

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



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@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
Digital Audio	2-channel Dante Out: On an Ethernet connector
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
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



