



**POLISH MANUFACTURER
MEDICAL EQUIPMENT**

CATALOG 2021

**Integration system for operating
blocks**



OIOM

**Treatment
room**

Bed ward

INTEGRATOR

Integration system of operatin rooms

**Descripton
room**



INTEGRATOR

SYSTEM FOR OPERATING BLOCKS
MEDICAL SOFTWARE
OPERATING BLOCK

**OPERATING
BLOCK**

Manufacturer



**A solution to increase efficiency
The operating block
and ergonomics of the team's work
operational**

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**Hospital
emergency
ward**

INTEGRATOR – Tool of 21st century

INTEGRATOR is a proprietary, modular, multimedia system IT system for the integration of operating theaters. The system integrates the medical devices of the room operational and communicates with internal hospital systems.

The main goal of the INTEGRATOR system is support and increasing the operating efficiency of the operating theater.

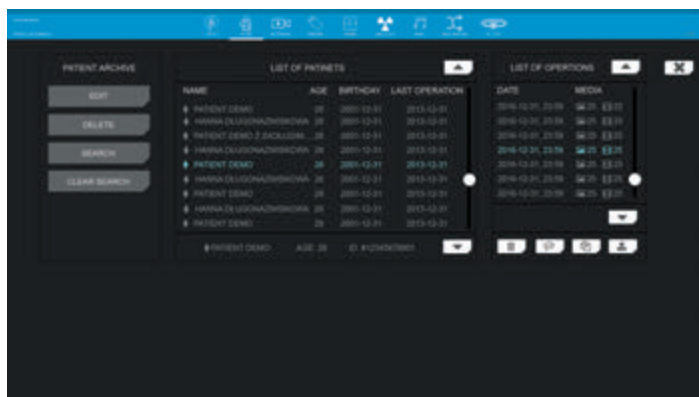
INTEGRATOR is:

- reliability - a POLISH product
- high quality - CLASS I medical device – registered into Register of Medical Devices
- intuitive and easy operation - the touch screen of the monitor
- security - individual encryption key
- full DICOM compliance
- system is open to other applications

The INTEGRATOR consists of modules that can be individually adjust depending on your preferences and budget.

10 MODULES OF INTEGRATOR SYSTEM:

1. TECHNICAL CONTROL MODULE
2. APPARATURE CONTROL MODULE
3. MONITORING MODULE
4. DICOM MODULE
5. NEGATOSCOPE MODULE
6. RECORDING MODULE
7. REPORT MODULE
8. VIDEO SWITCHING MODULE
9. VIDEO CONFERENCE MODULE
10. DATA EXCHANGE MODULE




Modular system structure

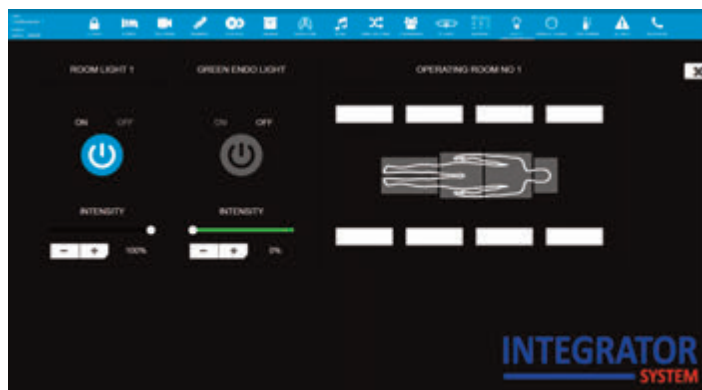


Integrator module:

INTEGRATOR

- 
- TECHNICAL CONTROL MODULE
 - APPARATURE CONTROL MODULE
 - MONITORING MODULE
 - DICOM MODULE
 - NEGATOSCOPE MODULE
 - RECORDING MODULE
 - REPORT MODULE
 - VIDEO SWITCHING MODULE
 - VIDEO CONFERENCE MODULE
 - DATA EXCHANGE MODULE

1. TECHNICAL CONTROL MODULE



The system allows you to control practically each parameter of devices and installations located within the operating room. Thanks to the use of an integrated system, staff are free to make necessary changes in the operating room. The system allows you to control practically each parameter of devices and installations located within the operating room. Thanks to the use of an integrated system, staff are free to make necessary changes in the operating room.

Examples of possibilities:

- operating room door control
- air conditioning and ventilation control
- control of window blinds
- control of the lighting

2. APPARATURE CONTROL MODULE

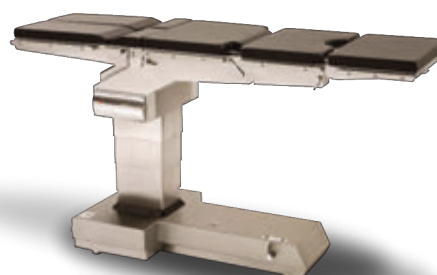
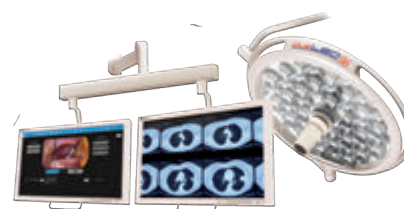
This module provides the ability to control devices on operating room. There are no limits to the amount of control devices, and everything depends only on your needs and user preferences. Additional devices may be added even after system installation. Possible connections available incl. via: IP, Wi-Fi, IP Port, RS232.

Examples of medical equipment control options:

- operating lamp
- camera in the operating lamp
- operating table
- diathermy
- laparoscope

It is also possible to connect a cardiac monitor to the system, anesthesia machines or infusion pumps for recording medical parameters during the operation. The system supports all available communication protocols which makes the adaptation of new devices transparent and straight.

Medical monitors are provided for each operating room having a touch function, allowing for direct communication within the system.





3. MONITORING MODULE

This module provides comfort and safety at work in the operating theater. During monitoring and informing about the condition of the hall's infrastructure operational, we have constant access to the state medical gases as well as condition electrical safety of the connected Electrical Equipment in the Room.

4. DICOM MODULE

The DICOM module is used for fast acquisition patient information. INTEGRATOR system provides connectivity using the standard DICOM. This standard is widely used

in the medical world to view and use patient information in centralized management systems RIS - (Radiological Information System). DICOM is digital imaging and image exchange in medicine. Development modern digital research methods has resulted in the emergence of the research imaging standard. Today it is difficult to imagine modern medicine without the DICOM standard and PACS systems. DICOM is applicable in image processing, e.g. computed tomography, digital angiography and digital conventional radiography.

An image saved in DICOM format takes over 30MB and can contain about 12,000 different indicators called tags (individual patient data). Digital images and their computer analysis have many advantages. Photos received are available in a very short time, almost immediately after execution, easy to store and retrieve images on the disk, no need to enter the same data for each study (this minimizes the risk of error), possibility electronic data exchange between different clinics, as well as between different offices in one building - no need to print and physically deliver the file. DICOMIZATION causes the material to receive characteristic data of the patient allowing for unambiguous identification.





5. NEGATOSCOPE MODULE

The digital negatoscope module allows you to display images radiological examinations performed with the digital method. Thanks to the use of The operating team gets access to the digital negatoscope current radiological examinations of the operated patient ,acquired from hospital information systems.

The monitor used in the digital negatoscope displays DICOM compliant image. It is also subject to calibration screen.



6. RECORDING MODULE

The recording and archiving module provides capture digital audio and video sequences. INTEGRATOR captures the image single-channel or multi-channel in quality and resolution up to 4K.



Recorded signal sources can come from:

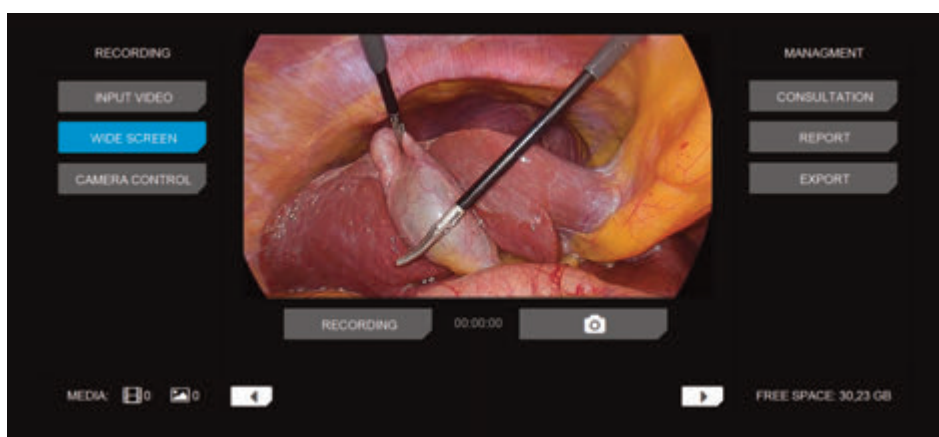
- laparoscopes
- endoscopes
- surgical microscopes
- imaging systems
- ceiling cameras omnidirectional
- cameras in operational lamps
- C arm
- ultrasound scanners
- cardiac monitors



The INTEGRATOR system allows viewing, importing and media export to conventional media, e.g. DVD, for subsequent archiving. The system can be connected PenDrive mass storage devices and USB portable drives.

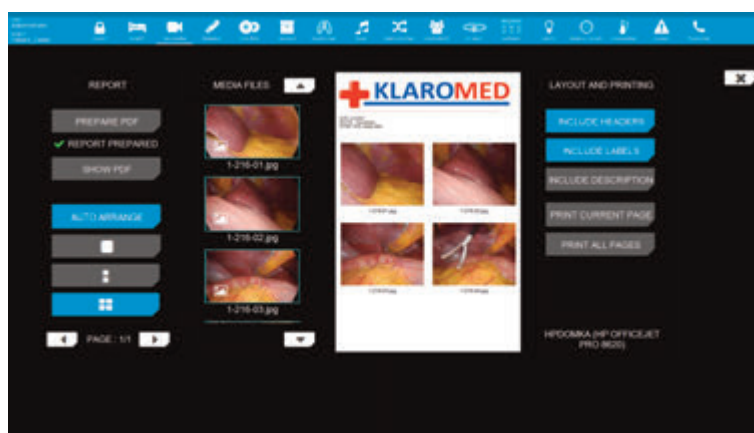
The purpose of this module is to enrich the patient's documentation. You can also create, edit and print report. Optionally, a switch can be used for writing data. By the switch the footswitch it is possible to control the recording module right in the operating field.

It is also possible to trigger recording and taking photos by means of gestures - complete sterility.



7. RAPORT MODULE

This module allows you to create an exact patient's medical records during surgery. Main doctor can make a complete report containing all patient data, photos and videos along with descriptions of the operations performed. The generated report is available in the system as medical records.



8. VIDEO SWITCHING MODULE

This module allows you to switch the image between multiple monitors in the operating room and view video sources.

The main benefits are:

- simple video source selection
- full-screen switching
- the video switching module manages a 12x12, 20x20 or 40x40 input / output matrix - in practice this means that **you can connect as many as 40 video devices**

The video switch distributes the video signal around the room using high-quality LC optical cabling, HD / SD-SDI coaxial or cables: S-Video, RGB HV, RGBs, YPbPr, DVI and Composite.

The management of 4K images on the monitors takes place without any time delays.



9. VIDEO CONFERENCE MODULE

The videoconference module provides the possibility of networking videoconferencing with more than one user with anywhere outside the hospital using the local network. This option allows you to transmit any chosen one audio and video signal sources.

Benefits:

- control via the application module – maximum comfort of work of the operating room staff and others videoconference participants
- access to specialists from other locations
- is an ideal solution to support training and education
- helps in the exchange of knowledge and experiences international



10. DATA EXCHANGE MODULE

This module is a complete exchange of patient data with Hospital Systems IT: HIS, RIS, CIS, LIS.

Data exchange concerns, among others:

- patient identification
- commissioned research
- operation schedules
- test dates
- patient test records

It is possible to read any modality that is implemented in the hospital. The modalities include CT (computed tomography, MR (magnetic resonance imaging), US (ultrasound), etc.









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