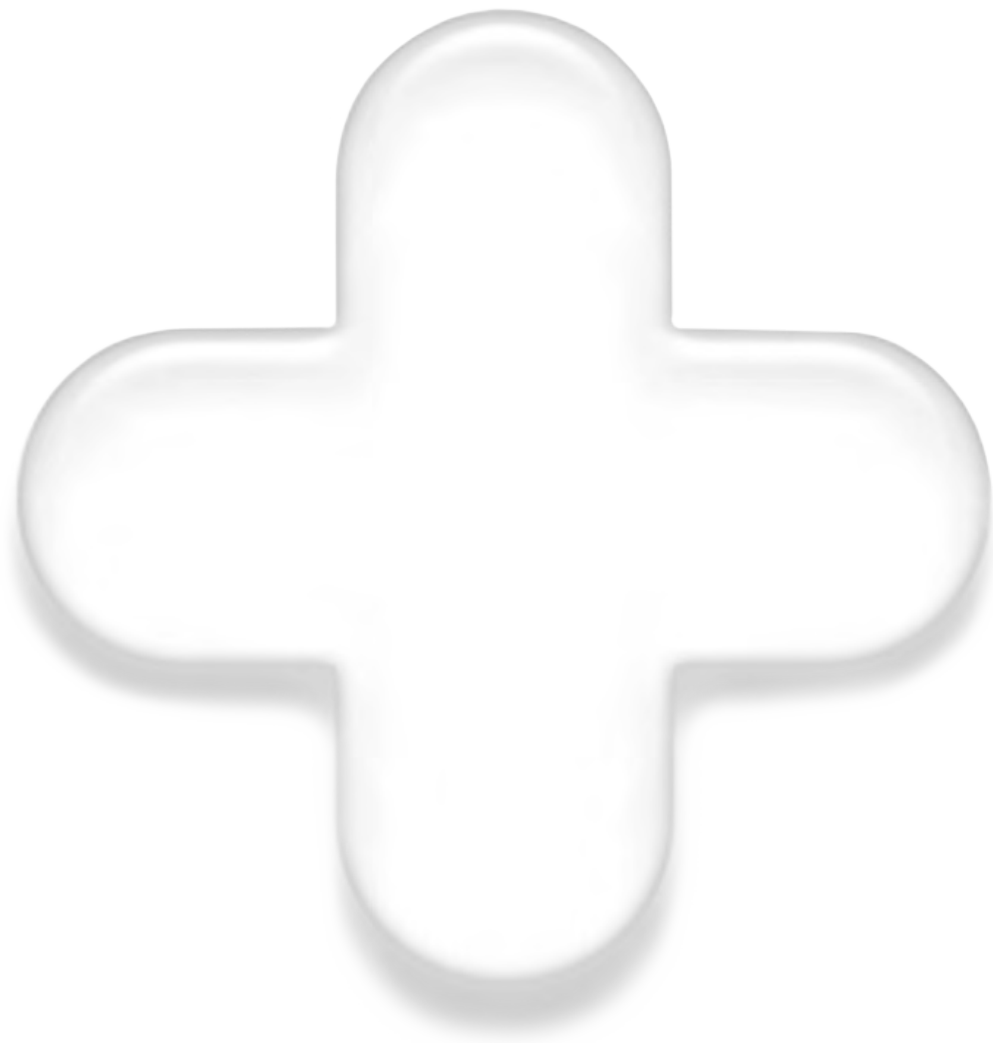


Medical Equipment

Cardiology
Neonatology
Resuscitation
Surgery
Physiotherapy



Cardiology

Single/three-Channel Electrocardiograph
with data communication via GSM

EK1T-1/3-07 «AXION»



Single / three-channel Electrocardiograph EK1T-1 / 3-07 "AXION" with data communication via GSM and combined power supply is a modern device for registration of bioelectric heart potentials when diagnosing the condition of the human cardiovascular system.

Single / three-channel Electrocardiograph EK1T-1 / 3-07 "AXION" is used both in specialized and non-specialized hospital departments (particularly ergonomic during ward rounds), clinics, general practitioner offices, ambulances and first-aid stations.

Compact, simple intuitive operation, clear image of the ECG on the screen.



Technical Specifications

Characteristics	Parameters
Processing	
Sampling frequency	4 kHz
Input voltage range	from 0,03 to 10 mB
Measurement error in the range: from 0,5 to 10 mV from 0,05 to 0,5 mV	±5% ±25 mkV
HR measuring range	24 bit
ADC	from 30 to 300 bpm
common-mode rejection	> 100 dB
Selectable sensitivity	5; 12,5; 25 and 50 mm/sec
The speed of the recording medium	2,5; 5; 10; 20; 40 mm/mV
Display	
Display resolution	320x240 pixels
Number of leads on the display	1
Display backlight brightness control	from 5% to 100%
TFT-display	7 cm (2,8")
Power supply	
AC mains	(220±22) V of frequency / 50 Hz
Power consumption	25 VA max
A removable battery	7,4 V
Number of registered on paper ECG with a fully charged battery	min 100
Period of continuous operation in monitoring mode when operated from the battery	3 hours
Battery charging time	3,5 h max
Battery type	Rechargeable lithium-ion
Registrator	
Paper width	58 mm, roll
Printing data	program type, version, time and date, sweep speed, sensitivity, name of the lead, filters, table of measured parameters, typical cardiocycles
Printer	Built-in
Thermal printer, resolution - dpmm, Vertical / Horizontal	8/32
Operation conditions	
Temperature	
when operating	from 10 to 40°C
during transportation and storage	from -50 to +50°C
Humidity	95% max
Pressure	from 84 to 107 kPA
General characteristics	
External memory	microSD up to 16 Gb
ECG recording in 12 standard leads and additional options	Standard sequence, Cabrera, Neb, user selectable
Recording time in automatic mode	3, 4, 6, 8, 10 sec or 4 RR-intervals
Automatic measurement of ECG elements	9 parameters
Write-ahead	1, 2, 3 sec
Degree of protection against electric shock	CF
Class of protection against electric shock	II
Start by timer	from 1 to 90 min
Dimensions	240x190x80 mm
Weight incl. battery without accessories	1.4 kg max
Functions	
Typical cardiocycles construction	
Transmission of ECG data to a PC (USB)	
Pacemaker detection	
Transmission of ECG data to cardiogram collection server via GSM channel	
Communication with a dispatcher via voice channel	
Adjustable GSM modem	
Automatic recording when detecting arrhythmia	
Construction of rhythmogram, histogram, scatterogram during HR monitoring	
Simultaneous printing leads 1/2/3	
Protection from defibrillation	
Combined power supply (electricity mains/battery)	
HR Audible indication	
Sound signal level adjustment	
Light indication of AC power, battery charge status, filters status, loose electrode, run of thermopaper	
Synchronous recording in automatic mode	
Automatic and manual operating modes	
Filters of ECG signal: power disturbances, tremor, drift	
Automatic grid printing	
Accessories	
Device	
Patient cable	
Power cord	
Set of reusable electrodes	
Carrying bag	
Set of operational documentation	
Audio headset with microphone	
CD with software for PC (Real-time monitoring of ECG on PC, printing ECG on A4 size paper)	
The starter set of consumables (2 rolls of thermal paper)	



Cardiology

Three/Six-Channel Electrocardiograph
Microprocessor-controlled, automatic
registration of the electrocardiogram
with ECG data transmission via GSM channel

EK3TC-3/6-04 «AXION»



Three/six-channel electrocardiograph EK3TC-3/6-04 "AXION" with microprocessor control and automatic processing of the ECG (hereinafter – electrocardiograph) is designed for measuring and graphic recording of heart bioelectric potentials when diagnosing the condition of the human cardiovascular system in hospitals, ambulances, health posts, organizations as well as for home treatment, in ambulances.

The ECG channel is designed for 3/6/12 ECG leads, Neb leads and 3 Cabrera leads recording by 3/6 lead in the built-in printer and ECG data transmission via GSM channel+automatic construction of syndromic report.



Technical Specifications

Characteristics	Parameters
Processing	
Sampling rate	4 kHz/channel
Input voltage range	from 0,03 to 10 mV
Measurement error in the range: - from 0,5 to 10 mV - from 0,05 to 0,5 mV	+/-25 mKV +/-5%
ADC	24 bit
HR Measuring range	from 30 to 300 bpm
Common-mode rejection	> 100 dB
The speed of the recording medium	5; 10; 12,5; 25 and 50 mm/sec
Sensitivity	2,5; 5; 10; 20; 40 mm/mV
Range of frequencies recorded	from 0,05 to 150 Hz
Display	
Display resolution	640x480 pixels
Number of leads on the display	3/6/12
TFT-display	14 cm (5,7")
Screen display	alphanumeric on-screen keyboard
Power supply	
AC mains	220±22V of frequency / 50 Hz
Removable battery	15 V max
Vehicle power supply	from 10,5 to 15 V
Number of registered ECG with a fully charged battery	min 100
Battery charging time	5 h max
Period of continuous operation in monitoring mode when operated from the battery	6 hours
Battery type	Rechargeable lithium-ion
Recorder	
Record medium	thermopaper 112 mm wide, rolls and zigzag folding
Printing data	program type, version, time and date, sweep speed, sensitivity, name of the lead, filters status
Printer	Built-in
Thermal printer, resolution - dpmm, Vertical / Horizontal	8/16
Operation conditions	
Temperature -when operating -during transportation	from +10 to +40 C from -20 to +50 C
Humidity	95% max
Pressure	from 84 to 107 kPA
General characteristics	
Internal memory	designed for 100 ECGs
External memory	external flash-card to 16 Gb, microSD up to 16 Gb
ECG recording in 12 standard leads and additional options	Standard sequence, Cabrera, Neb, user selectable
Recording time in automatic mode	3, 4, 6, 8, 10, 16 sec or 4 RR-intervals
Write-ahead	1, 2, 3 sec
Start by timer	from 1 to 90 min
Degree of protection against electric shock	CF
Class of protection against electric shock	I
Dimensions	265x195x70 mm
Weight	1.5 kg max
Functions	
Pacemaker detection	
Automatic measurement of amplitude-time parameters of ECG	
Typical cardiocycles construction	
Transmission of ECG data to PC (USB)	
ECG transmission via GSM, GPRS network	
Automatic shut-off	
Input of patient data and information on health facilities	
Automatic recording when detecting arrhythmia	
Construction of rhythmogram, histogram, scatterogram during HR monitoring	
Protection against defibrillation	
ECG interpretation (syndromic report) (option)	
HR Audible indication	
Sound signal level adjustment	
Light indication of AC power, battery charge status, filters status, loose electrode, run of thermopaper	
Synchronous recording in automatic mode	
Automatic and manual operating modes	
Filters of ECG signal: power disturbances, tremor, drift	
Grid printing	
Connecting an external AT-keyboard and laser printer	
Accessories	
Electrocardiograph	
Patient cable	
Power cord	
Set of reusable electrodes	
Carrying bag for transportation	
Set of operational documentation	
The starter set of consumables (2 rolls of thermal paper)	
CD for extra cost	



Resuscitation



DKI-N-10 «AXION»

Defibrillator-monitor



Defibrillator-monitor DKI-N-10 "AXION" with thermoprinter and combined power supply. The device is designed for electropulse therapy of cardiac arrhythmias. It is used in hospitals, cardiology clinics and to equip emergency medical assistance teams.



Technical Specifications:

Characteristics	Parameters
Energy of defibrillation pulse for adults for children	5, 10, 25, 50, 75, 100, 150, 200, 250, 300, 360 J (extra accumulation over 200 J for the adult electrodes) 5, 10, 25, 50, 75, 100, 150 J (shutdown of power of more than 150 J, when working in the children's mode)
Time of energy accumulation: to 200 J to 360 J	max 6 sec max 10 sec
Number of defibrillation pulses from the fully charged storage battery: 200 J 360 J	70 max 40 max
When operated from the rechargeable storage batteries at least	3 hours
Period of continuous operation in the monitoring mode: at least	168 hours
Length of the positive half-wave at energies up to 200 J	(4±1)
Length of the negative half-wave at energies up to 200 J	(4±0,3)
Display	5,7" (320x240 dots)
Weight	6 kg max

Defibrillation pulse is a biphasic and asymmetrical pulse of a trapezoid shape with the ratio of negative to positive current half-waves of (0,5±0,1)

Power shutdown at the patient's body resistance of lower than 12 Ohm and higher than 200 Ohm

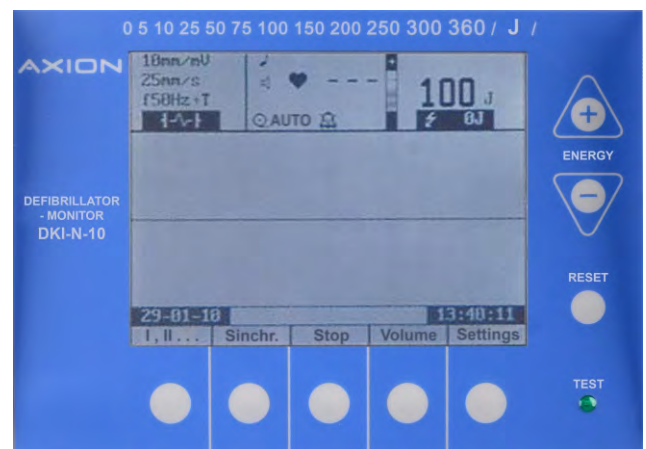
Automatic limitation of defibrillation current at level of (30+10) A and the patient's body resistance of lower than 25 Ohm

Automatic stabilization of the output pulse parameters depending on the patient's chest resistance ranging from 25 to 200 Ohm

Voice and visual support of the operator's actions and device operation

Built-in thermal printer

Charging unit designed for two batteries.



Resuscitation

Defibrillator-monitor with manual control or with function of automatic external defibrillation (AED)

DKI-N-11 «AXION»



CE

Defibrillator-monitor DKI-N-11 "Axion" is designed for resuscitation and electropulse therapy of acute and chronic cardiac arrhythmia as well as for external, transesophageal, endocardial pacing.

It is used in hospitals, cardiology clinics and to equip emergency medical assistance teams. The device is certified for the conformance with requirements of Directive 93/42/EEC.

Three versions:

Full: defibrillator + ECG + NiBP + SPO2 + 3 types of pacing (external, transesophageal, endocardial) + memory card.

Simplified: defibrillator + ECG + NiBP + SPO2 + memory card.

Basic: defibrillator + ECG + memory card.



Technical Specifications

Characteristics	Parameters
Defibrillation	
Pulse	Physiologically optimal bipolar pulse with automatic correction of duration and shape depending on the patient impedance
Defibrillation pulse energy, J for adults for children	5/10/25/50/75/100/150/200/250/300/360 (additional function of power accumulation over 200J, with the adult electrodes) 5/10/25/50/75/100/150 (shut-down of power over 150J, when working in the children's mode)
Time of energy accumulation, max, sec 200J 360J	6 10
Number of defibrillation pulses from the fully charged storage battery, max 200J 360J	70 40
Time of holding accumulated energy with indication of remaining seconds, with subsequent automatic reset of the stored energy to the internal load, max, sec	30
ECG	
Two ECG receiving channels	From defibrillation electrodes and separate ECG cable
ECG-monitoring through a 4-lead ECG cable	I...III, aVR...aVF
ECG-monitoring through a 10-lead ECG cable (option)	I...III, aVR...aVF, V1...V6
ECG channel sensitivity, mm/mV	5, 10, 20
Image motion speed, mm/sec	12,5; 25; 50
HR measuring range, bpm	from 30 to 300
The absolute error of HR measuring, bpm	±2
Paper width, mm	58
Possibility of grid printing at a pitch of 1mm	Presence
Sweep speed, mm/sec	12,5; 25; 50
Safety	
for defibrillation electrodes	BF type
incl. protection against defibrillation for separate electrodes of the monitor	CF type
incl. protection against defibrillation via blood pressure control channel	BF type
for SpO2 control channel	BF type
for pacing channels	CF type
Power shutdown	at the patient's body resistance of lower than 12 Ohm and higher than 200 Ohm, as well as in case of open and closed electrodes
In the event of failure of the defibrillation	Manual reset of the stored energy to the internal load
Display	
LCD display	colour TFT
Display size	152x91mm
Diagonal	7"
Resolution	800 x 480 pixels
Time of monitor restoration after defibrillation, no more than	6 sec
Displaying information	Values of the preset energy, three ECG leads, replaceable battery status, upper and lower alarm limits for heart rate and current value, energy accumulation process, current date and time, recording mode, current applied and the resistance of the patient's chest, photoplethysmogram, pulse frequency, SpO2 value, systolic and diastolic blood pressure values, pacing channel settings, message duplication of voice support of the operator's actions and device operation
Power supply	
When operated from replaceable storage battery battery charging time, at least	4h
When operated from DC mains	12-18 V
When operated from AC mains	220±22V of frequency 47-63Hz
Period of continuous operation when operated AC mains, min	168h
Mains power, max	210 VA
Period of continuous operation in monitoring mode when operated from the rechargeable storage battery, min	3h
Automatic external defibrillation (AED) — option	100-360J
Blood pressure channel — optional	
Range of blood pressure measurements, mm Hg	from 20 to 280
The absolute error of blood pressure measurement in cuff, mm Hg	±3
Pulsoximetry channel — optional	
The range of SpO2 measurement, %	75-100
The absolute error of SpO2 readings, %	±3
The range of pulse rate measurement, bpm	from 30 to 240
The absolute error of pulse rate measurement, bpm	±2

Pacing — optional	
Types of pacing electrocardiostimulation (ECS)	External (EKSN) Endocardial (ENDO) Transesophageal (TEES)
ECS operation modes	Fixed Overdrive Demand
External pacing	
Frequency setting, pulse/min fixed and demand modes overdrive mode	from 40 to 180 from 40 to 250
Pulse duration setting, msec	from 20 to 40
Pulse current setting, mA	from 10 to 180
Allowed load range, Ohm	100-500
Endocardial pacing	
Frequency setting, pulse/min fixed and demand modes overdrive mode	from 40 to 180 from 40 to 900
Pulse duration setting, msec	0,5; 1
Pulse current setting, mA	from 4 to 20 at a pitch of 2
Allowed load range, Ohm	400-600
Transesophageal pacing	
Frequency setting, pulse/min fixed and demand modes overdrive mode	from 40 to 180 from 40 to 900
Pulse duration setting, msec	5; 10
Pulse current setting, mA	from 4 to 20 at a pitch of 2
Allowed load range, Ohm	700-1300
Data processing	
Memory card slot	microSD
Supply package	
Basic equipment	
Defibrillator-monitor with built-in power supply unit and charging unit	1 pc
Storage battery (NiCd, 14,4V, 1900 mA•h)	1 pc
Registrar of recording on paper with automatic and manual switching	Built-in
Battery charging unit with automatic shutdown	Built-in
Power cord 1,8m	1 pc
Disposable electrodes for ECG monitoring	50 pcs
Adult and kids electrodes, reusable	Built-in
ECG cable for 4 electrodes with plug of "crocodile" type	1 pc
Carrying bag	1 pc
Operational documentation	1 set
Paper	2 pcs
Additional equipment	
Mains unit 12- 20 V	1 pc (at the customer's request)
Chest ECG electrodes	6 pcs (at the customer's request)
Limbs ECG electrodes	1 set (at the customer's request)
Disposable electrodes for external cardiac stimulation	1 set
ECG cable for 10 electrodes with 4 mm pin	1 pc (at the customer's request)
Cuff, average size, for adults	1 pc
Pulsoximetrical cabel	1 pc
Endocardial pacing set	1 pc (at the customer's request)
Transesophageal pacing set	1 pc (at the customer's request)
General characteristics	
Dimensions, mm.	310x340x175
Weight, kg, max	7
Resistance to mechanical stress (GOST R 50444)	Group 5



Resuscitation

Automatic portable external defibrillator
DA-N «AXION»

Public



Pro



Automatic portable external defibrillator DA-N "Axion" is designated for heart treatment impact by means of biphasic impulse supplied by a pair of electrodes and instructions for an operator in the course of cardiopulmonary resuscitation.

The defibrillator analyses patient's electrocardiogram in automatic mode and specifies the rhythm availability to carry out defibrillation. Voice prompts are supported by screen messages and flashing buttons.

Technical Specifications

Characteristics	Parameters	
	DA-N-01 Public	DA-N-02 Pro
Operating mode	automatic	automatic, manual, cardioversion
adults	100/150/170/200/300/360	
children	10/15/20/30/50/70/100	
Time from start of analysis to energy accumulation completion, max, s	15	
Numbers of shots supplied by fully charged battery, min	200	
Pulse shape	biphase trapezoid	
Impedance measurement range, Ohm	20 to 200	
Arrhythmia recognition	in accordance with requirements GOST R MEK 60601-2-4, AAMI DF 80	
Voice prompts for heart cardiac compression availability		
Power:		
Battery	non-rechargeable	Smart Li-ion
Charge indication level	5, min	
OD, l*w*h, mm	288x220x80	
Weight max, kg	3	
Resistance to mechanical impact (GOST R 50444)	group 5	
Electrodes	single use (adult and children)	

Resuscitation

Syringe pump

D01



Syringe pump D01 "AXION" is designed for injection of medical drugs from the injection syringe with a mechanical supercharger at a constant speed over extended periods of time with the possibility to control the total volume of the drug injection.

Syringe pump is used in wards and procedure cabinets of hospitals and similar medical institutions, in intensive care units.



Characteristics:	
Power supply voltage: - AC network - DC power supply	220(±22) V, 50(±1) Hz 12 V, 2 A
Built-in battery Total power consumption, max, VA Weight, max, kg Dimensions (excluding clamp), max, mm	Available 15 2.0 240×200×80
Operating mode: - with AC network power supply - with DC power supply - with built-in battery (with infusion rate of 25 ml/h)	continuous continuous min 5 hours continuously
Automatic detection of nominal syringe capacity	Available
Network cable length, m	1.8
Electrical safety class	II, with working part BF
TFT-LCD color display, with a diagonal, inch	2.8
User interface language	Russian, English
Operating modes: - by infusion rate - by infusion time - by patient's weight	Available Available Available
Approaching infusion completion	Available
Infusion complete	Available
Infusion tube occlusion	Available
Low battery	Available
Wrong syringe positioning	Available
Forced off the audible alarm	Available
Infusion rate setting range based on syringe capacity, ml/hour: - with syringe of 5 ml nominal capacity - with syringe of 10 ml nominal capacity - with syringe of 20 ml nominal capacity - with syringe of 30 ml nominal capacity - with syringe of 50 ml nominal capacity	from 0.1 to 100 from 0.1 to 200 from 0.1 to 400 from 0.1 to 600 from 0.1 to 1,500
Infusion rate setting increment, ml/hour	0.1
Infusion rate deviation from nominal, max, %	2
Bolus rate function	Available
Keyboard lock function	Available
Adjustable occlusion rates	Low, Medium, High
Keep Vein Open mode (KVO)	Available
Adjustable rate range in KVO mode, ml/hour	from 0.1 to 5
Medication hold-up volume, max, %	5
Total medication injected volume, ml	from 0.1 to 9999.9
Drug library	Available

Displayed information:

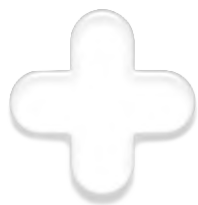
- Connection to power supply
- Battery status
- Infusion process
- Nominal capacity of the fixed syringe
- Sound alerts for medical staff
- Set infusion rate
- Set occlusion level
- Total medication injected volume
- Duplication of sound alerts with a single indicator blinking

Package contents:

- Operating unit
- Power cord
- Power cable
- Clamp
- Operational documentation



Surgery



Surgical Suction Unit

OMH-5/80-01 «AXION»



Surgical Suction unit is designed for aspiration of liquids, parts of tissues, air and blood gases from wounds and cavities during all surgical operations. Can be used in operating departments of hospitals and clinics. The device is equipped with interchangeable bacterial filters to clean the air emitted into the atmosphere.

Surgical Suction Unit OMH-5/80-01 "AXION" maintains the preset level of negative pressure automatically. The total capacity of collecting containers is 4 liters. The containers are nonshatterable, made of transparent plastic with graduating marks.



Technical Specifications

Characteristics	Parameters
Range of negative pressure	from -5 kPa to -80 kPa
Operation mode	continuous
Air suction rate	15 L/min
Collecting container capacity	2x2 l
Patient-connecting hose length	2 m
AC mains power supply	220V / 50Hz
Power consumption	100 VA max
Overall dimensions, max: Control unit Rack	260 x 230 x 280 mm 480 x 530 x 740 mm
Weight	max 20 kg



Surgery



Gynecologic Vacuum Aspirator
for Abortion with Foot-operated
Remote Control

OG-10/90-01 «AXION»



Gynecologic Vacuum Aspirator for abortion with foot-operated remote control OG-10/90-01 «AXION» of membrane type is applied for surgical operations as abortion or emptying the uterus after delivery and aspirate sampling both for medical inspection and laboratory research. It can be used in operational gynecological wards of maternity hospitals, hospitals and clinics, maternity welfare centers and family practice centers.

Advantages:

- Significantly reduces the risk of blood loss due to the performance and speed operation of the device;
- The preset level of vacuum is maintained automatically.
- The unit is switched on/off from the control panel or by the remote foot pedal;
- Automatic control of filling collecting containers;
- Replaceable bacterial filters to purify the air emitted into the atmosphere;
- Container with trap function, which prevents the ingress of liquid sucked into the vacuum pump system;
- The set includes reusable gynecological tips of four standard sizes with a diameter of 6,8,10,12 mm.
- Delivery with a working truck is available.
- Separate delivery of collecting containers and containers with trap function is possible



Technical Specifications

Characteristics	Parameters
Range of negative pressure	from - 10 to - 90 kPa (from -0,1 atm to -0,9 atm)
Time to maximum rarefaction	15 sec
Liquid (water) through capacity	25 L/min
Collecting container capacity	1L
Patient-connecting hose length	1,5 m
AC mains power supply	220 V/50 Hz
Power consumption	280 VA max
Overall dimensions	max 400 x 230 x 280 mm
Weight	max 15 kg



Neonatology



Phototherapy Radiator for
Treatment of Neonatal Jaundice

OFTN-420/470-02
«AXION»



Phototherapy Radiator for treatment of neonatal jaundice OFTN-420/470-02 «AXION» is designed to treat a newborn using «blue» rays with the wavelength of 420...470 nm in order to reduce the content of bilirubin in blood. The unit may be efficiently used in maternity hospitals, newborn intensive therapy units and newborn jaundice outpatient institutions.

Advantages:

- Indication of the preset time of the irradiation session;
- Indication of the current time of irradiation session with one minute increment;
- Automatic cutoff and sound signaling upon the irradiation session completion;
- Indication of operating time;
- Four rubber-coated wheels, including two brakes equipped;
- Height adjustment unit designed to adjust the location of the radiator above the bed where the newborn is placed in (from 1.29m to 1,69m)
- Radiator tilt adjustment unit provides up to 90-degree inclination of the radiator from the horizontal plane;
- Using super bright LEDs provides increasing of operating time up to 50 000 hours, increasing of the intensity of radiation and reduction of power consumption;
- Radiator block is made of plastic case;
- Membrane keyboard on the front side of the block;
- Small size and weight.



Technical Specifications

Characteristics	Parameters
Duration of phototherapy session	up to 99 h 59 min
Radiation intensity settings	from 540 to 2200 uW/cm ²
Radiation wave length	450-465 nm
Radiator tilt angle	up to 90 degrees
Radiator height level adjustment	from 1290 to 1690 range, mm
Power supply from AC mainsPP	220 V / 50 Hz
Power consumption	45 VA max
Overall dimensions	720x700x1690 mm
Weight	13 kg, max



Neonatology



Phototherapy Radiator for Treatment of Neonatal Jaundice

OFTN-03 «AXION»



Phototherapy Radiator for treatment of neonatal jaundice OFTN-03 «AXION» is designed to treat a newborn using «blue» rays with the wavelength of (465 ± 15) nm in order to reduce the content of bilirubin in blood. The unit may be efficiently used in maternity hospitals, newborn intensive therapy units and newborn jaundice outpatient institutions.

Advantages:

- Highly efficient phototherapy session with comfortable conditions for a patient;
- Adjustment of irradiation intensity;
- Duration of radiator operation up to 50 000 hours due to using super bright LEDs as a heating source;
- Indication of the preset time of the irradiation session;
- Indication of the current time of irradiation session with one minute increment and accuracy of $\pm 1\%$;
- Automatic cutoff and sound signaling on the irradiation session completion;
- Indication of operating time.



Technical Specifications

Characteristics	Parameters
Radiation wavelength	450-465 nm
Radiation intensity	from 600 to 1600 uW/cm ²
Duration of phototherapy session	up to 99 h 59 min
Power supply from AC mains	220 V / 50 Hz
Power consumption	40 VA, max
Overall dimensions	675x350x180 mm
Weight	7,5 kg, max



Neonatology



Newborn Warming Unit
with Phototherapy Function

UON-03F «AXION»



The Newborn Warming Unit with Phototherapy Function UON-03 H "AXION" is designed for heating and carrying out phototherapy sessions for a newborn (hyperbilirubinemia treatment). It is used in intensive care maternity and pediatric hospitals. Using the device makes routine procedures with newborn easier and more comfortable for medical staff.

Advantages:

- An infrared ceramic heater is the main heating source;
- Possibility of conduction phototherapy session simultaneously with warming-up session in manual and automatic models;
- Additional heating source - flexible heating element placed in the heated cushion;
- LEDs emitting blue light with wavelength (465 ± 15) nm for hyperbilirubinemia treatment;
- Four rubber-coated wheels, including two equipped with brakes;
- 2 shelves for staff convenience;
- Cutaneous sensor for temperature heating control;
- Manual and "Timer" modes;
- Alarm system with simultaneous activation of the audible and visual signals in case of fault occurrence, patient's temperature rising over $38,5^{\circ}\text{C}$ or temperature deviations of more than $\pm 1^{\circ}\text{C}$.



Technical Specifications

Characteristics	Parameters
Power consumed	max 1000 VA
Power supply from AC mains	(220 ± 22) V / 50 Hz
Overall dimensions	max 770 x 1150 x 1950 mm (without rotating components)
Temperature adjustment range	$+ 30^{\circ}$ to $+ 38^{\circ}\text{C}$
Temperature measurement error in the range $+ 35^{\circ}$ to $+ 38^{\circ}\text{C}$	max $\pm 0,3^{\circ}\text{C}$
The error of automatic temperature control	max $\pm 1^{\circ}\text{C}$
Temperature adjustment step	$0,1^{\circ}\text{C}$
Blue light radiation intensity	min 1200 $\mu\text{W}/\text{cm}^2$
Weight no more than	70 kg
Phototherapy session time	from 0 to 99 h 59 min
Light intensity at the patient's level	500 lux
Distance from radiator to bed	850 ± 50 mm
Time of continuous operation	min 4 days and nights



Neonatology



Newborn Warming Unit

UON-04



The Newborn Warming Unit UON-04 «AXION» is designed to create comfortable conditions for a newborn. It is used in intensive care maternity and pediatric hospitals. Using the device makes routine procedures with newborn easier and more comfortable for medical staff.

Advantages:

- Adjusting the height within 230-240 mm for optimal distance from the patient;
- Four rubber-coated wheels, including two equipped with brakes;
- Automatic mode;
- Cutaneous sensor for temperature heating control;
- Audible and visual alarm for providing safety of the patient;
- 2 lamps allowing to estimate condition of the patient in the dark time of the day.



Technical Specifications

Characteristics	Parameters
Temperature adjustment range	from +30 to +37° C
Temperature measurement error within the range of + 35 °+ 37 ° C	±0,3° C max
Temperature adjustment step	0,1° C
Automatic temperature maintenance accuracy	± 1° C
Light intensity at the patient's level	500 lux min
Height adjustment range	from 1560 to 1800 mm
Power supply from AC mains	220 V/50 Hz
Power consumed	max 1000 VA
Overall dimensions	max 650 x 900 x 1800 mm
Weight no more than	35 kg
Time of continuous operation	min 4 days and nights



Neonatology



Medical-purpose Electric Mattress

MEM-01



Medical-purpose electric mattress MEM-01 «AXION» can be used in maternity and children's hospitals. It consists of a bed with a control unit. The temperature of the bed is preset by a doctor.

The control unit maintains the preset temperature automatically. The Mattress may be placed on a table or may be put in a bed equipped with a pediatric bath of the KN-05.13 type. At that, the control unit shall be hung on the bed board.

Sound and light alarm signals are generated in the following events:

- Power shutdown (220V, 50Hz);
- Temperature sensor is out of order;
- Bed temperature exceeds 39°C;
- Temperature control system fails;
- Bed temperature falls outside the preset limits by more than $\pm 1^{\circ}\text{C}$;



Technical Specifications

Characteristic	Parameter
Temperature setting	from +35° to +38° C
Temperature setting increment	0,1° C
Temperature maintenance accuracy	$\pm 0,1^{\circ}\text{C}$
Time of heating to the preset temperature	30 minutes max
Time of the continuous operation	min 4 days and nights
AC mains power supply	220 V/50 Hz
Power consumption	60 VA max
Control unit dimensions	240x175x185 mm
Bed dimensions	400x680x160 mm
Weight	Bed 2 kg Control unit 4 kg



Physiotherapy



Vacuum Massage Apparatus

VM-03 «AXION»



Vacuum Massage Apparatus VM-03 «AXION» is designed to treat osteochondrosis and the diseases of peripheral nervous, vascular and musculoskeletal systems caused by it. Massage is made by vacuum created in the transparent plastic caps which may be applied to the different parts of the patient's body. The Vacuum massage apparatus can be used in clinics, sanatoria, massage rooms and in physiotherapy rooms of outpatient hospitals.

Advantages:

- 2 operation modes: "Preparation"(setting vacuum parameters in the vacuum caps) and "Operation"(automatic procedures execution);
- Provides indication of all parameters of rarefaction waves and operating modes;
- Demonstrates a wide range of fall and rise rate values of the rarefaction wave;
- Any part of patient's body can be treated with this unit.



Technical Specifications

Characteristics	Parameters
Rarefaction adjustment range	from - 5 to - 65 kPa
Time of retention at maximum and minimum rarefaction level	up to 9 sec.
Operating mode	30 minutes of operation and 20 minutes of break
Power consumption	200 VA max
Overall dimensions	max 260x250x280 mm
Weigh of complete unit	max 12 kg
Quantity of vacuum caps	in 1 set 24 pcs

- Compact, light-weight
- Modern design
- Controlled easily from a membrane keyboard
- Any part of patient's body may be treated with this unit

