ZEUS™
by Z3 Technology

Z3-HE4K-01
4K Ultra HD Video Encoder

Stream One Source in 4K + 1080p30

HE4K-01
4K Video Encoder

Power   Dec   Enc   RS-232

Z3 Technology, LLC
www.Z3technology.com

HDMI In   HDMI Out   Ethernet   USB   SATA   +12V/2A

4K ULTRAHD

| 4K ENCODING & DECODING | MULTI-RESOLUTION ENCODE | COMPACT DESIGN | EASY-TO-USE CONTROLS |

VIDEO ENCODING

Interfaces	1x 4K HDMI Input 1x GigE
Supported Resolutions	H.264 encode in resolutions up to 2160p30 (4K UHD) Simultaneous encode of one source in 4K + 720p30, 4K + 1080p29.97 and 4K + 1080p30
Video Codecs	H.264
Output Formats	MPEG-2 TS, RTP, RTMP, RTSP and TS File
Video Frame Rates (HD)	25p, 29.97p, 30p, 50p, 59.94p and 60p @ 720p 24p, 25p, 29.97p, 30p, 50p, 59.94p and 60p @ 1080p 50i, 59.94i and 60i @ 1080i
Video Frame Rates (UHD)	23.98p, 24p, 25p, 29.97p and 30p @ 2160p
Features	•Stream One Source in Multiple Resolutions *(See Use Case on Next Pg)* •Supports Sony VISCA camera control •Supports Unicast and Multicast •Seamless Bitrate and Frame Rate Changes

AUDIO ENCODING

Interfaces	Embedded HDMI Audio
Audio Codecs	AAC-HE ADTS, AAC-LC ADTS
Optional Audio Codecs	AAC-LC LATM, AAC-HE LATM, AAC-HE V2, G.711 and PCM

SPECIFICATIONS

Dimensions	145 x 130 x 34 mm (5.71 x 5.12 x 1.34 in)
Weight	608 g (1.34 lb)

VIDEO DECODING

Interfaces	1x 4K HDMI Output 1x GigE
Supported Resolutions	HD resolutions up to 2160p30 (4K UHD), 1080p30, 1080p/i at 60fps and 720p60
Input Formats	MPEG-2 TS, RTP, RTSP and TS File
Video Frame Rates (HD)	30p, 50p and 60p @ 1080p
Video Frame Rates (HD)	25p, 29.97p, 30p, 50p, 59.94p and 60p @ 720p 24p, 25p, 29.97p, 30p, 50p, 59.94p and 60p @ 1080p 50i, 59.94i and 60i @ 1080i
Video Frame Rates (UHD)	23.98p, 24p, 25p, 29.97p and 30p @ 2160p

AUDIO DECODING

Audio Codecs	AAC-HE ADTS, AAC-LC ADTS
Audio Bitrate	32 to 320 kbps

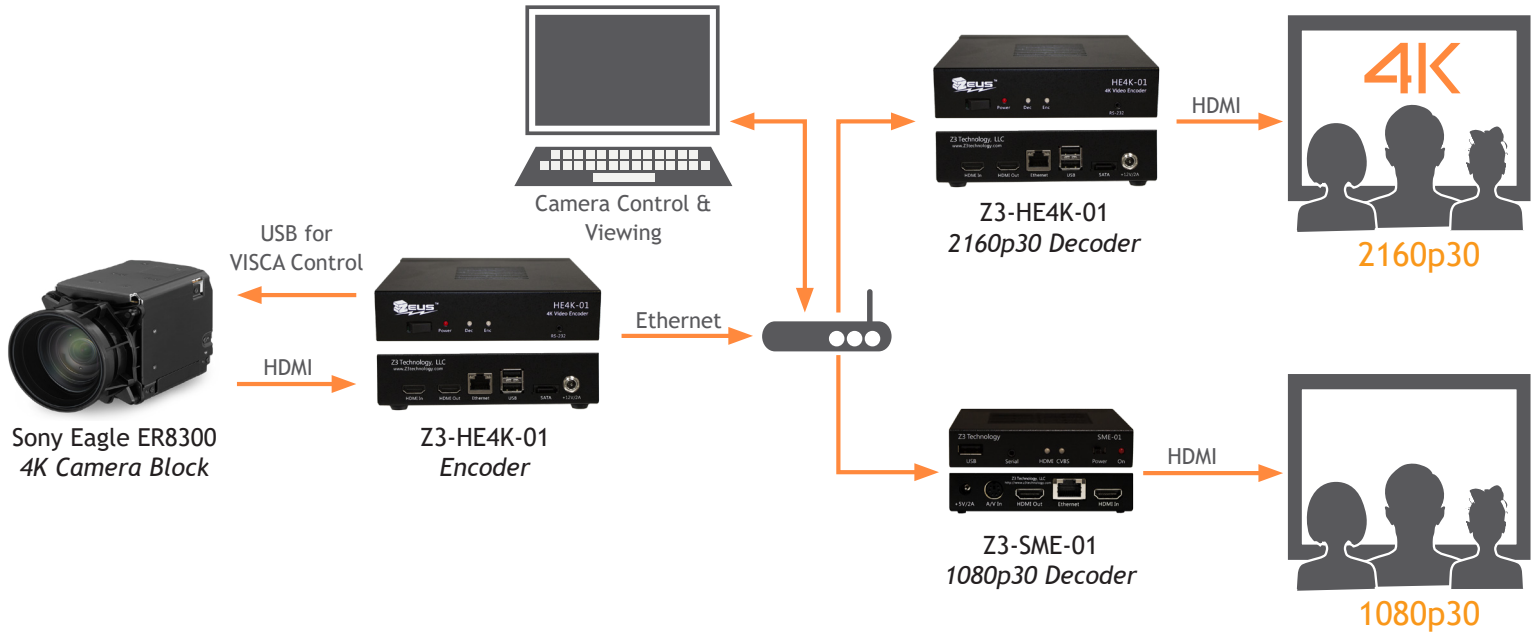## OTHER

Additional Interfaces	2x USB 2.0, SATA2 and RS-232
Software Control	HTTP-Based GUI: Configuration and Software Update RS-232: Configuration
Power	12V External Power Supply 15W Typical Consumption
Temperature and Humidity	Operating: 0 to 40 degrees C at 20-80% Relative Humidity Storage: -10 to 65 degrees C at 20-80% Relative Humidity

The diagram below demonstrates a Sony Eagle FCB-ER8300 4K camera block capturing and sending 4K content over HDMI to our Z3-HE4K-01 encoder. Two streams are sent, one 2160p30 and one 1080p30, over a network to a decoding device and made available for display. In the example below, the 4K stream is decoded by a second Z3-HE4K-01 and the 1080p30 stream is decoded by our Z3-SME-01, an HD decoder.

Camera Control & Viewing

4K HDMI

Z3-HE4K-01
2160p30 Decoder

2160p30

USB for VISCA Control

HDMI

Ethernet

Sony Eagle ER8300
4K Camera Block

Z3-HE4K-01
Encoder

HDMI

Z3-SME-01
1080p30 Decoder

1080p30

OPERATING CONTROLS

①	Power Switch
②	Power Light
③	Status LEDs
④	Serial Port
⑤	HDMI Input
⑥	HDMI Output
⑦	Ethernet
⑧	2x USB 2.0
⑨	SATA2
⑩	12V 2A Power

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*Contact Z³ Technology for Customized Product Options