



Perfect Video over Any Network

QVidium[®] MPEG2+4 IP Codec

The QVidium[®] MPEG2+4 IP Codec provides a compact and reliable solution for transporting live NTSC and PAL video streams across an IP network. QVidium's MPEG2+4 IP Codec implements QVidium's patented ARQ error correction as well as the latest version of the Pro-MPEG Forum's standard, *Code of Practice (COP) 3 release 2* with Forward Error Correction (FEC) for reliable and interoperable video transport.

The QVidium[®] MPEG2+4 IP Codec can be quickly configured through its easy-to-use web interface as either an encoder or decoder, or both. As an encoder digitizes composite or S-Video video signals, along with stereo audio, compresses them using MPEG-2 (MP@ML) or MPEG-4 (SP@L1, L2 & L3, Full D1 & interlacing) 4:2:0 and MPEG-1 Layer-II audio compressions, multiplexes the video and audio streams and produces a DVB-compliant MPEG-2 Transport Stream. It can accommodate both PAL and NTSC video formats. As a decoder, it will accept any ProMPEG, RTP/IP, or UDP/IP encapsulated MPEG-2 transport stream, and decodes MPEG2 and MPEG4-SP video through its S-Video and composite outputs.

It encapsulates the video transport stream into IP packets using the UDP or Real Time Protocol (RTP) for complete interoperability with Set-Top Boxes (STB) and other UDP and RTP compliant gateways.



The encoder is fully compliant full Pro-MPEG COP #3 standard for complete interoperability with QVidium's and third-party networked video devices that also comply with the Pro-MPEG standard.

The QVidium[®] MPEG2+4 IP Codec includes two forms of error correction: ProMPEG FEC and QVidium's patented ARQ. This full video transport quality can be maintained even in the face of packet loss, packet duplication and packet re-ordering from the IP network when used in conjunction with a Pro-MPEG FEC or QVidium ARQ compatible receiver.

The QVidium[®] MPEG2+4 IP Codec is simple to set up and maintain. An intuitive web interface control allows configuration and monitoring from any location on the network using a standard web browser from any networked computer. The system also supports Telnet and FTP access.

Benefits and Features

- Advanced **error correction**, selectable between Pro-MPEG COP 3 Release 2 FEC and QVidium's patented ARQ, maintains video transport quality despite packet loss, reordering, and duplication.
- QVidium's advanced **packet pacing** eliminates large packet bursts that can impair video transport.
- Compliance with **DVB standards** insures interoperability. Interoperable with Set-Top Boxes (STB).
- **MPEG Encoding up to 9 Mbps** and very low cost per channel provides a very cost-effective solution.
- Two Codecs provide a complete end-to-end solution for transmission of analog video and audio over IP networks. Can send and receive audio and video simultaneously.
- **Compact size** is perfect for mobile applications such as Electronic News Gathering (ENG).
- Silent fan-less design completely eliminates any added noise and insures reliability.
- **Capable of battery operation**, 6 VDC Power Input for mobile applications.
- Includes composite video, S-Video, and Cable TV Tuner inputs.

Specifications

Network Interface:

- 1 IEEE 802.3 100/10 Base-TX Ethernet (RJ-45)

IP Network Stream Conditioning & Error Correction (EC):

- QVidium patent-pending ARQ error correction
- QVidium packet pacing
- Pro-MPEG Forum COP #3 Release 2 FEC, FEC packet linearization as per Pro-MPEG Forum COP #3.2, Annex A, 4-20 Rows x 4-25 Columns

Network Protocols:

- IP Encapsulation: RTP/UDP/IP and UDP/IP
- IETF DiffServ and IEEE TOS compliance
- IGMP v.2 Multicast, SNMP v.2 traps
- DHCP

Audio/Video Interfaces:

- 1 S-Video video input
- 1 Composite video input (RCA connector)
- 1 CATV Input with loop through output (F-Type jacks)
- 2 Unbalanced audio inputs (RCA connectors)
- 1 S-Video video output
- 1 Composite video output (RCA connector)
- 2 Unbalanced audio outputs (RCA connectors)

Transport Stream Bitrate (Audio & Video):

- 400 Kbps to 9.0 Mbps (encode or decode no EC)
- 400 Kbps to 7.5 Mbps (encode or decode w/EC)
- 400 Kbps to 4.5 Mbps (bi-directional no EC)
- 400 Kbps to 3.0 Mbps (bi-directional w/EC)

Audio:

- MPEG-1 Layer-II audio encoding, ISO/IEC-11172-3 Layer 2 standards compliant
- Stereo bit rates: 64K, 128K, 192K, 256K & 384K bps
- Sampling rates: 32K, 44.1K & 48K samp/sec
- Input audio signal levels up to -1 dBu (0.976 Vpeak)

Video:

- 4:2:0 MPEG-2 MP@ML encode/decode: ISO/IEC-13818-2 standards compliant
- 4:2:0 MPEG-4 Simple Profile @ L1, L2, & L3 encode/decode with extensions for D1 and interlacing
- NTSC: 720x480, 704x480, 640x480, 480x480, 352x480, 352x240, 320x240
- PAL: 720x576, 704x576, 352x288
- Encode Line 21 Closed Captioning (Teletext optional)

Configuration and Monitoring:

- Web setup & monitoring interface over IP network
- Telnet
- SNMP v1 & v2c traps

Electrical:

- DC Power Input: 6Vdc, or
- AC Power Input: 100-240Vac 50/60Hz, 30VA
- Auto sensing AC power adapter included

Mechanical:

- Dimensions: 6.8"(W) x 4.1" (D) x 1.4" (H)
- Dimensions (mm): 172(W) x 105 (D) x 35 (H)
- Unit Weight: 1.6 lbs (726 g)

Environmental:

- Operating temperature: 0 to 50° C
- Operating humidity: 0 to 90% R.H., non-condensing
- Non-operating temperature: -20 to 70° C
- Non-operating humidity: 0 to 95% R.H., non-condensing

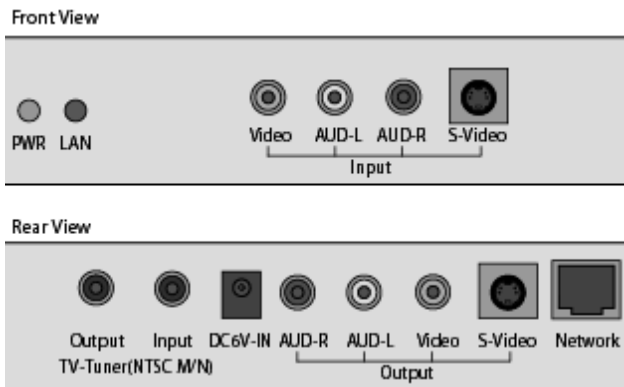
Regulatory:

- RoHS, CE and FCC compliant

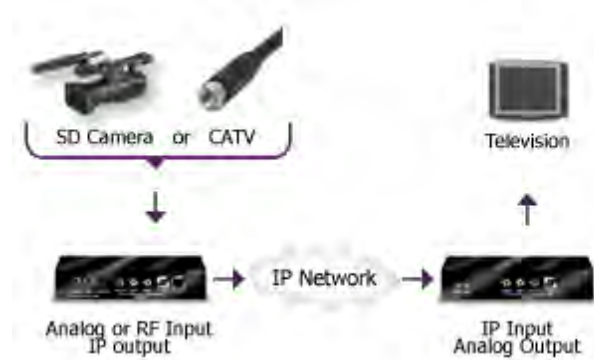
Warranty:

- Parts and labor: 1-year

Front and Rear Panels



Application Example



Ordering info: Model# QVMP2C-1011 / QVMP2C-1011-NOFEC

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