospitals, clinics, medical, preventive, industrial and public institutions, and is an effective means of prevention and control of airborne infections. It is used in rooms free of people for quick disinfection of air and surfaces.

Parameter, measuring unit	Value		
	OBN-150K	OBNP-150	OBNP-100
Radiation source: bactericidal lamps, G13 lamp socket, pcs.	2	2	2
including shielded ones, pcs.	1	-	-
Lamp nominal power, W	30	30	15
Total bactericidal flux of lamps, W	24	24	12,4
Irradiance at a distance of 1 m, W/m ²	1,25	1,5	0,7
Bactericidal flux utilization factor	0,48	0,9	0,9
Capacity of the irradiator, m ³ /hour	107*	201*	100*
Power consumption, max., W	100	100	50
Overall dimensions, mm, max.	942x74x162	940x60x130	480x60x130
Weight, kg, max.	3,5	2	1,5
Average service life, years	5	5	5

* with a level of bactericidal efficacy of at least 99.9%

Designed and manufactured by Kamerton Branch
Tel. (+375 16) 564 06 33, (+375 16) 564 09 61
www.kamertonpinsk.by

Bactericidal portable irradiator

Marketing Authorization in the Republic of Belarus dated 17.09.2025 No.IM-7.118045
TU BY 100386629.160-2010

OBP-450K, OBP-250



The irradiator is designed for rapid air disinfection in rooms where it is difficult or ineffective to use wall or ceiling types of irradiators. Due to its design and ease of movement, it is recommended for alternating disinfection of several rooms or for use in the premises of health care institutions of large areas and households as germicidal ultraviolet irradiators based on a bactericidal lamp.

The mobile irradiator has open lamps and can be used in rooms free of people for rapid air disinfection.

Parameter, measuring unit	Value	
	ОБП-450К	ОБП-250
Radiation source: bactericidal lamps, G13 lamp socket, pcs.	6	3
Lamp nominal power, W	30	30
Total bactericidal flux of lamps, W	72	36
Irradiance at a distance of 1 m, W/m ²	2,5	1,8
Bactericidal flux utilization factor	0,9	0,9
Capacity of the irradiator, m ³ /hour	605*	302*
Power consumption, max., W	300	150
Overall dimensions, mm, max.	1300x500x500	1200x500x500
Weight, kg, max.	15	13
Average service life, years	5	5

* with a level of bactericidal efficacy of at least 99.9%

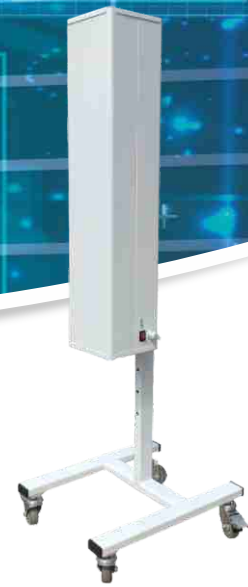
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UV bactericidal recirculator irradiator

Marketing Authorization in the Republic of Belarus dated 13.04.2023 No.IM-7.113658
TU BY 100386629.230-2020

ORVU-75, ORVU-80

ORBN-90, ORVU-100



UV bactericidal recirculator irradiators are designed for disinfection of air in rooms of medical, preventive and public institutions, both in the presence and absence of people. Irradiators are manufactured in the following designs: wall-mounted, stand-mounted, on wheeled supports, with and without an hour meter.

Parameter, measuring unit	Value	
	ORBN-90, ORVU-100	ORVU-75, ORVU-80
Radiation source: bactericidal lamps, G13 lamp socket, pcs.	2	2
Lamp nominal power, W	30	15
Total bactericidal flux of lamps $\Sigma\Phi$, W	26	13
Capacity of the irradiator, m ³ /hour	176*	88*
Bactericidal flux utilization factor a	0,48	0,48
Average duration of bulb glow, h	9000	9000
Power supply voltage, V	230 ± 23	230 ± 23
Frequency, Hz	50 ± 0,5	50 ± 0,5
Power consumption, W, max.	120	65
Protection class from electric shock according to GOST 30324.0	I	I
Overall dimensions, mm, max.	1120x170x170	690x170x170
Weight, kg, max.	8,5	4,5
Average service life, years	5	5

* с уровнем бактерицидной эффективности не менее 99%

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Tel. (+375 16) 564 06 33, (+375 16) 564 09 61
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Bactericidal portable irradiator

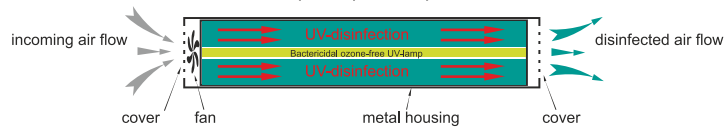
ORB-20/230



ORB-45/230



Purifier principle of operation



B Ultraviolet air purifier is designed for air purification in office, industrial, warehouse, public premises in the presence of people.

ORB-45/230 is manufactured in the following designs: wall-mounted, stand-mounted, on wheeled supports, with and without an hour meter.

Parameter, measuring unit	Value	
	ORB-20/230	ORB-45/230
Rated supply voltage, V	220-230	220-230
Power consumption, W, max.	40	73
Capacity, m ³ /hour	50	135
Bactericidal lamp, 15 W, pcs.	1	2
Protection degree of the cover	IP20	IP20
Overall dimensions, mm, max.	590x130x110	690x170x170
Weight, kg, max.	3	5

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 Tel. (+375 16) 564 06 33, (+375 16) 564 09 61
www.kamertonpinsk.by

JSC “INTEGRAL”- “INTEGRAL” Holding Managing Company



Room 327, 121A Kazintsa I.P. Str.,
Minsk, 220108, Republic of Belarus



Sales Department for Electronic Products
and Medical Products

Тел. +375 (17) 371 00 07



Service Department for Medical and Electronic Products й

Тел. +375 (17) 263 40 50



E-mail: info@integral.by, office@integral.by
[integral.by](mailto:info@integral.by)

“Kamerton” Branch Designer and manufacturer



Тел. +375 (16) 564 06 33, +375 (16) 564 09 61



E-mail: smk@kamertonpinsk.by
www.kamertonpinsk.by



Service: tel.:+375 (16) 648 41 13