

Portable Encoding and Streaming Devices



Professional Series of Portable H.264 Encoding and Streaming Appliances

Complete line of small and ultra-small H.264 encoders for Low-Latency delivery of SD HD video over IP up to 1080



- Faster, denser, more powerful and more cost-effective – Z-Band IP Systems diverse offering of portable, industrial-grade, H.264 streaming appliances offer a wide range of video and audio inputs formats combined with broadcast-grade compression quality.
- With advanced algorithm streaming technology, Z-Band IP System’s Portable ZEN appliances are ideal for low latency distribution of high-definition and standard-definition video sources across the enterprise network and to remote sites.
- Designed for stationary and portable applications, the portable encoders are uniquely designed without any moving parts making the units more robust and 100% silent. Whether on the ground, in the air or at the sea – the MIL-STD certified ZEN’s ingest and stream video from any source - anytime, anywhere and in any bit-rate.

Market Leader in Streaming Capacity

The Z-Band IP System’s Family of Z-Band Encoders (ZEN) boasts advanced, hardware-based video compression engines that encode and stream High Definition and Standard Definition IP video from digital and analog feeds. The ZEN Premier is the most dense, portable professional-grade H.264 AVC encoder in the market with processing power of up to 2xHD or 5xSD channels from unique video sources or a single input with up to 5 different compressed streams flavors.



Best-in-Class Connectivity Options

Integrating with any video environment - the Portable ZEN appliances offers the largest selection of inputs types in the industry including 3G, HD-SDI, SD-SDI, DVI, HDMI, Composite, and S-Video. A built-in video matrix and scaler enable the operator to downscale incoming resolutions and frame rates as well as to route a single video source to multiple compression cores for encoding up to five different resolutions and frame rates at the same time.

Low latency Streaming

Powered by Z-Band IP System's advanced algorithm streaming technology. ZEN Premier and ZEN Classic deliver superb HD quality streams with under than 65 milliseconds encoding latency, while ensuring uncompromised quality of service and smooth playback.

Fully Secure End-to-End IP Video Delivery Solution

Featuring hardware-based AES encryption module – the portable ZEN appliances can be used to provide a fully secure end-to-end IP video delivery solution in conjunction with Z-Band IP Systems ZIP Portal IPTV Software Systems or with the ZEN Premier Decoder appliance that support the AES decryption capability.

The Most Complete Offering for delivering Situational Awareness Video and ISR imagery with KLV Metadata

Z-Band IP Systems Portable ZEN encoders have been deployed on numerous manned and unmanned vehicles as well as in use by various corporate and education projects. The appliances feature a rugged design, with no moving parts, combined with real-time embedded video and metadata processing that ensures delivery of critical video and telemetry data in harsh environments. The units ingest Cursor-on-Target (CoT) and Key-Length-Value (KLV) metadata and generate MISB/STANAG compliant streams. Innovative image stabilization chip incorporated into the ZEN Premier and ZEN Classic encoders enhance viewing quality in real-time and allows for reducing bandwidth requirements when streaming motion-intensive content.

Benefits

- High density with multiple encoding engines up to 2xHD or 5xSD concurrent channels
- Best selection of video inputs in a single platform: 3G, HD/SD-SDI, HDMI, DVI, Composite
- Compact form factor - ideal for mobile applications
- 100% silent, fan-less, securable enclosure, optimized for extreme environments
- Transport infrastructure agnostic: Satellite, xDSL, LANs, WANs,
- 3G/4G/LTE and FTTx
- Industry-standard, open architecture allows decoding TurboVideo™ streams with any H.264 players in low delay
- Same video performance and in multiple size and density options -optimize your encoder selection for your specific application
- Low power consumption – drive encoders on-the-go with battery packs. Battery cables available by Z-Band, IP Systems

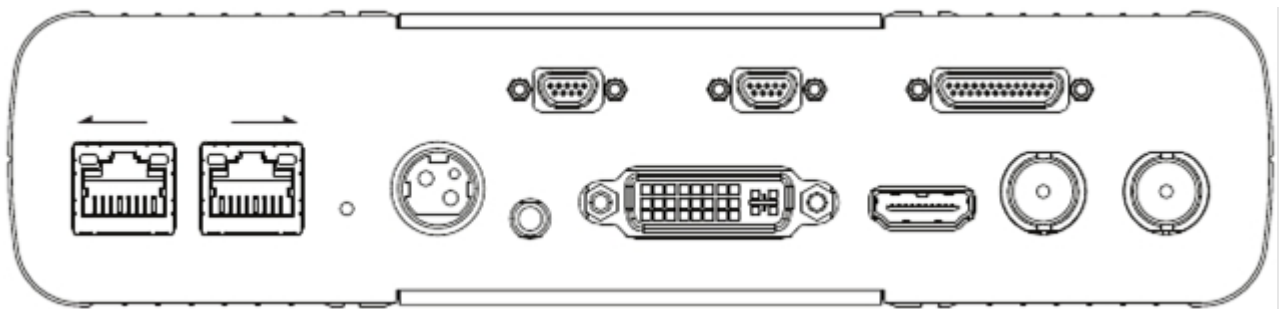
Applications

- Streaming IP video to TV's and desktops on any organization's network
- Dissemination of Situational Awareness and FMV content across LANs and WANs
- Intelligence Security and Surveillance (ISR) video from mobile and airborne vehicles
- Full HD 1080p60 monitoring and Command and Control
- Encoding and multicasting High-Res HDMI / DVI / Computer sources
- Mirroring PC applications on large screens and software IPTV players
- Point-to-Point video contribution with ultra low delay
- Digital signage video streaming

Key Features

- Superb HD and SD H.264 AVC compression quality - up to Full HD 1080p
- Supports a wide range of bit rates, frame rates and resolutions
- Less than 65 milliseconds latency with metadata insertion
- Built-in AES encryption, interoperable with VITEC's software players and
- MGW Premium Decoder appliance
- KLV and CoT metadata processing – ingest from serial, IP and SDI (VANC)
- Ability to encode a video source up to 5 times at different resolutions and data rates in parallel
- API for integrating control and monitoring using 3rd party software.
- Built-in Scaler - convert and scale high resolution imagery to any size and rate

Zen Premier



Zen Classic

