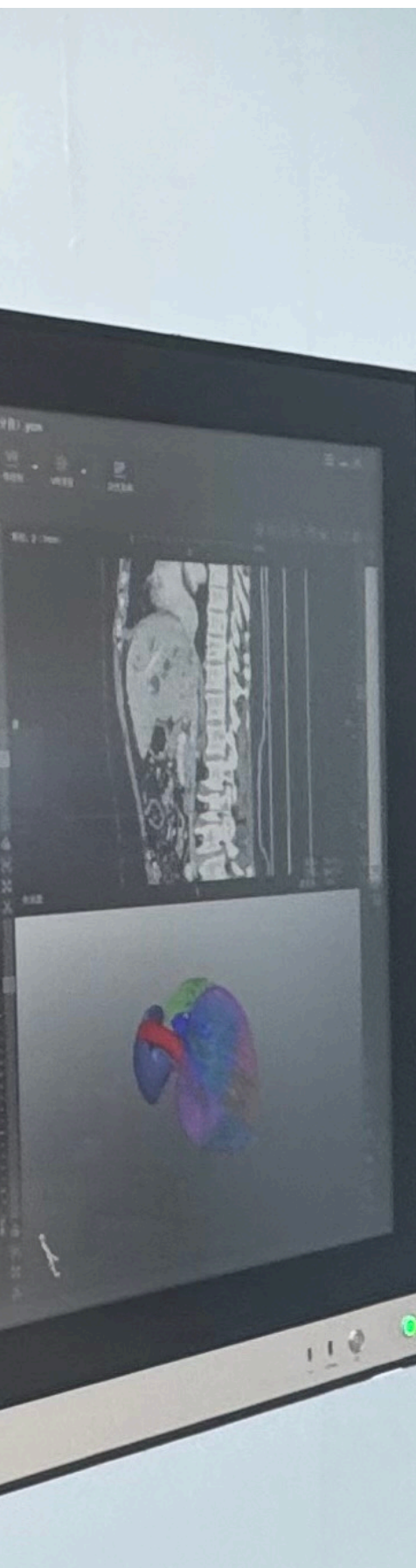


## DIGITAL OR VIDEO INTEGRATION SYSTEM



*Smart, Affordable,  
and Scalable*





## ORCHEX® LITE

**PRODUCT DESCRIPTION** 01

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**TECHNICAL DATA SHEET** 02

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## INTRODUCTION

ORCHEX Lite is a compact digital operating room video integration system designed for modern surgical environments. It enables seamless management of surgical video sources, real-time routing, multi-channel recording, and remote teaching.

The system integrates video processing, surgical information display, and recording functions into a streamlined architecture, making it an ideal solution for modular operating theaters and cost-sensitive hospital projects.

### **Integrated Surgical Video Management**

Centralized management of multiple surgical video sources including endoscopy systems, surgical cameras, C-arm imaging, and medical workstations.

### **Real-Time Video Routing**

Flexible routing and switching of video signals to different displays during surgical procedures.

### **Multi-Channel Surgical Recording**

Simultaneous recording of multiple surgical video sources and composite views for documentation and education.

### **4K Ultra-HD Video Processing**

Supports 4K video input, output, encoding, and decoding for high-definition surgical imaging.

### **Remote Teaching & Teleconsultation**

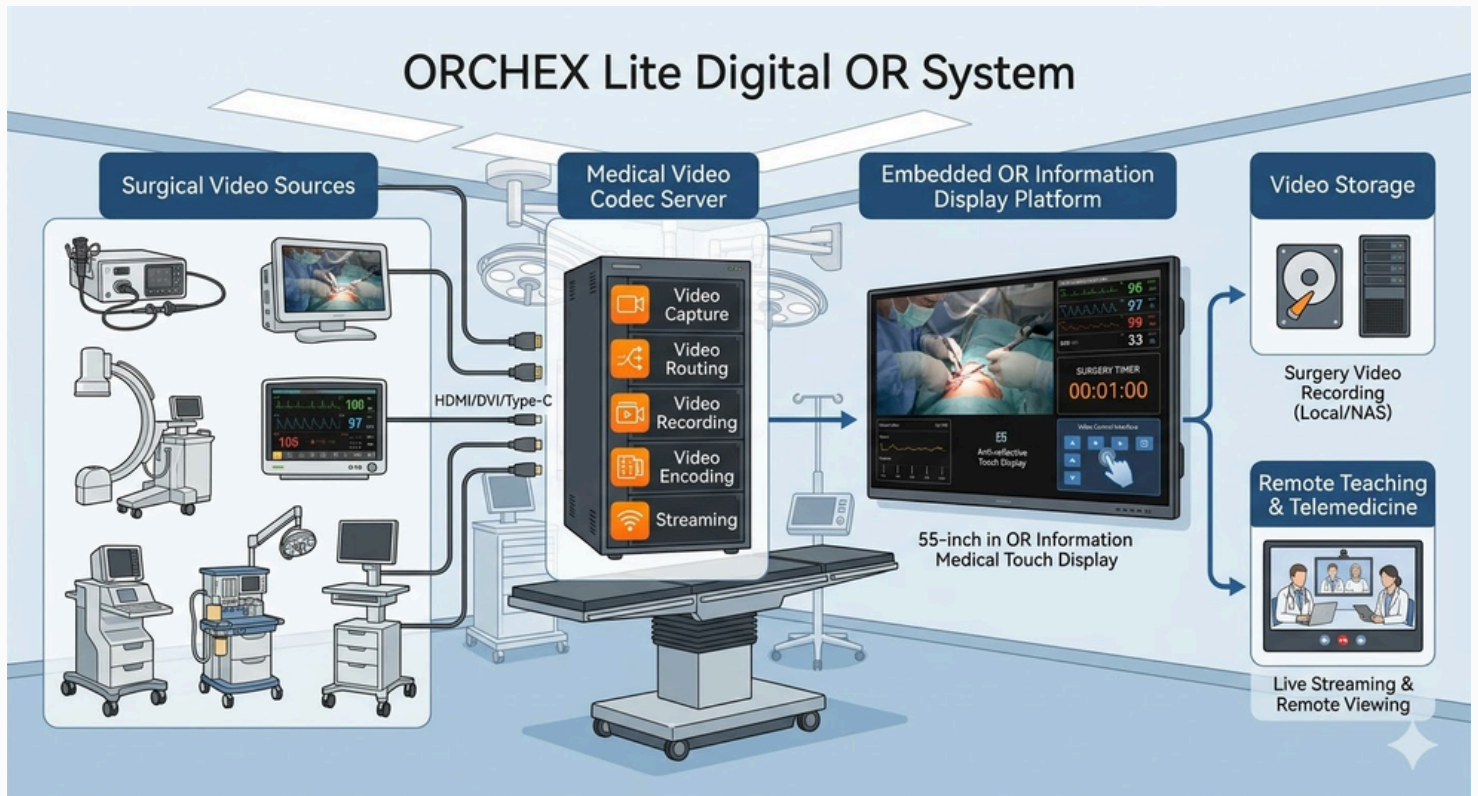
Supports live streaming and remote collaboration for surgical education and consultation.

### **Embedded OR Information Platform**

Integrated touch display platform allows intuitive control of video routing, recording, and surgical information.

## System Architecture

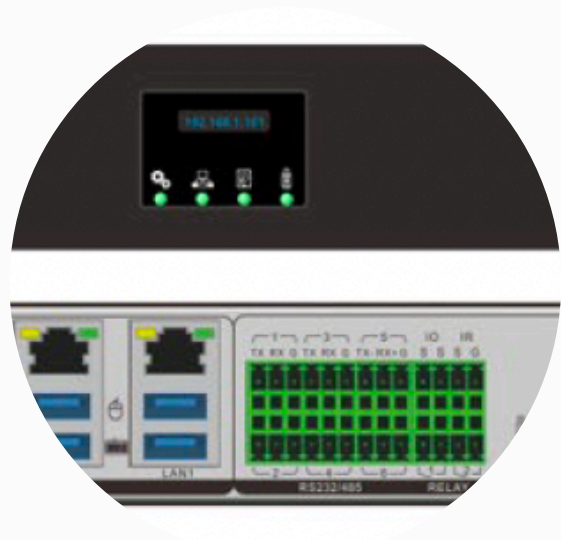
ORCHEX Lite consists of two main components:



Embedded OR Information Display Platform



Medical Video Codec Server



# Detail Descriptions

ORCHEX Lite consists of two main components:

# ORCHEX<sup>®</sup> LITE

## Embedded OR Information Display Platform

Designed for seamless integration into operating room walls, providing a centralized interface for surgical video control and information display.

### Features

- 55-inch medical-grade 4K touch display
- Anti-glare high-transparency glass front panel
- Stainless steel (SUS304) housing
- Integrated industrial computer workstation
- IP65 waterproof medical keyboard and mouse
- Wall-embedded installation for easy cleaning and infection control

## Medical Video Codec Server

### Core Capabilities

- Video capture and routing
  - Real-time video encoding and decoding
  - Surgical recording and playback
  - Live streaming and remote access
  - Multi-screen video composition
- Video Processing Capability

### Video Inputs

- 5 × HDMI / DVI video inputs
- 1 × Type-C video input

### Video Outputs

- 4 × HDMI video outputs
- 1 × GUI monitoring output

### Maximum Resolution

- Up to 4K (3840 × 2160)

### Video Encoding & Streaming

- H.264 / H.265 video encoding
- AAC / G711 audio encoding
- RTSP / RTMP streaming protocols
- Multi-stream processing
- Live streaming and remote access

### Recording & Storage

- Multi-channel surgical video recording
- Up to 6 simultaneous recording channels
- Multi-screen composite recording
- Built-in storage with optional external storage
- Video playback and download functions

## Detail Descriptions

### Option and others

#### System Integration

ORCHEX Lite can integrate with hospital information systems.

Compatible with:

- HIS
- PACS
- LIS
- EMR

#### Typical Applications

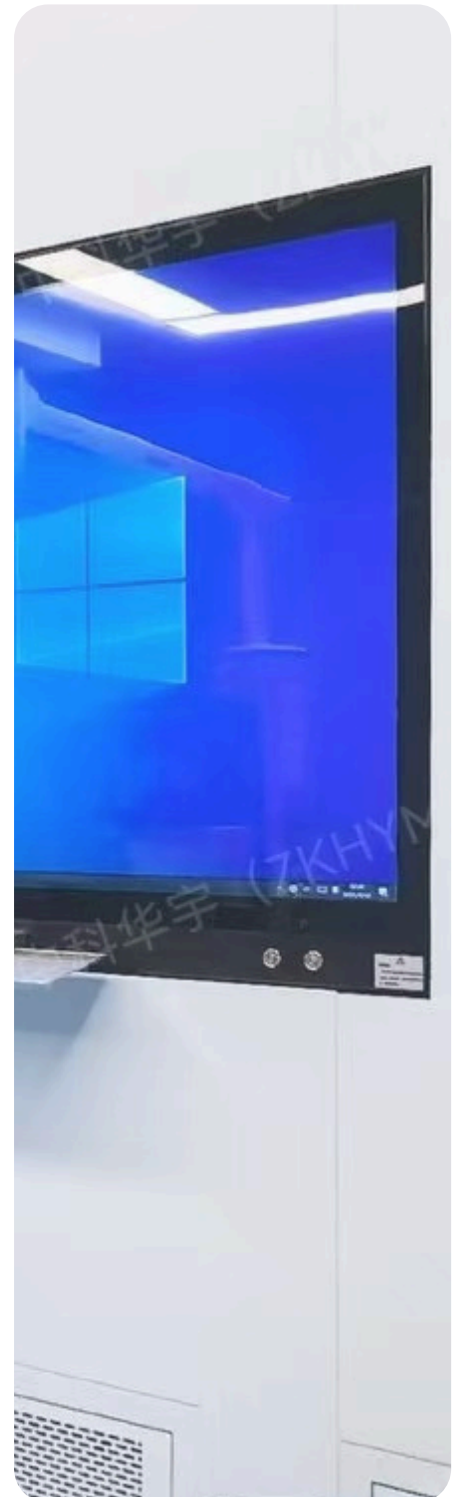
ORCHEX Lite is suitable for:

- Modular Operating Theaters
- General Surgery Operating Rooms
- Teaching Hospitals
- Surgical Training Centers
- Remote Surgical Consultation

#### Optional Modules

To meet different hospital requirements, ORCHEX Lite supports optional expansion:

- Surgical camera system
- Remote teaching module
- Central storage server
- Multi-room integration



# ICARELIFE

INNOVATING SPACES THAT HEAL

ICARELIFE provides integrated solutions for modular operating theaters and medical cleanroom environments, including architectural systems, airflow solutions, and digital operating room technologies.



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CARING SPACES THAT HEAL