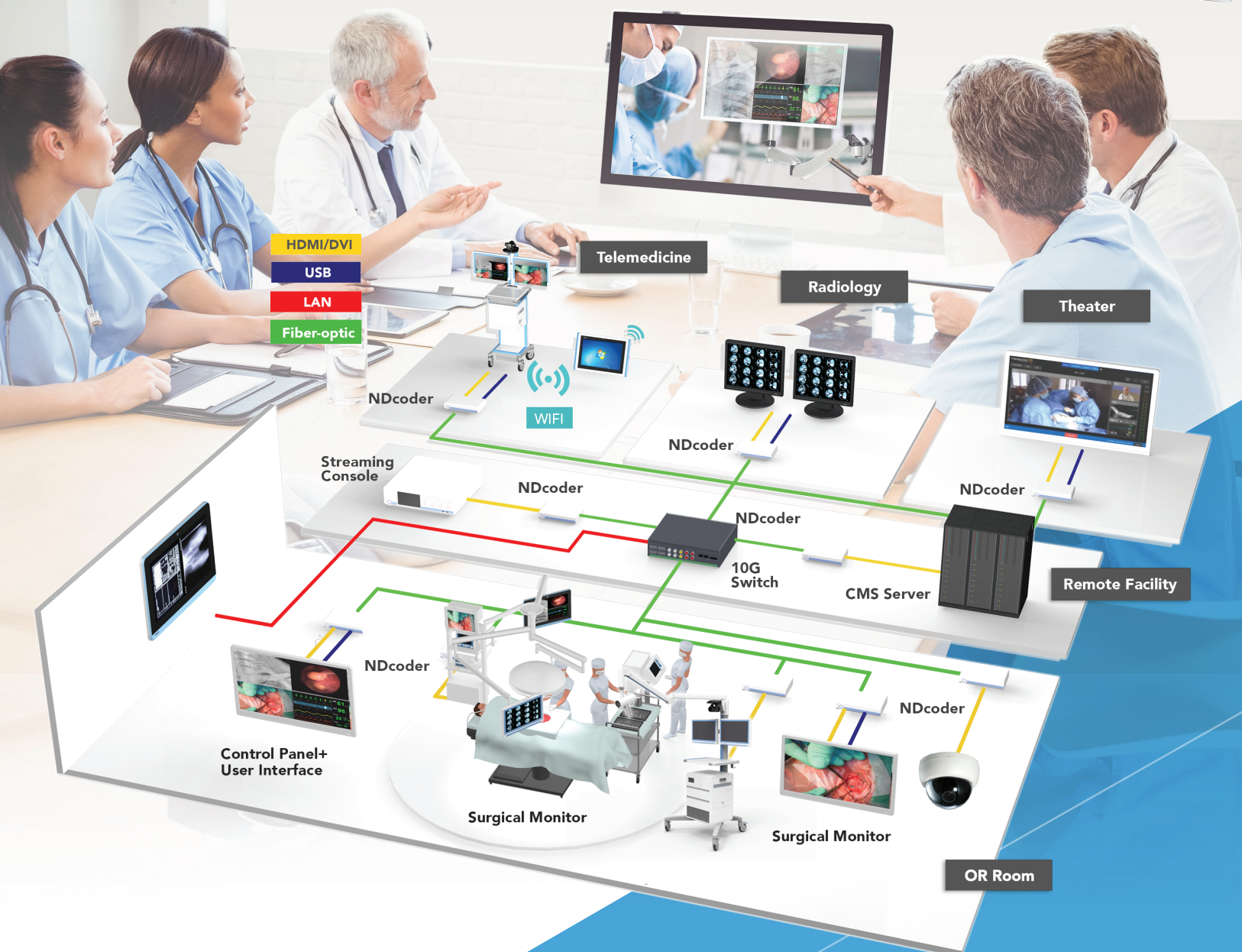


Video Sources Management | Demonstration | Consultation

AVAS-OR

Advantech Video Archiving and Streaming for Intelligent Operating Rooms

ADVANTECH **iHealthcare**



AVAS Solutions

With the increased complexity of surgical procedures, several factors including the use of diverse image sources, lack of surgical technique storage systems, and external communication difficulties are reducing the efficiency of operating room workflows. Advantech's AVAS solutions support real-time image and video streaming, centralized control, remote teaching and consultation, and cloud-based management in order to streamline operating room workflows and improve overall efficiency.



Featured Products

AVAS solutions comprise monitors, workstations, and systems that facilitate medical imaging integration, HD broadcasts, zero latency video, and remote learning and consultation. With AVAS, integrated surgery and patient data can be accessed via switchable displays, enabling convenient management of medical surgery records and enhanced workflow efficiency.



For Streaming / AVAS-200

NDCoder

AVAS-200 is an IP-based data transmission system with a single-cable distribution architecture designed for operating rooms. This system supports video, audio, and control signal streaming with low latency and allows rapid switching between streams. Moreover, video data can be transmitted over 10 Gigabit Ethernet without compression or data loss.

For Management / AVAS-400

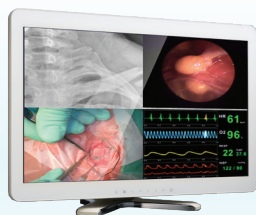
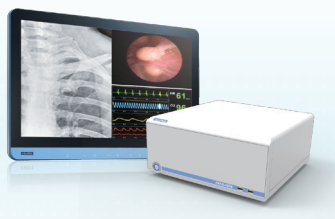
Streaming Console and VMS Server

AVAS-400 is a powerful integrated imaging hub equipped with software development APIs for customizing video and imaging streams according to application requirements. With AVAS-400, video signals can be collected from multiple sources and integrated for simultaneous display on monitors with diverse configurations.

For Procedure / AVAS-60

Mobile Intraoperative Workstation

AVAS-60 is a versatile mobile workstation for conducting surgical demonstrations and consultations. Equipped with a movable camera, built-in codex box, video switch card, and dual display support, AVAS-60 is designed to support remote intraoperative monitoring, mobile healthcare delivery, and imaging-intensive applications.



Medical Computers

As the core operating room infrastructure, these systems provide access to intraoperative imaging data and video streams to enable centralized management of all surgical processes for an efficient and integrated operating room.

Medical Displays

Equipped with hybrid gamma functionality to support the simultaneous display of monochrome and color images with varying gamma curves, these medical displays offer exceptional image quality for operating room applications.

Medical Tablets

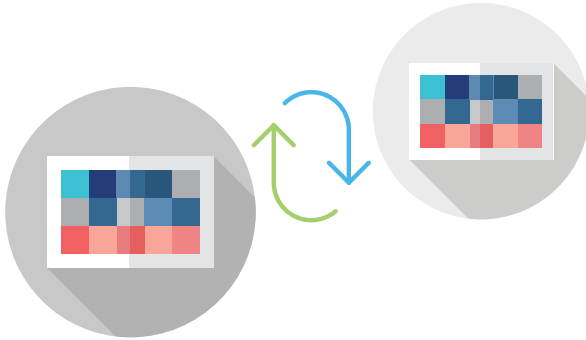
Featuring an IP65 rating for superior infection control, Advantech's medical tablets enable mobile real-time access, management, and control of all intraoperative imaging and video streams for increased operational efficiency.

Streaming API and SDK

Advantech's AVAS SDK provides recording, captured video streaming, broadcasting, files playback and editing and APIs that allow hospitals and system integrators to easily develop software solutions that satisfy their usage needs.

Zero Latency

Imaging data is transmitted at the same frame rate with zero latency, ensuring uninterrupted real-time communication between collaborating physicians located remotely.



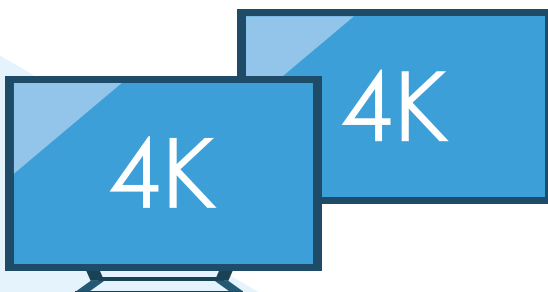
Open API and SDK

The provision of open APIs and SDKs ensure easy integration with existing infrastructure and management systems.



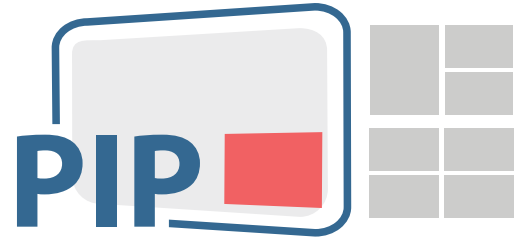
4K End-to-End Resolution

Medical images can be displayed with greater accuracy, clarity, and detail to enable more precise diagnoses.



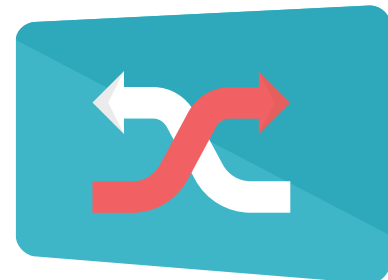
Multi-View

Multi-view functionality supports the simultaneous display of four image streams on a single monitor.



Seamless Switching

Integrated switching technology enables glitch-free transitions between input sources for seamless switching and consistent visual performance.

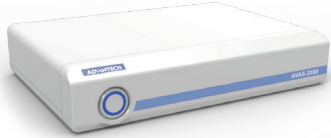


Medical-Grade Certification

All AVAS computers, displays, and tablets are certified to relevant medical standards for infection control and patient safety.



AVAS-200 Series



- ▶ Supports both encoding and decoding
- ▶ All video, image, audio, and USB signals are transmitted via 10 Gigabit Ethernet
- ▶ Multi-view functionality supports the simultaneous display of four image streams on a single monitor
- ▶ Integrated switching technology enables seamless switching between input sources
- ▶ Easy navigation and control with a mouse or keyboard, even in Quad-View or Multi-View modes
- ▶ Open APIs and SDKs ensure easy integration with existing infrastructure and management systems

AVAS-400 Series

- ▶ 7" display panel with dual input support
- ▶ Supports 4K and 2K resolutions to enable simultaneous recording of two video channels
- ▶ Video signals can be recorded to the internal hard disk drive, a Blu-ray recorder, connected USB drive, and network server
- ▶ Programmable hotkeys for more efficient control
- ▶ Supports Windows 10, 8, 8.1, 7/Windows Server 2012, 2012 R2, 2008 R2/Linux Kernel, CE/FCC/EN60601-1/UL-60601-1/CCC certifications



AIM-55

- ▶ 8" medical tablet with Full HD (1920 x 1080) resolution
- ▶ Supports both Windows and Android operating systems for easy integration
- ▶ Battery offers up to 8 hours operation under standard computing loads
- ▶ Built-in magnetic stripe reader, NFC reader, and 13-megapixel camera
- ▶ Certified to IEC 60601-1, Edition 3.1, standards for medical device safety
- ▶ Can be integrated with optional expansion modules and docking stations to support diverse applications

AKostec Series

- ▶ High-brightness, high contrast ratio surgical displays with Ultra HD 4K resolution
- ▶ Wide range of monitor sizes available
- ▶ LED backlighting for increased energy efficiency
- ▶ Supports multi-view display (Normal, PiP, PBP, 4P)
- ▶ Multimodal input interface for displaying images of differing modality simultaneously
- ▶ 14-bit lookup table for image processing
- ▶ Compliant with the DICOM Part 14: Grayscale Standard Display Function
- ▶ Variable gamma and DICOM (color temperature) modes



POC Series

- ▶ Fanless 6th generation Intel® Core™ i7/i5 processor
- ▶ Edge-to-edge, bezel-free IPS LCD with Full HD resolution
- ▶ Multi-touch control for convenient operation
- ▶ IP54-rated enclosure that protects against dust and water ingress for easy cleaning
- ▶ Optional lithium-ion battery, 5 megapixel camera with auto focus, DICOM presets, and
- ▶ Bluetooth, RFID, and WLAN modules
- ▶ I/O ports feature power isolation to prevent current leakage and electric shock

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