

CureLink™ Video Over IP Controller



Area of Usage

OPERATING ROOM

Video Over IP Controller

CureLink™ Video over IP | OR Integration

Centralized control and management for SDVoE IP video distribution networks in operating rooms and clinical environments

The CureLink SDVoE Controller is a centralized video-over-IP management appliance designed for the clinical demands of operating rooms and advanced healthcare environments. It controls and manages SDVoE IP video distribution products — coordinating all video, audio, RS-232, IR, KVM signals, and GPIO events across an operating room's AV network from a single point of control.

Supporting dual 1G network ports, the CureLink isolates the video multicast network from the control network — a critical requirement for hospital IT environments. Its built-in web GUI with drag-and-drop matrix configuration, HTTPS/SSH security, and third-party central control compatibility make it the integration-ready backbone of any CureVision OR system.

PRODUCT FAMILY

- SDVoE Protocol
- Video over IP
- OR Integration

CONTROL INTERFACES

- Web GUI (HTTPS)
- TCP / IP
- RS-232 (×2)
- IR In / IR Out
- GPIO (4-channel)
- SSH

NETWORK

- SDVoE Protocol
- Video over IP
- OR Integration

POWER

- DC 12V / 1A
- 8.4 W max consumption

KEY FEATURES



SDVoE Network Control

Centralized control and management of all SDVoE IP video distribution products – routing, switching, and monitoring across the OR AV network from one interface.



Dual-Network Isolation

Two independent 1G LAN ports separate the video multicast distribution network from the control network – meeting hospital IT network segmentation requirements.



Web GUI – Drag & Drop

Browser-based control interface with intuitive drag-and-drop matrix configuration, image preview, and full system monitoring – no specialist software required.



RS-232 & IR Control

Two independent RS-232 serial ports plus IR in/out (3.5mm) for bidirectional control of connected AV and medical devices – fully compatible with third-party central control systems.



4-Channel GPIO Control

Four-channel GPIO port with selectable 5V or 12V logic levels for integration with surgical lighting, door controls, environmental sensors, and custom OR automation triggers.



HTTPS & SSH Security

Enterprise-grade HTTPS and SSH encryption for all network control interfaces – meeting hospital IT security policies and protecting clinical network integrity.

CureLink SDVoE Controller is the right choice if

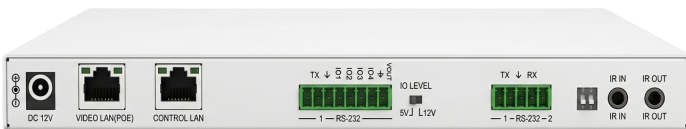
- You are deploying SDVoE IP video distribution in the OR and need a dedicated, reliable control appliance.
- Your hospital IT team requires strict network isolation between video multicast traffic and clinical control networks.
- You need third-party central control integration (AMX, Crestron, or custom RS-232/TCP) in your OR integration project.
- You want 7×24 continuous operation with enterprise security (HTTPS/SSH) and lightning/ESD protection built in.

NETWORK & TRANSMISSION	
Protocol	SDVoE (Software Defined Video over Ethernet)
Network Bandwidth	1 Gbps per port
Transmission Dist.	100 m via CAT 5e / 6 / 6A / 7
Video LAN Port	1x 1G RJ45 — supports PoE (Power over Ethernet)
Control LAN Port	1x 1G RJ45 — isolated control network
Network Isolation	Video multicast and control networks fully isolated
Security	HTTPS + SSH encrypted access
CONTROL INTERFACES	
RS-232	2x RS-232 — 3-pin 3.81mm phoenix connector TX / RX / GND — full third-party control support
Digital I/O (GPIO)	1x Digital I/O — 6-pin 3.81mm phoenix connector 4 GPIO channels · selectable 5V or 12V logic level
IR Control	1x IR IN — 3.5mm audio jack (12V level) 1x IR OUT — 3.5mm audio jack Bidirectional IR signal receiving and loop output
USB Host	1x Micro USB (5-pin female) — firmware update
LAN Control	TCP/IP · Web GUI · third-party central control
MANAGEMENT	
Web Interface	Built-in Web GUI — drag & drop matrix configuration
Image Preview	Live video thumbnail preview in Web GUI
Signal Management	Video, audio, RS-232, IR, KVM — all managed over IP
Third-Party Control	RS-232 / LAN API — compatible with AMX, Crestron, etc.
Project Management	Easy project creation, device control and system management
Reliability	Designed for 7x24 continuous unattended operation

POWER	
Power Supply	DC 12V / 1A — external adapter
Consumption (Max)	8.4 W
PoE Output	VIDEO LAN port supports PoE for connected IP devices
PHYSICAL	
Dimensions	204 mm (W) × 98.5 mm (D) × 21.5 mm (H)
Housing	Metal enclosure
Colour	White
Weight	508 g
Mounting	Desktop / rackmount
ENVIRONMENTAL	
Operating Temp	0°C ~ 40°C (32°F ~ 104°F)
Storage Temp	-20°C ~ 60°C (-4°F ~ 140°F)
Humidity	20% ~ 90% RH (non-condensing)
Protection	Lightning protection · ESD design · multiple circuit protection

HARDWARE OVERVIEW

REAR PANEL



FRONT PANEL



Rear Connector	Description
DC 12V	Power input — 12V DC barrel connector
VIDEO LAN (PoE)	1G RJ45 — SDVoE video multicast network · supports PoE
CONTROL LAN	1G RJ45 — isolated management / control network
RS-232 — 1	3-pin phoenix: TX — IO1 IO2 IO3 IO4 Vout
IO LEVEL	GPIO logic level selector switch: 5V / 12V
RS-232 — 2	3-pin phoenix: TX — RX (second serial port)
IR IN	3.5mm audio jack — IR receive (12V level)
IR OUT	3.5mm audio jack — IR loop output

Front Element	Description
RESET	Hardware reset button — factory restore
POWER LED	Red LED — power on indicator
STATUS LED	Green LED — network / system status indicator
UPDATE	Micro USB port — firmware update interface



Multiple Circuit Protection — Lightning & ESD Design

The CureLink SDVoE Controller incorporates multiple layers of circuit protection including lightning surge protection on all external interfaces and ESD (electrostatic discharge) protection throughout. Combined with its 7x24 reliable system design, the device is engineered for continuous, unattended operation in hospital environments where uptime is critical.