MGW Premium Decoder
Portable, Rugged IPTV Decoder for HD/SD Video Streams
MGW Premium Decoder is a high-performance IP decoding appliance for standard definition and high definition MPEG-2 and MPEG-4 H.264 streams. The MGW Premium Decoder features a flexible selection of output interfaces including SDI, HDMI and Composite video in a fan-less, rugged design suitable for stationary or field use. Support for ProMPEG Forward Error Correction (FEC) as well as Zixi Error Correction Technology assures reliable, secure and highly error-free delivery of live video and audio.

Unique Compact Footprint for Professional-Grade Decoding

MGW Premium Decoder uses discrete hardware to provide a real-time, broadcast-quality picture with the highest quality of service and resilience required in complex IPTV environments. The highly compact design offers the flexibility of using the appliance for portable missions as well as a stationary decoder for 24x7 applications. The optional rack mount kit secures two units side by side in one standard 19” rack unit.

Best-in-Class Connectivity Options

MGW Premium Decoder offers the highest flexibility with video outputs including HD-SDI, SD-SDI, HDMI and Composite video, with embedded audio or separate analog audio in a single appliance. The built-in scaler offers simultaneous play out of HD and a downscaled SD copy of decoded video.

Reliable and Secure Delivery with ProMPEG FEX and Zixi Error Correction

MGW Premium Decoder includes Hardware-implemented ProMPEG Forward Error Correction (FEC) as well as the highly-efficient Zixi error correction technology. These protocols can be used with VITEC’s Portable Encoders or with 3rd party encoders that support these error correction technologies to deliver reliably, artifact-free video and audio over public networks with minimal delay at any bit-rate from 500kbps to 10Mbps. The appliance can decode streams from Zixi Broadcaster servers or be used for point to point applications using VITEC’s MGW Nano and MGW Premium encoders.

Integrated & Secure End-to-End IP Video Delivery Solution

MGW Premium Decoder can be used as a stand-alone high quality, low delay decoder or in conjunction with VITEC EZ TV and FITIS IPTV Systems to provide a fully secure end-to-end IP video delivery solution utilizing its real-time AES decryption capability. The tight integration with VITEC’s IPTV and FMV video management and delivery solutions enables the use of the appliance as an end-point to view live and on-demand content and browse channel information using a visual Electronic Program Guide (EPG). Video operators can regulate access to content on each appliance using Active Directory by activating the built-in AD Authentication module in the decoder.

Low Delay Decoding

Combined with the low latency streaming capabilities of VITEC’s MGW Encoding and Streaming Platforms, the Premium Decoder offers low latency decoding of HD and SD streams with end-to-end latency of 400 milliseconds.
Benefits
- Small form factor, ideal for mobile applications
- HD and SD decoding of MPEG-1, MPEG-2 and MPEG-4 H.264 streams
- Rugged, fan-less, securable enclosure, optimized for harsh environments
- Industry standard ProMPEG FEC and Zixi Error Correction Technology
- Transport infrastructure agnostic: Satellite, xDSL, LANs, WANs, 3G/4G/LTE and FTTx
- Integration with EZ TV IPTV System and FITIS ISR Systems with EPG and AES support
- Optional rack-mount kit secures up to two units side by side using 1-RU in standard 19” rack

Applications
- Point-to-Point contribution of high quality video and audio over public or private networks
- Broadcast-quality decoding of HD and SD IPTV streams
- Displaying of Situational Awareness and Full Motion Video (FMV) content on monitors, video walls and personal screens
- Digital signage
- Streaming PC content over IP and displaying on large screens

Rear Panel Interfaces
Technical Specifications

Supported IP Input Stream Formats:
- MPEG-4 H.264 HP@L4 up to 20.0 Mbps
- MPEG-4 H.264 MP@L3 up to 20.0 Mbps
- MPEG-4 H.264 BP@L2 up to 10.0 Mbps
- MPEG-2 MP@HL up to 20.0 Mbps
- MPEG-2 MP@ML up to 12.0 Mbps
- MPEG-1 up to 2 Mbps

Resolutions: QCIF - Full HD 1920x1080
Frame rates: 1-60
Color systems: PAL and NTSC
Aspect Ratio: 4:3 and 16:9
Streaming Protocols: UDP TS, RTP TS, ProMPEG FEC, Zixi
Multicast and Unicast

Supported Audio Formats:
- MPEG-1 L2
- AAC, AAC-LC, AAC+

Input Interface:
- 1 x 10/100 Ethernet port

Output Interfaces:
- 2 x HD/SD-SDI
- 1 x HDMI
- 1 x Composite
- 1 x mini-jack for unbalanced stereo audio
- Embedded audio on HD/SD-SDI and HDMI interfaces

Ordering Information
14641 -> MGW Premium Decoder SD
14907 -> MGW Premium Decoder HD

Customers may upgrade SD units to HD by purchasing a firmware upgrade

Electrical:
- Input Power: 90 - 240VAC
- Max. Power Consumption: 6W

Management:
- SSH application for system configuration and remote management
- On-screen graphical interface for system configuration and browsing live and on-demand content from EZ TV / FITIS Systems
- Remote firmware and software upgrade capability via command line
- Telnet/SSH API for integration with third-party systems

Compliance:
- Operating Temperatures: 0°C to 40°C (32°F to 104°F)
- Relative Humidity: 5% to 95% (non-condensing)
- EMC Standards: FCC part 15 class A and CE

Physical:
- Enclosure: Military-grade rugged aluminum case, portable and rack-mount options
- Dimensions: 43mmH x 190mmW x 198mmD
  (1.69"H x 7.48"W x 7.79"D)
- Weight 4.20 lb (1.90 Kg)
- Fan-less design with mounting holes for securing to walls
- Optional racking-kit for standard 19" wide IT racks