

FEATURES

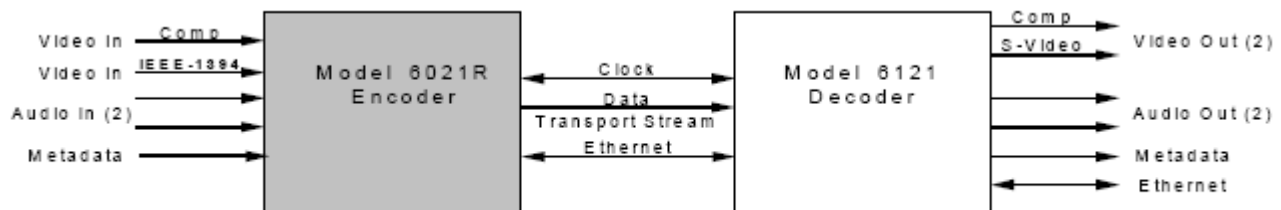
- Real-time digital transmission of broadcast video
- H.264 Baseline Profile (ISO/IEC 14496-10)
- Video, audio, and data multiplexing
- NTSC/PAL
- Data rates from 64k to 6Mbps
- Low latency modes
- Multiple resolution modes
- Stereo audio
- User data
- FEC
- Compact, flight-worthy package
- Metadata Support (optional KLV Encoding)
- MISB Compliant



Delta's Model 6010R is an airborne encoder that compresses video and audio signals, multiplexing them with data and other system information for transmission to a remote decoder unit. The 6010R uses the H.264 (MPEG-4 Part 10) video compression algorithm to provide high-quality video even with large compression ratios. The H.264 standard is the latest compression algorithm and is designed to facilitate the transmission of full resolution, full frame rate, motion imagery in less bandwidth than its predecessors (Wavelet/MJPEG/MPEG-2).

The 6010R is easily integrated into most airborne telemetry systems. The standards-compliant transport stream is output on a synchronous serial interface (RS-422) for direct connection to the data link or recorder. The transport stream can be applied to one of Delta's H.264 decoders or played through an H.264-compliant software decoder.

Control of video, audio, and system parameters permit the user to optimize video performance for any given bandwidth. Control is provided through a Windows application via an RS-232 port.



H.264 VIDEO / AUDIO ENCODER, RUGGED**VIDEO INPUT**

Ports One
Format NTSC/PAL Composite
Levels Comp: 1.0Vp-p
Impedance 75 ohms/Hi-Z (Selectable)
Connector TNC

VIDEO COMPRESSION

Algorithm ISO/IEC 14496-10
H.264 Baseline/Main Profile
ISO/IEC 13818-2
MPEG-2 MP@ML
Modes H.264: I-Only/IP
MPEG-2: I-Only/IP/IPB
Resolution D1/2CIF/CIF
Frame Rate 1-30 (25 for PAL)

MULTIPLEX

Protocol ISO/IEC 13818-1
MPEG-2 Transport Stream
Video/Audio/Data

TRANSPORT STREAM

Ports Two
Interface 1 Synchronous Serial(RS-530)
Levels RS-422
Data Rate 64Kb to 10Mbps
Connectors Circular MIL
Interface 2 10/100 Ethernet IP
Format UDP/IP
Data Rate 64Kb to 10Mbps
Configuration DHCP or Static Address
Selectable Ports
Unicast/Multicast
Connector Circular MIL

METADATA (USER DATA)

Levels RS-232
Connector Circular MIL

AUDIO INPUT

Ports One
Channels None, Left, Left and Right*
Format Balanced (Line Level)
Levels 2.8Vp-p (1Vrms)
Impedance 10K Ohms
Gain 0 to 64 db*
Connector Circular MIL

AUDIO COMPRESSION

Algorithm ADPCM
Sample Rates 8K/16K/32Ksps
Synchronization Lip synchronized with video

CONTROL

Ports Two
Port 1
Protocol Windows Application
Levels RS-232C
Connector Circular MIL
Port 2
Protocol TCP/IP
Platform Windows
Connector Circular MIL

ENVIRONMENTAL

Temperature -40°C To +85°C
Vibration MIL-STD-810F, Method 514.5
Shock MIL-STD-810F, Method 516.5
Humidity MIL-STD-810F, Method 507.4
EMI/EMC MIL-STD-461

POWER

Voltage +28VDC (IAWMIL-STD-704/641)
Power 7 Watts
Connector Circular MIL

SIZE

Dimensions: 1.6"H x 4.5"W x 7"D
Weight: 2.1 lbs.

