



# kramer

## KDS-SW3-EN7

4K AVoIP Encoder Switcher with Dante over 1GbE

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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

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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**



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## 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 Through RTSP (Real Time Streaming Protocol): IGMP snooping non-blocking, Layer 2 Unicast Through RTSP (Real Time Streaming Protocol) Bit Rate Peak: 850Mbps, 4K average: 350Mbps, 1080p average: 250Mbps
Video Streaming	Compression Standard: JPEG2K based, proprietary stream Max Input Resolution: 4K@60hz (4:2:0) 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@60Hz, 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, maximum power consumption 19W (when USB at full load)

Optional power supply 24V DC, 5A

Environmental Conditions Operating Temperature: 0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing

Storage Temperature: -20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing

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 17.90cm x 7.60cm (12.28" x 7.05" x 2.99" ) W, D, H

Shipping Weight 0.9kg (2.1lbs) approx

