

H.264 HD/SD VIDEO ENCODER, COMPACT/RUGGED

TECHNICAL SPECIFICATIONS

FEATURES

- Real-time, HD or SD, Full-motion Video (FMV) compression up to 1080p resolution
- H.264 video compression for full-motion video even at low bit rates
- Primary/Secondary Channel Encoding
- MISB/STANAG Compliant
- Ethernet Output Interface (UDP-IP)
- Metadata Support - Synchronous/Asynchronous (optional KLV Encoding)
- <50ms Encode Latency
- Fully configurable network interface
- Data Rates from 64Kbps to 15Mbps
- Stereo/dual-channel audio inputs
- MPEG-1 Layer I/II Audio Compression
- RS-232 or Ethernet port configurable
- Compact, lightweight Chassis
- -40°C to +70°C Operation



Delta's Model 6805R H.264 HD/SD Video Encoder provides for the transmission of full-motion video for ISR applications. Primarily designed for small aircraft, the 6805R is a rugged, compact unit with all the features of Delta's JITC certified video encoder products. These include, standards-compliant video compression, KLV metadata processing, and transport stream multiplexing.

Utilizing H.264 (MPEG-4 AVC) encoding, the 6805R provides flexibility for optimizing video performance for any given bit rate. User-configurable parameters permit the user to adjust the video/audio/data features in accordance with mission requirements.

The 6805R is built around an advanced, high-speed, multi-media processor working with a fully optimized codec. Delta's technology has been integrated, tested, and flown in numerous applications with various airborne platforms and is compatible with MISB and STANAG standards. It is compatible with other Delta products and can be easily integrated with standards-compliant processing, dissemination, and exploitation (PED) systems.

The unit has a fully-configurable network interface for transport stream transmission making it a "drop-in" for digital datalink applications. The 6805R is easily configured via Ethernet (web GUI or Telnet) or serial connection.

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VIDEO

Input SDI/Composite
Format SMPTE/NTSC/PAL
Resolutions 1080p29/30; /720p59/60;1080i59/60;
480i29/30; 576i25
Connector Circular MIL or Optional BNC

AUDIO

Ports Two
Channels None, Left, Right, Stereo
Format Differential Line Level
Levels 2.8Vp-p (1Vrms)
Impedance 10K Ohms
Connector Circular MIL

METADATA INTERFACE

Protocol KLV/Clear
Format RS-232/Ethernet
Connector Circular Mil

CONTROL

Ports Two
Format RS-232: Terminal Emulation
Format TCP/IP: Web Browser/Telnet

POWER

Input 18-36VDC
Watts 7W
Connector Circular Mil

MECHANICAL

Size 3.6" x 3.087" x 1.177" (91.4 x 78.4 x 30.0)
Weight 8oz (.227kg)

VIDEO COMPRESSION

Algorithm H.264 /MPEG-4 AVC (Part 10)
Format H.264 Baseline/Main/High Profiles
GOP Structure Inter/Intra; I/IP

AUDIO COMPRESSION

Algorithm MPEG-1 Layer I/II
Sample Rates 8K/16Ksps
Sync Lip synchronized with video

TRANSPORT STREAM

Ports One
Format Ethernet (UDP/IP)
Protocol ISO/IEC 13818-1
MPEG-2 Transport Stream
Data Rate 64Kbps to 15Mbps
Format 10/100 Ethernet IP
Configuration DHCP or Static Address
Selectable Ports
Unicast/Multicast
Connector Circular Mil

LATENCY

Encoder ~50ms

ENVIRONMENTAL

Temperature -40°C to +70°C
Altitude 35,000 Feet MSL
Humidity 95% RH, non-condensing
Vibration HALT Testing Profile
Shock 21.5g Peak, Half-sine, 8ms
Salt Fog MIL-STD-810 Method 509.4

Electromagnetic Environments

Radiated Emissions MIL-STD-461 RE102
Conducted Emissions MIL-STD-461 CE101
Conducted Power MIL-STD-461 CE102
Leads

