VITEC Encoder & Decoder Appliances

VITEC encoder & decoder appliances are compact, flexible devices which deliver low-latency, high-quality video using high-performance codecs.

VITEC encoders enable video to be streamed directly onto an IP network, creating channels from the output of a wide range of sources, including broadcast feeds, cameras, TV set-top boxes, digital signage systems and computers. They are designed to minimize glass-to-glass latency over any IP network including the internet.

Appliance encoders & decoders are small and portable, ideal for use in environments where size, weight and power (SWaP) considerations are important.

VITEC Appliance Encoders & Decoders

VITEC's range of portable encoding and decoding streaming appliances deliver broadcast-quality video with minimal latency, at any bitrate, and using industry standard HEVC/H.264 or MPEG-2 video compression.

The industrial-grade construction, combined with VITEC's 100% hardware processing, make the appliance family of encoders and decoders ideal for any point-to-point video streaming and IPTV application, stationary or in the field.

VITEC appliance encoders and decoders are used for a variety of applications such as:

- IPTV distribution
- Point-to-point and multi-site IP video streaming
- Contribution over the internet/remote contribution
- Streaming Intelligence, Surveillance and Reconnaissance (ISR) video feeds from ground and airborne vehicles over RF or satellite link
- Streaming video to desktop/laptop, TV and mobile devices

Encoders

MGW Diamond-H Encoder

MGW Diamond-H is a portable appliance featuring impressive size, weight and power (SWaP) characteristics. It provides best-in-class video quality over industry standard video/audio connectivity.

MGW Diamond-H encodes up to 4x channels from 2x sources at HD resolution, or 1x at 4K. Offering 2x HDMI 2.0 and 1x 12G SDI inputs makes MGW Diamond-H a flexible portable appliance for IPTV distribution or site-to-site streaming within corporate, sports or broadcast markets.

- 2x HDMI and 1x SDI input
- 1x 4Kp60 or 2x HD HEVC/H.264 encodes
- Up to 4x output streams with 4:2:2 10-bit encoding and HDR support
- 32x audio channels
- Closed-caption support
- AES encryption to secure content & metadata
- HDMI loopthrough and Power-over-Ethernet (PoE+) support
- USB recording for storage and review of footage

MGW Diamond Encoder

Like MGW Diamond-H, MGW Diamond is also a portable appliance featuring optimised size, weight and power (SWaP) characteristics.

MGW Diamond captures up to 4x 3G/HD/SD-SDI or Composite inputs and streams up to 8 live channels, addressing diverse applications within sports, enterprise, defense and surveillance markets.

- 1x 12G-SDI and 4x 3G-SDI inputs
- 1x 4Kp60 or 4x HD HEVC/H.264 encodes
- Up to 8x output streams with 4:2:2 10-bit encoding and HDR supprt
- 32x audio channels
- Closed-caption support
- AES encryption to secure content & metadata
- KLV/STANAG metadata processing for ISR applications

MGW Pico Encoder

MGW Pico is a seriously small yet hugely powerful portable encoding appliance. Designed for applications where size, weight and power (SWaP) are of utmost importance, MGW Pico packs the ability to provide two simultaneous H.264 encoding channels (HD+SD) with on-the-fly bit rate change, advanced scaling and frame rate sampling, all into a tiny enclosure with no moving parts.

- 3G/HD/SD-SDI and Composite input
- 1x HD and 1x SD simultaneous encodes
- Ultra-small form factor with under 6W power consumption
- KLV/STANAG metadata processing for ISR applications
- Full-frame snapshot capture delivered over IP or stored in internal memory

MGW Ace Encoder

MGW Ace Encoder is an HEVC/H.265 hardware encoder packaged in a professional grade portable streaming appliance. Delivering the industry's best video quality, MGW Ace Encoder enables users to stream broadcast quality HD/SD video with up to 50% bandwidth savings compared to H.264.

From live news broadcasting in the field, point-to-point contribution of HD video, live streaming from or within sports venues to distribution of mission-critical military imagery, the MGW Ace makes it more efficient than ever to deliver the highest quality IPTV streams over satellite links, private networks and over the internet.

- SDI, HDMI and Composite inputs
- 1080p60, 4:2:2 10-bit HEVC encoding with HDR support
- Glass-to-glass latency as low as 16ms when paired with MGW Ace Decoder
- Closed-caption support
- AES encryption to secure content & metadata
- Up to 16 channels of audio decoding
- KLV/STANAG metadata processing
- Portable, low-power hardware design

Decoders

MGW Ace Decoder

MGW Ace Decoder delivers broadcast quality, low-latency and reliable decoding for demanding professional applications

MGW Ace Decoder is a single channel, multi-codec decoder that delivers reliable, broadcast-quality decoding of HEVC, H.264 or MPEG-2 streams up to 4Kp60 with HDR support.

- HEVC, H.264 & MPEG-2 low-latency decoding of UHD/HD or SD IP feeds
- Broadcast-quality decoding up to 4:2:2, 10-bit with HDR support
- Glass-to-glass latency as low as 16ms when paired with MGW Ace Encoder
- Up to 16 channels of audio decoding
- Reliable, low-latency stream delivery with built-in Zixi™, SRT, RIST and ProMPEG stream protection
- Rich, industry-standard video and audio output interfaces to match any setup
- Time-synchronized playback across several decoders

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