



## KDS-SW3-EN7

4K AVoIP Encoder Switcher with Dante over 1GbE



KDS-SW3-EN7 is an auto switcher and advanced encoder for streaming a selected video signal at 4K via Ethernet over copper cable in unicast (one-to-one) or multicast (one-to-many) configurations. It can add digital audio Dante, USB, IR, RS-232, or CEC signals

### FEATURES

KDS-SW3-EN7 provides exceptional quality, advanced user-friendly operation, and flexible control

**Instantaneous Switching Time** - 1 second switching time between selectable video inputs

**Video Streaming Transmitter** - Streams up to 4K@60Hz (4:2:0) resolution signals over a 1G network interface. While KDS-DEC7 decodes the stream to 4K@30Hz (4:4:4) resolution

**Streaming delay 33msec** - for video 4K@30Hz 4:4:4 signal

**Streaming Support** - Provides unicast and multicast streaming

**Flexible Analog Audio Embedding and De-embedding** - Select balanced analog audio as input to embed into the streaming and HDMI™ output signal, or as output to extract the HDMI audio signal and output it as balanced analog audio

**Flexible Digital Audio Embedding and De-embedding Dante** - Select digital audio as input to embed into the streaming and HDMI™ output signal, or as output to extract the HDMI audio signal and output it as balanced analog audio

**Easy To Use KM/KVM Support** - Searchable, OSD menu for KM and fully configurable KVM roaming

**Power consumption without USB-C Power Delivery is 13W** - power consumption with USB-C Power Delivery is 77W (requiring the optional power supply)

**Convenient and Comprehensive Control** - Control the unit using intuitive embedded web pages, Protocol 3000 API commands via Ethernet, or front panel LCD and navigation buttons

**PoE Support** - Powered with PoE connection from PoE LAN switch

**Control Gateway** - Through P3K or special TCP connection, users can control/communicate with IR, RS-232, or CEC to the connected devices

**Separate Service LAN Port** - can be used for physical separation between AV and command streams to separate LAN for security and reliability purposes

**Selectable Inputs** - 2 HDMI and 1 USB-C input

**Analog/Digital audio inputs and outputs**

**Plug-and-play with Netgear M4250 AVoIP switches, Kramer Control, and KDS-USB2**



# kramer

## TECHNICAL SPECIFICATIONS

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Inputs	2 HDMI: On female HDMI connectors 1 USB: On a USB-C connector
Outputs	1 HDMI: On a female HDMI connector
Ports	2 Ethernet: On R-J45 female connectors 1 Balanced Audio: On a 5-pin terminal block connector 1 RS-232: On a 3-pin terminal block connector 1 IR: On a 3.5mm TRS connector 1 USB-B Host: On a USB-B connector 2 USB-A Devices: On USB-A connectors
Network	1G Multicast UDP, IGMP snooping non-blocking, Layer 2 Unicast UDP Bit Rate Peak: 850Mbps, 4K average: 350Mbps, 1080p average: 250Mbps
Video Streaming	Compression: Visually Lossless, proprietary codec Max Input Resolution: 4K@30hz (4:4:4) Max Output Resolution: 4K@30hz (4:4:4) Max End-to-End Resolution: 4K@30hz (4:4:4) Scaler: Yes End-to-End Latency: 33msec Switching Time: 1sec
Resolution	4096x2160@30Hz, 1600x1200@60Hz, 1280x960@60Hz, 848x480@60Hz, 3840x2160@60Hz, 1600x900@60Hz, 1280x800@60Hz, 800x600@60Hz, 1920x1200@50Hz, 1440x900@60Hz, 1280x768@60Hz, 720x576@60Hz, 1920x1080@60Hz, 1400x1050@60Hz, 1280x720@60Hz, 720x480@50Hz, 1856x1392@60Hz, 1366x768@60Hz, 1224x768@70Hz, 640x480@60Hz, 1792x1344@60Hz, 1360x768@60Hz, 1152x864@70Hz, 640x400@85Hz, 1680x1050@60Hz, 1024x768@60Hz, 640x350@85Hz
Audio	Supported Formats LPCM, Dolby and DTS LPCM LPCM upto 7.1/24-bit/192kHz Dolby Dolby Atmos, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0 DTS DTS-HD Master Audio, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS Digital Surround 5.1 Dante Digital Audio: 2 IN or 2 OUT audio mono channels
Security	HTTPS, 802.1x, OWASP-10, AES-128 encryption of AV streaming with changeable key
User Interface	Indicators: LINK, NET and ON LEDs, front panel LCD Display

Rear Panel: Restart and factory reset button

Controls: Embedded web pages, P3K API commands via Ethernet, front panel navigation buttons

Power

PoE (Power over Ethernet) 37V to 57V

Typical Power Consumption 9.21W

AV + USB Power Consumption 14.58W

Optional power supply 24V DC, 5A

Full Load (including USB-C Charging) Power Consumption 77.93W

Environmental Conditions

Operating Temperature: 0° to +40°C (32° to 104°F)

Storage Temperature: -40° to +70°C (-40° to 158°F)

Humidity: 10% to 90%, non-condensing

Regulatory Compliance (Standards Compliance)

Safety: CE, FCC

Environmental: RoHs, WEEE

Enclosure

Size: Mega Tool Deep

Type: Aluminium

Cooling: Convection Ventilation

Product Dimensions 18.90cm x 14.50cm x 2.76cm (7.44" x 5.71" x 1.09" ) W, D, H

Product Weight 0.7kg (1.5lbs) approx

Shipping Dimensions 31.20cm x 18.00cm x 7.60cm (12.28" x 7.09" x 2.99" ) W, D, H

Shipping Weight 0.9kg (2.1lbs) approx

