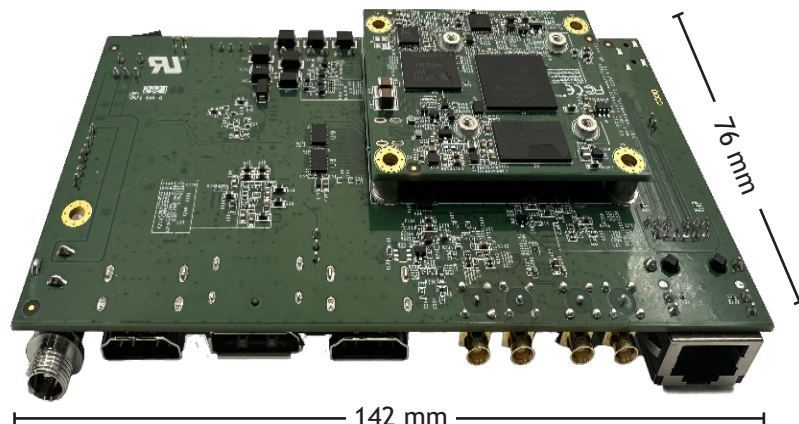# Dual 3G-SDI or 4Kp30 Encoder

Designed for Visible, IR and Display Encoding

HE2160

- H.265/H.264 Dual Video Streaming
- Interfaces with SDI, HDMI, and Display Port
- VESA Video Modes Supported
- Pass KLV Metadata
- Pass through with optional resizing HDMI Video

76 mm

142 mm

The HE2160 is a compact, NDAA compliant, video encoder designed for cybersecure H.264/H.265 video encoding up to 4Kp30 with optional storage options. The HE2160's combined feature set allows for low bandwidth low latency streaming, while recording and displaying real-time video on a monitor. The flexible control features allow this system to be used in a variety of applications. This low-power, production ready 4K or Dual HD encoder truly highlights the quality and versatility of Z3 Technology's hardware solutions.

Technical

Interfaces	• 2x 3G-SDI Input • 1x HDMI Input • 1x Display Port Input
•Recording	USB, Micro-SD, or NFS
•Additional Interfaces	GbE, Re-clocked SDI loop through, HDMI Passthrough, Audio Input, RS-485, GPIO + UART, RS-232 Serial
Video Codecs	H.265, H.264, MJPEG
Encoding Resolutions	4Kp30, 1080p and i080i (up to 60fps), NTSC & PAL, Laptop VESA Modes (up to 85fps)
Output Formats	RTP, RTSP, MPEG-2 TS, RTMP, RTMPS and SRT
Features	• Low Latency, Low Power • Cyber Secure Features Available • Simultaneous streaming and recording • Record to USB or Network File System • Control via HTTP web user interface, API, ONVIF or SSH/Serial • SRT Modes: Caller Sender, Rendezvous, & Encryption • Embedded KLV Metadata via SDI or Serial, MISB 0601 Compliant • High Precision Timestamps Across Multiple Streams, MISB 0604 Compliant • Picture in Picture Mode Supported or Two Separate Streams • 4 SDI Stereo Pairs • Live Video Preview in the Web User Interface

Specifications

Module Size	50 x 58mm (1.97 x 2.28 in)
Application Board Size	76 x 142mm (2.99 x 5.59 in)
Power Supply	12V DC
Power Consumption	6.5W

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ORDERING INFORMATION

HE2160-RPS
OEM Starter Kit
- Software SDK
- Documentation
- Power Supply
- Serial Cable
- 2x MCX to BNC Cables
- HDMI Cable

HE2160
OEM Production Set
- HE2160 Encoder Boards

Note: Cables sold separately

APPLICATIONS

Security and Surveillance

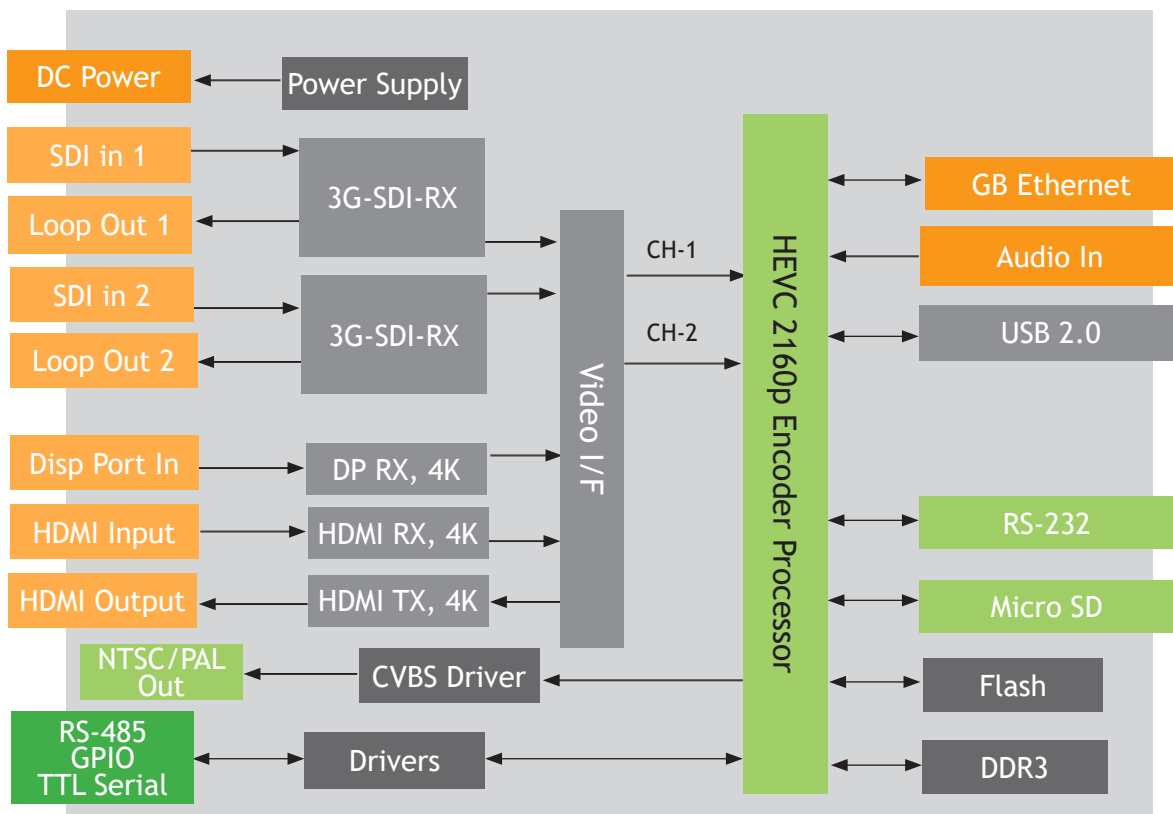Military Systems

Medical Applications

Customed Applications

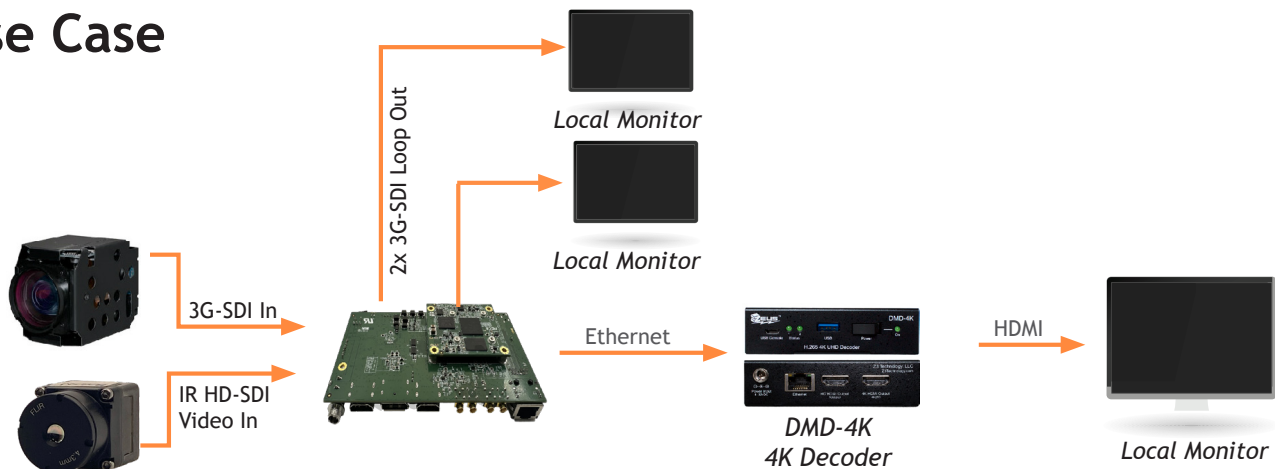***Contact Z³ Technology for Customized Product Options**

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www.Z3technology.com

HE2160 Encoder (H.265 3G-SDI x2)

- DC Power ← Power Supply
- SDI in 1 → 3G-SDI-RX
- Loop Out 1
- SDI in 2 → 3G-SDI-RX
- Loop Out 2
- CH-1, CH-2 → Video I/F → HEVC 2160p Encoder Processor
- GB Ethernet
- Audio In
- USB 2.0
- Disp Port In → DP RX, 4K
- HDMI Input → HDMI RX, 4K
- HDMI Output ← HDMI TX, 4K
- RS-232
- Micro SD
- NTSC/PAL Out ← CVBS Driver
- Flash
- RS-485 GPIO TTL Serial ← Drivers
- DDR3

Use Case

- 3G-SDI In
- IR HD-SDI Video In
- 2x 3G-SDI Loop Out → Local Monitor / Local Monitor
- Ethernet → DMD-4K 4K Decoder → HDMI → Local Monitor

Z³ Technology is an industry-leading, USA-based manufacturer of production-ready embedded multimedia solutions and IP camera systems. From our founders to our world-class engineers to our sales and customer service team, we understand your requirements and speak your language. Our experience allows us to provide cost-effective solutions to meet your multimedia product requirements. With the assistance of our robust worldwide distribution and sales networks, we can provide a simple solution for your multimedia needs.