World's Fastest H.264 Streaming Solution

MGW Sprint

Sub One-Frame H.264 HD IPTV Encoder / Decoder Appliance

VITEC
VIDEO INNOVATIONS

MGW Sprint

Sub One-Frame H.264 HD IPTV Encoder / Decoder Appliance

MGW Sprint is a professional-grade IPTV appliance running the world's fastest MPEG-4 H.264 HD codec. With only several milliseconds for encoding and decoding - MGW Sprint units can stream Full HD 1080p60 video and audio, point to point or point to multipoint with less than one video frame of delay- practically matching the latency of hard-wired uncompressed video systems.

TurboVideo2™ - Full HD 4:2:2 H.264 zero-delay-codec

MGW Sprint uses VITEC's revolutionary sub one-frame TurboVideo2™ technology for broadcasting H.264 IP streams in unicast or multicast, over wide range of network types, while maintaining superb video quality suitable for any video application. From encoding stationary HD cameras, through real-time distribution of imagery from high-resolution computer graphics applications, to motion-intensive broadcast and ISR video - TurboVideo2™ delivers crisp, details - rich video over IP in unprecedented speed and with no visually noticeable delay.

Compact Design Blends High-Performance IPTV Service with Versatile Form Factor

Designed for both stationary applications and for the field, MGW Sprint Encoder and MGW Sprint Decoder appliances are compact, rugged and built to last. The units are rated for extreme applications and provide the reliability needed for mission critical Full-Motion-Video and 365x24x7 IPTV services.

Secure, Intuitive Web Management Interface for Rapid Configuration and Control

MGW Sprint Encoders and Decoders feature a user-friendly HTTP interface that enables easy management and control of the codec's over the local network or from remote. Designed for maximum performance and quick setup - the appliances auto-save last known configuration making it easy to rapidly start sending/receiving IP Video content anytime, anywhere using any video source.

Benefits
- World's fastest professional-grade H.264 HD Codec - IP Video with no visible delay
- Portable, compact - optimized for field use and for mounting in IT racks
- 3G/HD-SDI and HDMI encoding and decoding - up to Full HD 1920x1080p60
- 4:2:2 Encoding Mode for highest level of details - ideal for complex video content
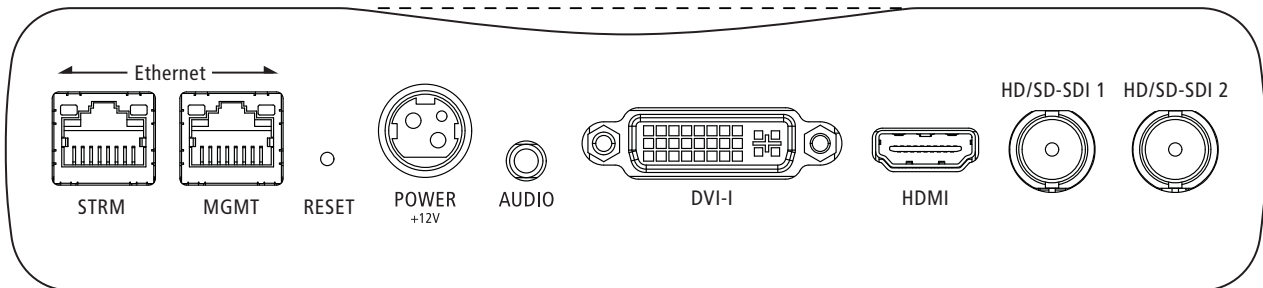
Applications

- Point-to-Point video contribution
- Military and Medical Simulators
- IP Broadcasting of high-res HDMI / DVI sources from computers and TV Tuners
- Digital Signage
- Hospitality
- Targeting, Monitoring and Tactical ISR
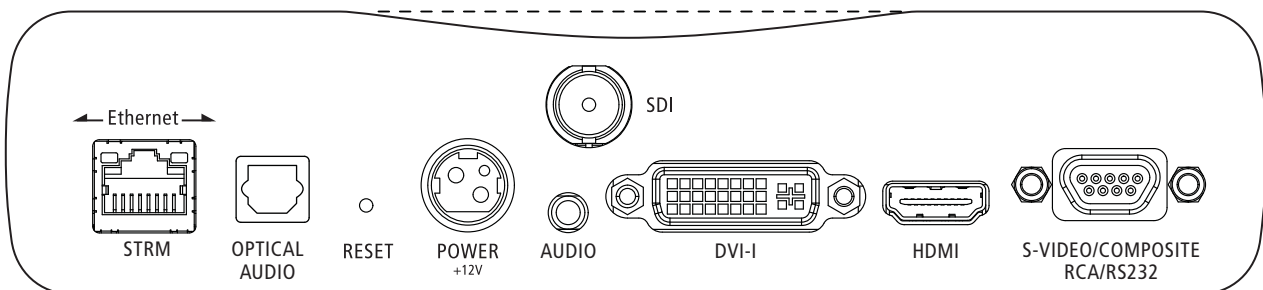- Zero delay Video Tele-presence

Key Features

- Ultra low latency encoding and decoding technology - TuboVideo2™ leading to sub one frame end-to-end streaming latency (15ms glass-to-glass)
- 3G/HD-SDI, DVI and HDMI encoding inputs - validated with Cable and Satellite TV HDMI receivers
- Unique design with no moving parts simplifies installation and mounting options
- Session Announcement Protocol (SAP)
- Compatible with all major H.264 software/hardware decoders

Rear Panel Interfaces

MGW Sprint Encoder

Ethernet — STRM — MGMT — RESET — POWER +12V — AUDIO — DVI-I — HDMI — HD/SD-SDI 1 — HD/SD-SDI 2

MGW Sprint Decoder

Ethernet — STRM — OPTICAL AUDIO — RESET — POWER +12V — AUDIO — SDI — DVI-I — HDMI — S-VIDEO/COMPOSITE RCA/RS232

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Technical Specifications

Video Format
- H.264 (ISO\IEC 14496-10 AVC MPEG-4 part 10) Modes:
  - o Main Profile L3 and L4
  - o High Profile L4 and L4.2
- Color Sampling: 4:2:2 and 4:2:0
- Bit Rate: 5 Mbps - 40 Mbps
- Resolutions: Configurable up to Full HD 1920x1080p
- Frame Rate: 25-60 fps

Audio Format
- Embedded audio, PCM stereo and mono modes
- Bit Rate: 48 Kbps - 196 Kbps

I/O Interfaces - Encoder
- Input Resolutions:
  - o 1024x768p50/60/75
  - o 1280x800p50/60
  - o 1366x768p50
  - o 1280x720p25/29.97/30/50/59.94/60
  - o 1920x1080p23.976/24/25/29.97/30/50/59.94/60
- Video Input:
  - o 1 x 3G / HD-SDI
  - o 1 x HDMI with support for HDCP / non-HDCP sources
- Audio Input:
  - o Embedded audio via HD-SDI / SD-SDI
  - o Embedded audio via HDMI
- Ethernet:
  - o 1 x RJ45 10/100/1000 Mbps Base-T for streaming/ management

I/O Interfaces - Decoder
- Video Output:
  - o 1 x 3G / HD-SDI / SD-SDI
  - o 1 x HDMI with support for HDCP / non-HDCP sources
- Audio Output:
  - o Embedded audio via HD-SDI / SD-SDI
  - o Embedded audio via HDMI
- Ethernet:
  - o 1 x RJ45 10/100/1000 Mbps Base-T for stream input/management

Network Protocols
- Streaming:
  - o RTP/RTCP unicast and multicast
- Peripheral:
  - o HTTP, SAP, IGMP

Management
- HTTP Web based remote management application
- Remote firmware and software upgrade capability

Physical
- Enclosure: professional-grade rugged aluminum case, portable and rack-mount options
- Dimensions: 42.92mmH x 190mmW x 118mmD (1.69"H x 7.48"W x 4.64"D)
- Weight: Encoder 1.11 Kg (1.90 lbs), Decoder 1.05 Kg (2.31 lbs)
- Power Consumption: 9-12 VDC, max 15W
- Front LED's for power, network activity, streaming and video source indications
- Mounting holes for seamless installation in vehicles, silent operation

Environmental
- Operating Temperatures: 0º C to 50º C (32º F to 122º F)
- Relative Humidity: 5% to 95% (non-condensing)
- MTBF: Ground Benign – 5.15 years. Airborne Inhabited Cargo – 8.59 years (as per MIL-HDBK-217F, 30ºC)
- EMC Standards: FCC part 15 class A and CE
- Not controlled under ITAR
- TAA Compliant

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