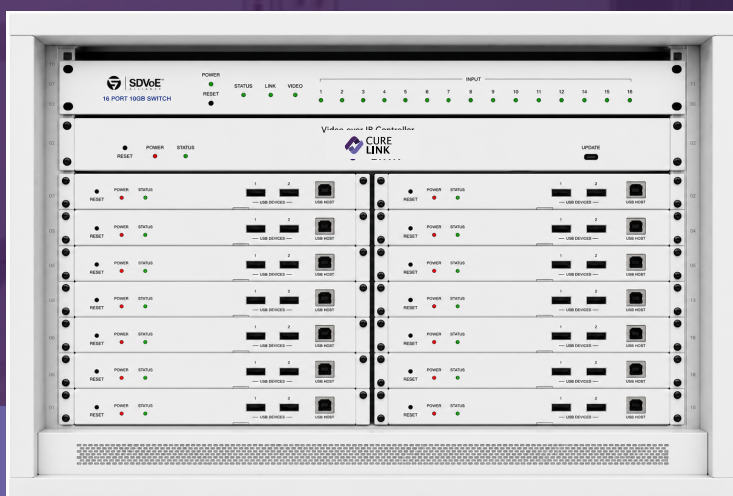


CureLink™ 4K SURGICAL VIDEO ROUTER



Area of Usage
OPERATING ROOM

4K Surgical Video Router System

CureLink™ Ultra High Definition Modular Video Matrix Router
4K60 · Zero-Delay · DP / HDMI / 12G-SDI / Analog · MultiView · 4-Ch Streaming · 10 Presets

The next generation of medical image processing and control is here.

CureLink OR Video Integration has developed a powerful, yet compact, digital video integration solution that offers compatibility for today and beyond. The CureLink 4K Surgical Video Router delivers ultra-high-definition modular video matrix routing — handling DisplayPort, HDMI, 12G-SDI, and analog sources with zero-delay uncompressed routing to any output at resolutions up to 4096×2160.

Built-in MultiView output layouts, 4-channel concurrent network streaming, hardware scaling, zoom/pan control per window, and 10 user-configurable presets make the CureLink Video Router purpose-designed for the demands of modern surgical suites and OR integration systems.

VIDEO FORMAT SUPPORT

INPUTS

- DisplayPort
- HDMI (incl. 4K)
- 12G-SDI
- Analog

OUTPUTS

- DisplayPort
- HDMI (4K UHD)

KEY CAPABILITIES

- 4096 × 2160 max resolution
- Zero-delay routing
- No video compression
- Hardware scaling
- MultiView output layouts
- 4-ch concurrent streaming
- 10 user presets
- Zoom / Pan per window
- Web-based control interface

KEY FEATURES



4K60 Zero-Delay Routing

Uncompressed 4K60 (4096×2160) video routing with zero latency. Full signal fidelity from source to display — no compression artifacts, no processing delay — for critical surgical imaging. The video distribution architecture is built a fully non-blocking, uncompressed 4K video-over-IP fabric that carries any video signal from any source to any destination in the OR network with zero-frame latency and no compression artifacts. All video transport uses structured OM3 fiber cabling and 10 Gigabit Ethernet switching.



Multi-Format Input

Accepts DisplayPort, HDMI, 12G-SDI, and analog inputs simultaneously — connecting any surgical camera, endoscope, C-arm, workstation, or legacy imaging device.



MultiView Output Layouts

Route any source to any window of any destination. Display multiple sources simultaneously on a single output with configurable window positions and sizes.



4-Channel Streaming

Stream up to 4 video channels concurrently over the hospital network — remote observation, surgical training, telemedicine, and PACS archiving without additional hardware.



10 User Presets

Save and recall up to 10 complete routing configurations — inputs, outputs, layouts, icons, names, and display settings — for rapid OR setup and consistent procedure workflows.



Web-Based Image Control

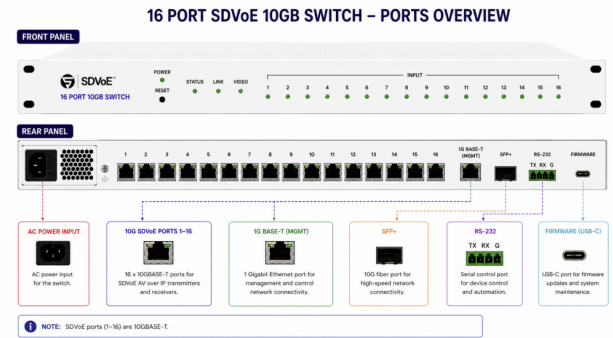
Browser-accessible control — route sources, adjust layouts, configure zoom/pan, manage input/output icons and names, set resolutions, and view system/firmware status.

CureLink 4K Surgical Video Router — Designed for the Modern OR

- Connects all OR imaging sources — endoscopes, surgical cameras, C-arms, workstations, vital signs monitors — to all OR displays through a single routing hub.
- Works seamlessly with CureLink SDVoE Transceivers and CureLink SDVoE Switch for IP distribution of routed video outputs across the hospital network.
- Full image control from any browser: change input/output icons, colour settings, names, resolutions, zoom/pan, and window layouts — no dedicated control panel required.
- Real-time monitoring of input/output parameters, system status, network configuration, streaming state, and firmware version from one unified web interface.

4K SURGICAL VIDEO ROUTER — SPECIFICATIONS & CURELINK SDVoE SWITCH

VIDEO PERFORMANCE	
Max Resolution	4096 × 2160 (4K UHD @ 60 Hz)
Routing Latency	Zero-delay — no processing latency
Compression	None — uncompressed video routing throughout
Scaling	Built-in hardware scaling on all outputs
Zoom / Pan	Per output window — software controlled via web interface
INPUT VIDEO FORMATS	
DisplayPort	DP input — 4K UHD supported
HDMI	HDMI input — up to 4K @ 60 Hz
12G-SDI	12G-SDI input — HD-SDI through 12G-SDI
Analog	Analog video input — legacy source compatibility
OUTPUT VIDEO FORMATS	
DisplayPort	DP output — 4K UHD
HDMI	HDMI output — up to 4K @ 60 Hz
OUTPUT LAYOUT & ROUTING	
Window Layout	Configurable multi-window layout — select per output destination
Source - Window	Route any input source to any window of any output destination
Window - Source	Route any window to any source of any output destination
Zoom / Pan	Independent zoom and pan control per output window
NETWORK STREAMING	
Concurrent Streams	4 channels simultaneously over hospital network
Access	Browser-accessible stream viewer on hospital network



PRESET MANAGEMENT	
User Presets	10 user-configurable presets — save and recall
Preset Contents	Complete state: inputs, outputs, layouts, names, display settings
WEB-BASED IMAGE CONTROL	
User Presets	<ul style="list-style-type: none"> Change output window layout Route a source to a window of a destination Route a window to a source of a destination Change input icons, input color setting, input name Change output icons, output resolution setting, output name Change zoom / pan setup per output window Save and recall a preset configuration View input and output parameters View settings: system, network, streaming, firmware
CERTIFICATIONS	
Electrical Safety	CE

SDVoE PORTS		FRONT PANEL	
SDVoE Ports	16× 10GBASE-T (RJ45) — SDVoE AV-over-IP devices	Status LEDs	POWER · STATUS · LINK · VIDEO
Management Port	1× 1G BASE-T (RJ45) — management and control	Input LEDs	16× individual green port LEDs
Fiber Uplink	1× SFP+ — 10G fiber uplink to network backbone	Reset	Hardware RESET button
PHYSICAL		CONTROL & MAINTENANCE	
Power	AC power — IEC inlet · internal PSU	RS-232	TX / RX / GND — serial device control / automation
Form Factor	1U 19" rackmount · standard rack compatible	Firmware	USB-C — firmware updates and system maintenance
Platform	CureLink™ SDVoE-certified AV-over-IP		

Integrated Rack Deployment

CureLink SDVoE Switch (1U) and up to 16 CureLink Transceivers mount together in a standard 19" rack — Switch at top, Transceivers vertically below — forming a complete, cable-managed SDVoE AV distribution system.

SYSTEM FLOW — CureLink OR Video Integration	
1	OR VIDEO SOURCES – 4K VIDEO ROUTER DP, HDMI, 12G-SDI, and analog sources routed and scaled. Output layouts configured. Presets recalled.
2	4K ROUTER OUTPUT – SDVoE ENCODER TRANSCEIVE HDMI output from Router feeds CureLink Transceiver (Encoder). Video compressed to H.264 transport stream over 10G SDVoE.
3	SDVoE SWITCH – 16-PORT 10G BACKBONE CureLink SDVoE Switch routes all encoder and decoder Transceivers. VPC-240C and CureLink Controller also connected here.
4	SDVoE DECODER – OR DISPLAY ENDPOINTS Decoder Transceiver feeds GP-449, surgical boom monitors, VPC-240C. Fiber runs via OMP-HM TX/RX and OM3 MPO cable.