

# ZyPer4K

## Uncompressed 4K Encoder/Decoder

The ZyPer4K platform allows for the distribution and switching of high definition uncompressed video, audio, and control using ZyPer4K encoder and decoder modules and off-the-shelf 10Gb Ethernet switches (both fiber and copper).



### Uncompressed 4K

ZyPer4K delivers perfect pixel for pixel reproduction of uncompressed 720p, 1080p HD, Ultra HD, and 4K resolution content directly over a standard 10Gb Ethernet network. ZyPer4K eliminates the need to have a separate AV network or proprietary matrix switcher for video and other AV content.

### Change sources and content instantly without programming

IP based architecture enables you to instantly switch from one source to another without any loss of frames - even at 4K resolutions.

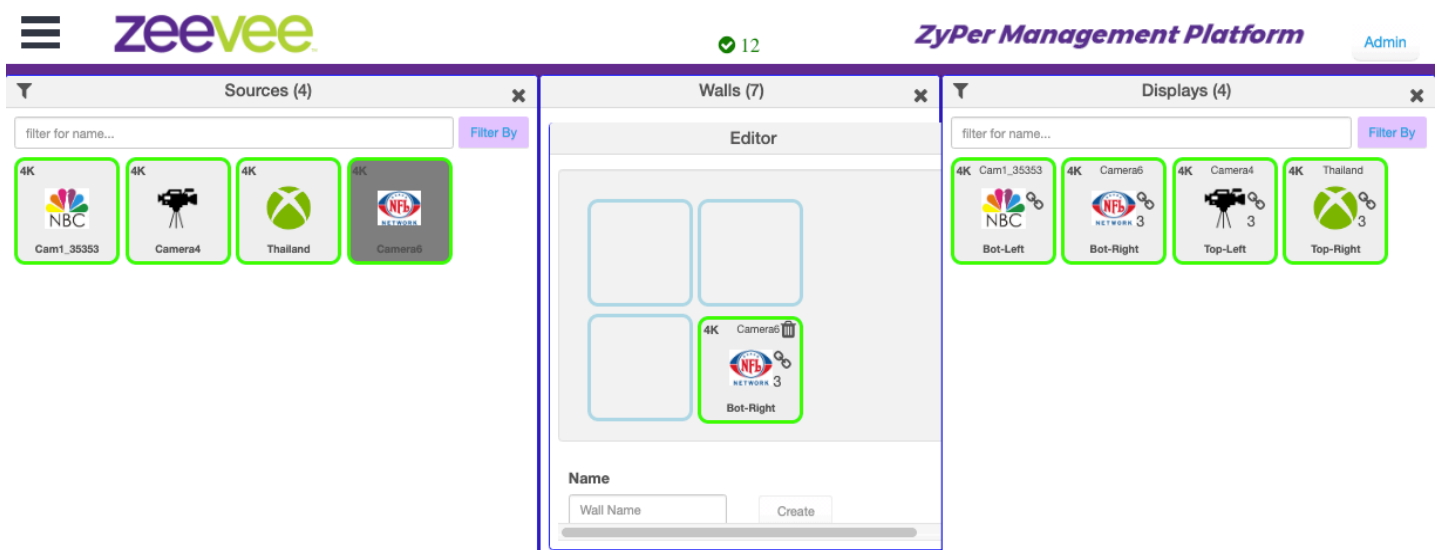
### USB 2.0 and KVM Control

ZyPer4K with USB support enables remote access to cameras, keyboards, mice and other devices (KVM) that offer flexibility in securing or accessing equipment such as digital media players that may be stored in remote locations.











### Highlights:







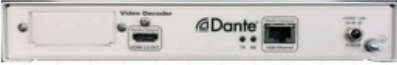

- Uncompressed zero latency UltraHD (4K/60) video, audio, and control
- Lossless transport of 7.1 audio signals including all encoded formats and uncompressed linear PCM.
- 1GbE utility network port on all encoders and decoders
- Source and display control (Infrared and RS232)
- HDMI 2.0 (full 4K 4:4:4 60Hz support)
- HDCP 2.2 compliant
- Supports HDR10 and HDR10+
- ZMP (ZyPer Management Platform) with software GUI allows simple set up and control of ZyPer4K.
- 128-bit AES encryption
- Video wall and multiview support
- Decoder with Integrated Dante Transmitter (Supports AES67)
- Quad HDMI Input Encoder for Netgear M4300-96X switch

### ZyPer Management Platform Interface



# ZyPer4K Models & Options

Input Options	Encoders	
HDMI		
DUAL HDMI WITH LOOPOUT		
HD-SDI		
DisplayPort		
Analog		
	Copper	Fiber
	Network Interface	

Decoders		Output Options
		HDMI
		HDMI FANLESS
		DISPLAYPORT
		HDMI OUTPUT INTEGRATED DANTE TRANSMITTER
Copper	Fiber	
Network Interface		

ZyPer4K Encoder	Information	Connector
Video	HDMI 2.0 with HDCP pass-through (Optional: 3G-SDI, DP, Analog)	HDMI 2.0 type A, with optional 3G-SDI, Display Port 1.3 or Analog
Audio (Digital)	Encoded audio formats and LPCM up to 8 channels	HDMI 2.0 type A, with optional 3G-SDI, Display Port 1.3 or Analog
Audio (Analog)	Unbalanced 2-Channel Stereo (In or Out)	3.5mm stereo mini jack
IR	Input/Output ports	3.5mm mini jacks
RS-232	Full Duplex up to 115.2 kbps	9-pin D-sub
USB (Optional)	Single USB 2.0	USB Type B
Ethernet	10 Gb for Video/Audio/Control with 1 Gb Utility	10 Gb RJ45 or SFP+ port 1 Gb RJ45 port

ZyPer4K Decoder	Information	Connector
Video	HDMI 2.0 with HDCP pass-through. Widescreen format selection (Crop, stretch or box)	HDMI 2.0 type A with optional DisplayPort
Audio (Digital)	Multi-channel linear PCM up to 8 channels (7:1)	HDMI 2.0 type A
Audio (Analog)	Unbalanced Stereo (Output)	3.5mm stereo mini jack
IR	Input/Output ports	3.5mm mini jacks
RS-232	Full Duplex up to 115.2 kbps	9-pin D-sub
USB (Optional)	Dual USB 2.0	2 USB Type A
Ethernet	10 Gb for Video/Audio/Control with 1 Gb Utility	10 Gb RJ45 or SFP+ port 1 Gb RJ45 port
Dante Transmitter (Optional)	2 channel Dante Audio over IP (Supports AES67)	NA

**Note:** ZyPer4K Decoder with Dante Transmitter does not have Analog Audio output port. Also does not have 1Gb Utility port.

Other Specifications	ZyPer4K Encoder/Decoder
Formats	Supports all major VESA resolutions and variations including full HDMI 2.0 support: <ul style="list-style-type: none"> <li>VGA: 640x480 (4:3) • SXGA: 1280x1024 (5:4) • 1080p/i: 1920x1080 (16:9) • SVGA: 800x600 (4:3)</li> <li>WXGA: 1366x768 (16:9) • QXGA: 2048x1536 (4:3) • XGA: 1024x768 (4:3) • SXGA+: 1440x1080 (4:3)</li> <li>Ultra HD: 3840x2160 (16:9) • HDTV: 1280x720 (16:9) • UXGA: 1600x1200 (4:3)</li> <li>4K: 4096x2160 (17:9)</li> </ul> Custom resolutions are supported at pixel clock rates up to 600 MHz
Video Other	Color depth: 24 bit, 30 bit, 36 bit, 48 bit
Video Wall and Multiview	Video Wall up to 15x15. Multiview up to 19 sources.
Signal transmission distance	Cat6a: 328 ft (100 m) or 30km fiber optic line
Copy Protection/Security	HDCP 2.2, AES-128 Encryption, 802.1X compatible
Power input (locking connector)	12 VDC 2A (Worldwide AC adapter is supplied)
Power (Standard encoder/decoder)	Approximately 15 watts
Power (Quad HDMI encoder)	Approximately 25 watts
Dimensions (L x W x H) / Weight	6.9 in (176mm) x 5.7 in (145mm) x 1.5 in (37mm), 31.0 oz (880 g)
Dimensions, Long box version	9 in (229mm) x 5.7 in (145mm) x 1.5 in (37mm), 37.7 oz (1070 g)
Dimensions, Quad HDMI Encoder	8.3 in (210mm) x 2.6 in (67mm) x 1.5 in (37mm), 14.3 oz (405 g)
Temperature	Operating temperature: 32° F to 104° F <0° C to +40° C> Storage temperature: -4° F to +176° F <-20° C to +80° C>
Humidity	Operating/ Storage: 20% to 90% (Non-Condensing)

ZeeVee, Inc., headquartered in Littleton, Mass., and founded in 2007, is a leading global developer of digital technology and products for distributing audio-video content from any source or multiple sources to any number of displays. Manufactured in the U.S. and used primarily in commercial and corporate applications, ZeeVee products are employed worldwide by major organizations in education, government, hospitality, retail, sports, entertainment, broadcasting, healthcare, housing, energy and other industries. For more information visit [www.zeevee.com](http://www.zeevee.com)