

MGW Micro

Portable Rugged H.264 Encoder with
Metadata Support



MGW Micro is an industrial-grade, MPEG-4 H.264 IP encoder designed for the most extreme environments. Optimized for mission critical ISR applications, MGW Micro offers real-time, low latency streaming of live video sources in a portable, ruggedized airborne-ready foot print. MGW Micro offers built-in capability of converting CoT metadata to KLV and streaming the FMV with metadata.

MGW Micro is the smallest, professional grade, rugged MPEG-4 H.264 Full Motion Video (FMV) encoder available, optimized for mobile and airborne platforms as well as mission critical deployments. MGW Micro uses advanced MPEG-4 AVC (H.264) video compression, to ensure excellent video stream quality and using low bandwidths. With advanced video processing features such as real-time metadata insertion, video masking, metadata insertion, text overlay and boot up time of 2 seconds the Optibase MGW Micro is the optimal solution for UAV's and other ISR applications.

With its unique robust construction and no moving parts, the MGW Micro withstands extremes environmental conditions of -40°F to 158°F (-40°C to 70°C), 5%-95% relative humidity without compromising operation and quality of service. The auto-saved configuration feature allows operator to recover encoding and streaming service immediately after the unit is powered-up.

Use MGW Micro with Optibase EZ TV or FITIS IPTV Systems and provide an end-to-end IP video delivery solution using your existing IP infrastructure. With the advanced Optibase IPTV Player, local and remote network users permitted will be able to access and view MGW Micro streams and watch situational awareness and tactical video in multi-window mosaic views.

Benefits

- Ultra small form factor, ideal for mobile applications
- Rugged, securable enclosure, optimized for extreme environments
- Suitable for any transport infrastructure Satellite, xDSL, LANs and WANs
- Enables access to situational awareness and tactical video from the edge

Applications

- Tactical Video / KLV Metadata Insertion
- Intelligence Security and Surveillance (ISR)
- Mobile and Airborne Vehicles
- Point to Point Contribution
- Monitoring

Key Features

- Superb full motion video MPEG-4 H.264 compression
- Supports a wide range of bit rates, frame rates and resolutions
- CoT to KLV conversion and streaming
- Airborne-ready rugged design with no moving parts
- Streams FMV sources in low latency with metadata insertion
- Masking, text overlay and IP tunneling
- Low power consumption of less than 5W
- Withstands extreme temperatures: -40°C to 70°C (-40°F to 158°F)

Technical Specifications

Video

Standards: H.264 baseline and main profile

Bit Rate: 64 Kbps - 2.2 Mbps

Frame Rate: 5-30 fps

Bit Rate Regulation Modes: Constant / Variable

Resolutions: QCIF / CIF / 2CIF / HalfD1 / Full D1

Low Latency: Encoding / Decoding < 200ms

Network

Streaming Protocols: UDP, RTP, RTSP, SDP (unicast or multicast mode)

Supported protocols: TCP, UDP, HTTP, DHCP, NTP, SAP, SDP

Alarm

Triggers:

Video signal loss, Video Obstruction, Camera Movement, Video Blur, System Failure, Digital Input (40V/100mA), VMD (Video motion detection)

Resulting Actions:

Text on screen display, digital output (40V/100mA), LED, user message via TCP command

System

Management: Web based remote management application (HTTP) with remote firmware upgrade capability

Audio

Standard: AAC-LC (mono)

Bit Rate: 32 - 64 kbps

Sampling Rate: 8 kHz - 48 kHz

Interfaces

Video: 1 x BNC input

Audio: 1 x mono input

Ethernet: RJ45 10/100 Mbps Base-T

Serial Links: 1 x RS232/RS422/RS485

Power: Jack connector

Physical

Enclosure: rugged metal case

Dimensions: 130 mm x 30 mm x 105 mm (5.12" x 1.18" x 4.13")

Weight: 0.85 lb

Power Consumption: 9-12 VDC, max 5W

Environmental

Operating Temperatures: -40°C to 70°C (-40°F to 158°F)

Relative Humidity: 5 to 95% (non-condensing)

EMC Standards: FCC part 15 class B and CE