# Operating Room Integration System









# grtechnology art of technology

What is
Operating Room
Integration
System?





PACS VIEW ACCESS/PACS INTEGRATION

PACS STORAGE ACCESS

MEDIA SERVER

TABLET / MOBILE PHONE TELECONFERANCE

COMPUTER TELECONFERANCE



HIS VIEW ACCESS/HIS INTEGRATION

Video management module

Recording and archiving module

Broadcasting module

46" 2MP, High Quality & TFT LED Technology

500cd-120Hz and 10 Bit Color Depth

Optional 4 Channel Camera Video Input

**DICOM Calibration** 

IP65 Protection Class Front Face

Video Management and Recording

Approved Hygenic Usage

**PACS Access** 

Built-in QR Code Reader

**RFID Reader** 



Medical Gas, Alarm, IT Power System Failure Alarm

Parameter Data Record and Graphic Feature

**Temperature Control** 

**Humidity Control** 

**Room Pressure Control** 

Hepa Filter Control

Handsfree Intercom with video

**Audio and Other Devices Control** 

Chronometer (date and time)



#### Features of Artech Operating Room Integration System

- Access to HIS (Hospital Information) Software
- Build in QRCode Reader
- ➤ Access to PACS (Medical Images) 46" DICOM Preset Monitor
- 4 Channel High Resolution Medical Video In (Endoscope, Laparoscope, Vital Monitors, Digital Microscope, OR Lamp Camera, all kinds of Medical Device with a video out can be connected)
- > 1 Channel High Resolution Video Out for Directing the Images to Monitor on Pendant Arm
- PIP Function for Video Images
- Recording Function for Video Images
- Archiving and PACS Integration of Video Images in DICOM mpeg4 File Format
- Live Broadcast Video Images with Audio (one to one and one to many modes)
- Digital Chronometer and Timer
- **→** Light Control of OR
- Temperature, Humidity, Pressure Control of OR
- Hepa Filter Status, Medical Gas System, IT Power System Monitoring
- > Alarm Log
- Parameter Log
- Nurse Call
- Hands-Free Intercom / Phone (IP Phone Integration)
- Eco and Operation (In Use) Modes of OR
- > Remote Monitoring and BMS (Building Management System) Integration.





Devices of Artech Operating Room Integration System







#### **Artech Operating Room Integration System**

Operating Room Control Panel



Medical PC









#### Artech Operating Room Integration System for

## **Hospital Management**

- Patient Safety
- More Efficient Use of Operating Room
  Staff
- Cost Reduction (Time, Material and Billing Management)
- Parallel Patient Satisfaction Increased Success Rates in Surgery
- Increasing Preference and Use Rate of the Operating Room
- Establishing Hospital Functions for Education and Congress Purposes







## Artech Operating Room Integration System for Surgeons

- Patient Safety
- Quick and Easy Access to Information During
  Surgery
- Decreasing Risks, Increasing Efficiency in Surgeries
- Archiving Surgery Images
- Consultation and Training Opportunity During Surgery with Telemedicine System







# Artech Operating Room Integration System for Surgical Nurses

- Patient Safety
- Digital Workflow Tracking
- Time & Material Managemet
- Accurate Reporting







## Patient Safety with Artech Operating Room Integration System



Easy access to the patient's medical history



Possibility to make a consultation for sudden developing situations.



Process follow-up with digital checklist before, during and after the operation



Making the most accurate diagnosis and treatment decisions with the recording of the operation





## Cost Saving: Time with Artech Operating Room Integration System

- Shortening the operation times
- Possibility to do more surgery
- Shortened preparation times of the operating room with digital checklist
- Reducing personnel costs by using operating room staff more efficiently

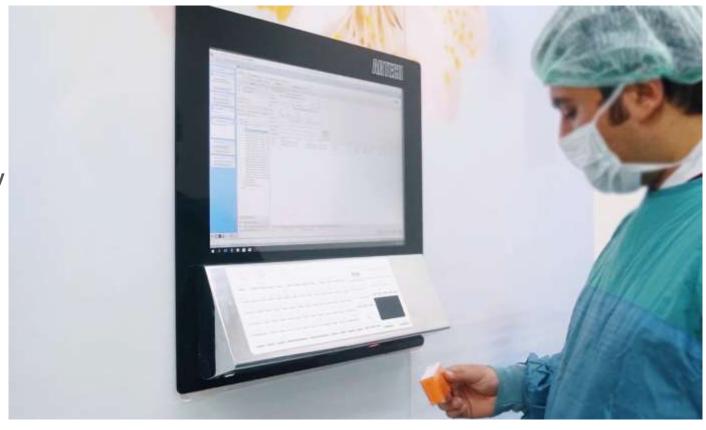






## Cost Saving: Material Management and Billing with Artech Operating Room Integration System

- Control and monitoring of medical consumables used with the internal barcode reader
- Possibility of comparative evaluation of the materials used on the basis of surgery
- Detailed reporting on monthly and annual basis for each surgery
- Instant billing







## Quick and Easy Access to Information with Artech Operating Room Integration System



Instant Access to Patient History



Instant Access to
Internally Stored PACS
Images, EHRs and
Laboratory Reports



Saving /
Broadcasting /
Sharing Surgery



Online Consultation with Surgeons,
Radiologists or
Pathologists





## Advanced Surgery with Artech Operating Room Integration System

- Allows surgeons to see different images from different medical equipment at the same time
- Facilitates the recording and accessibility of critical information and documents in digital media for medical processes
- This feature facilitates making more complicated procedures and working at the same time







## Workflow Tracking and Productivity with Artech Operating Room Integration

- Collects all the procedures in a central device, it enables surgeons to control their environment better.
- Reduces pressure on surgeons and staff in long and detailed cases
- Operating room is structured according to the surgeon with a single button and operating room staff are used more efficiently.
- Allows control and monitoring of ideal ambient conditions of the operating rooms







#### Archiving with Artech Operating Room Integration System



Patients' PACS
Images and All
Medical History are
Stored in One Place
in DICOM Compliance



Instant Access to
Patient Information is
Provided from the
Archive During the
Operation



Training Materials
can be Prepared from
the Information and
Images in the
Archives





### Telemedicine with Artech Operating Room Integration System



The telemedicine system enables the transfer of medical information for consultation, diagnosis or training between specialists located outside the operating room and in the operating room.



Possibility to make a consultation for sudden developing situations.



Hospitals can incorporate new procedures more easily.



Allows surgeons to access new procedures without leaving their work places.







#### **Artech Operating Room Integration System**



















Our Certificates

- TS 13611 (2014) AUTHORIZED SERVICES AUTHORIZED SERVICE PROVIDING ACCORDING TO THE RULES STANDARD FOR PROGRAMMABLE AUTOMATION SYSTEMS
- TS 13243 (2014) AUTHORIZED SERVICES AUTHORIZED SERVICE PROVIDING THE COMPLIANCE WITH THE RULES STANDARD FOR LED-GRAPHIC BASED VIDEO ANNOUNCEMENTS
- TS 13166 (2017) AUTHORIZED SERVICES ORDER AND CALL SYSTEM (QUEUEMATIC) -AUTHORIZED SERVICE PROVIDING THE COMPLIANCE WITH THE RULES STANDARD
- TS 12498 (2015) AUTHORIZED SERVICES COMPUTER AND ENVIRONMENTAL UNITS -AUTHORIZED SERVICE PROVIDING ACCORDING TO THE RULES STANDARD
- TS 12963 (2016) AUTHORIZED SERVICES POS, ATM, KIOSK AND HAND TERMINALS -AUTHORIZED SERVICE PROVIDING ACCORDING TO THE RULES STANDARD
- ISO 9001 (2015) DESIGN, PRODUCTION, AFTER-SALES SERVICES QUALITY MANAGEMENT SYSTEM CERTIFICATE
- ISO 13485 (2016) MEDICAL DIGITAL IMAGING AND INFORMATION SYSTEMS PRODUCTION AND TECHNICAL SERVICES OF THE DEVICES QUALITY MANAGEMENT SYSTEM CERTIFICATE
- ISO 27001 (2013) INFORMATION SECURITY MANAGEMENT SYSTEM CERTIFICATE
- ISO 10002 (2018) CUSTOMER SATISFACTION and ACTIVE INFORMATION MANAGEMENT SYSTEM CERTIFICATE
- ISO 45001 (2018) OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE
- IEC-60601 EMC MEDICAL DEVICE ELECTROMAGNETIC SAFETY COMPLIANCE
- IEC-60601 LVD MEDICAL DEVICE ELECTRICAL SAFETY COMPLIANCE
- OPERATING ROOM AND INTENSIVE CARE HYGIENE COMPLIANCE REPORT
- EEC93-42 MEDICAL DEVICE COMPLIANCE CERTIFICATE
- UTS REGISTRATION







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