

- H.265 and H.264 Encoder in 4K and HD Resolutions
- Easy to Use HTTP Based Control Interface
- Small Form Factor
- Closed Captions EIA608 & EIA708
- H.265 4K and HD Streaming to Wowza
- 2x 3G SDI Input and Loop Through



The Z3-DME-20 is a compact video encoder which supports up to 2160p30 H.265 encode in streaming or storage mode. These combined features create an ideal platform for broadcast, medical imaging, event streaming, industrial video, low-latency and low bit-rate streaming and many other video streaming and recording applications. This powerful, production-ready 4K encoder offers the latest technology combined with Z3 Technology's reputation for compact, production quality embedded modules and software solutions.

### Technical

Video Codecs	H.265, H.264, MJPEG	
Interfaces	HDMI 1.4a input HDMI 1.4a passthrough Display Port 1.1 input 2x 3G-SDI input Re-Clocked SDI loop through Gigabit Ethernet	RS-232 USB 2.0 Line Level Audio input RS-485 2x GPIO or UART Micro-SD card
Audio Codecs	HE-AAC, HEv2-AAC, AAC-LC 4 Channels Line Level and Embedded Audio	
Operating System	Embedded Linux (root file-system, NAND boot, tool chain and flash programming tool), u-boot	
Encoding Resolutions	H.265 encode in resolutions up to 2160p30 H.264 video from QCIF to 2160p30, & 1080i	
Output Formats	RTP, RTSP, MPEG-2 TS over UDP, RTMP, RTMPS, TSRTSP, MPTS MP4, and TS File	

- Features
- Low latency
  - Fully controllable parameters: resolution, max bitrate, GOP and on-the-fly bitrate control
  - Picture in Picture Support
  - Synchronous KLV data via SDI & Asynchronous KLV data via RS-232
  - SRT Modes Supported: Caller, Sender, Rendezvous & SRT Encryption
  - Close Captioning (EIA608, EIA 708)
  - Pro-MPEG Forward Error Correction
  - Zixi Feeder Enabled

### Specifications

Encoder Size	157 x 78 x 30 mm
Encoder Weight	225g
Power Supply	12V
Temperature Range	0C to +50C
Typical Power Consumption	7W typical while encoding 4K video (Preliminary)

### BENEFITS

- H.265 high-efficient encode in resolutions up to 2160p30
- Compact Form Factor

### APPLICATIONS

- Broadcast
- Medical Imaging
- Event Streaming
- Industrial Video
- Customized Applications\*

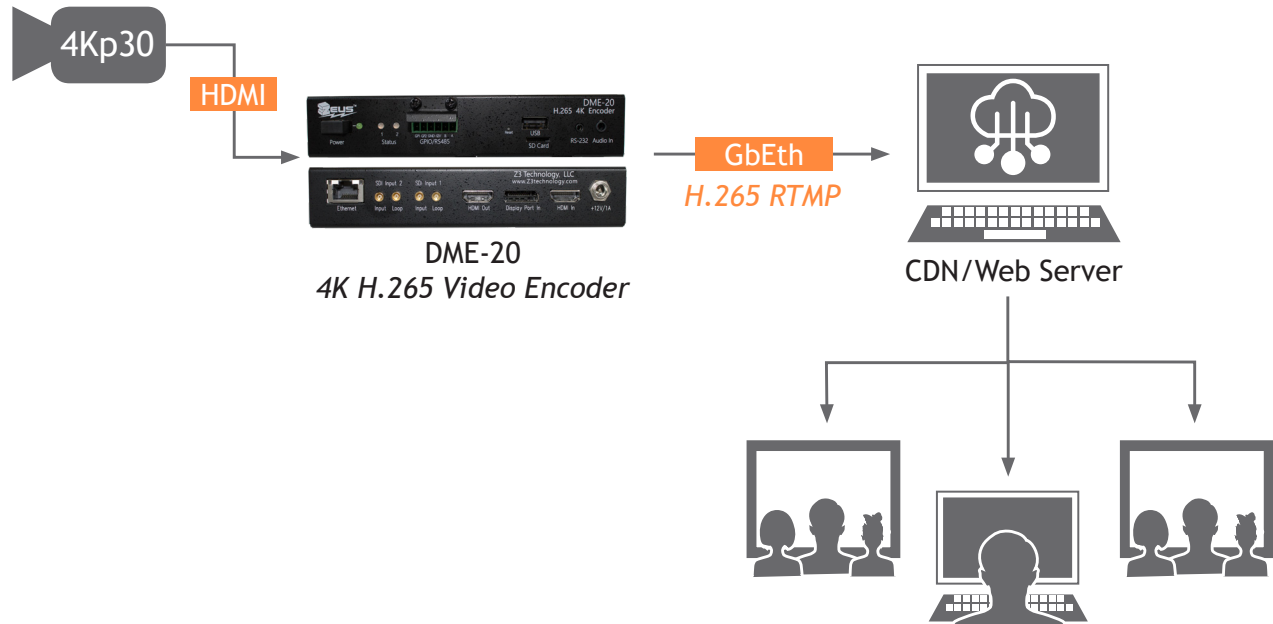
### ORDERING INFORMATION

#### Z3-DME-20

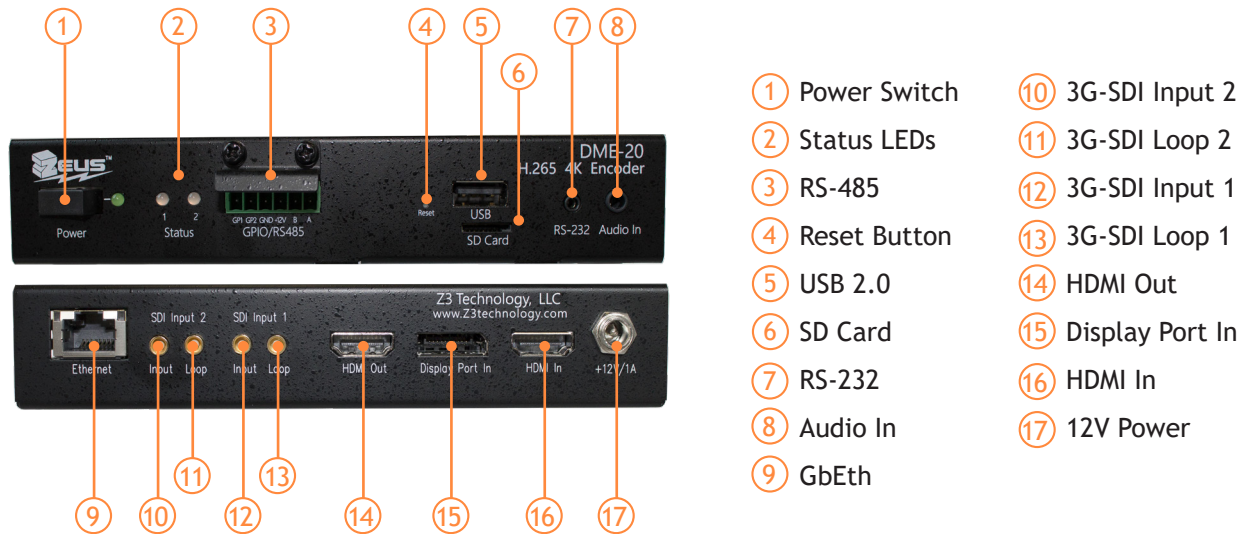
- Included cable kit
- 1.4A HDMI cable
- MCX to BNC Cable
- 12V Power Supply
- Serial Cable

## 4K H.265 Video Streaming

The diagram below demonstrates a video streaming application. 2160p30 video is being sent via HDMI to the Z3-DME-20. Once the video is received, the video is sent utilizing H.265 RTMP over Gigabit Ethernet to a CDN/Web Server (such as Wowza Streaming Engine) for distribution.



## Operating Controls



**\*Contact Z<sup>3</sup> Technology for Customized Product Options**  
[sales@Z3technology.com](mailto:sales@Z3technology.com) +1.402.323.0702 [www.Z3technology.com](http://www.Z3technology.com)



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