



KDS-SW3-EN7

4K AVoIP Encoder with Dante



KDS-SW3-EN7 is an auto switcher and advanced encoder for streaming a selected video signal at 4K@60Hz 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



TECHNICAL SPECIFICATIONS

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 at 60hz (4:2:0)
	Max End-to-End Resolution: 4K at 30hz (4:4:4) + HDR 10bit
	Scaler: Yes
	End-to-End Latency: 33msec
Resolution	Switching Time: 1sec
	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
Digital Audio	2-channel Dante Out: On an Ethernet connector
Security	HTTPS, 802.1x, OWASP-10
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	Consumption: 13W self-consumption (73W with USB-C charge)
	PoE: PoE IEEE 802.3af on LAN (PoE) port
	External Power Supply: 24V DC, 5A (optional, purchased separately) when USB-C charging is required

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	19" x 5.71 x 7U (43.6cm x 14.50cm x 2.76cm) W, D, H
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Product Weight	0.7kg (1.5lbs) approx
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Shipping Dimensions	31.20cm x 17.90cm x 7.60cm (12.28" x 7.05" x 2.99") W, D, H
	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
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