# Z3-HE4K-01

4K Ultra HD Video Encoder

## 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

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>Embedded HDMI Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Codecs</td>
<td>AAC-HE ADTS, AAC-LC ADTS</td>
</tr>
<tr>
<td>Optional Audio Codecs</td>
<td>AAC-LC LATM, AAC-HE LATM, AAC-HE V2, G.711 and PCM</td>
</tr>
</tbody>
</table>

## Video Decoding

| Interfaces | 1x 4K HDMI Output  
1x GigE |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported Resolutions</td>
<td>HD resolutions up to 2160p30 (4K UHD), 1080p30, 1080p/i at 60fps and 720p60</td>
</tr>
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<td>Input Formats</td>
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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 |

## Specifications

| Dimensions | 145 x 130 x 34 mm (5.71 x 5.12 x 1.34 in)  
Weight | 608 g (1.34 lb) |
MULTI-RESOLUTION ENCODING WITH THE

Z3-HE4K-01

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.

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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