

QVidium® Advanced Video Codecs

QVAVC-SD IP Video Codec

Compact SD Model

QVidium® Advanced Video Codecs provide ideal solutions to coding and transport of SD and HD video and audio signals.

Advanced H.264 High Profile compression, coupled with QVidium® Advanced Video Transport, maintains broadcast quality video distribution over nearly any IP network, including wireless networks and the Internet.



The QVAVC-SD is part of the QVidium® Advanced Video Codec line of products; a line of compact, powerful and cost-effective products designed for real-time video encoding, decoding and transcoding for Content Gathering, Monitoring, and Distribution of broadcast quality video over IP networks.

QVidium's advanced video transport takes advantage of the inherent flexibility of IP and the Internet, providing broadcasters an efficient, affordable and scalable solution for professional quality video distribution.

The QVAVC-SD provides advanced H.264 High Profile compression of video signals, coupled with QVidium's patent-pending error correction and IP video transport, allowing cost-effective transmission of high quality over nearly any IP network.



Applications

- Professional broadcast video distribution
- Electronic News Gathering (ENG)
- Confidence monitoring
- High-quality video surveillance
- Live event coverage

Key Features

- **Real-time High Quality Video Encoding**
 - MPEG-4 AVC / H.264 High Profile
 - ▶ Only 250 Kbps to 2 Mbps for SD Encoding
 - MPEG-2 Main Profile
 - MPEG-4 AVC / H.264 Baseline Profile
 - Realtime encoding of 480i & 576i
- **Real-time High Quality Transcoding**
 - IP input to IP output SD & HD Transcoding
- **Real-time High Quality Video Decoding**
 - MPEG-4 AVC / H.264 High Profile
 - MPEG-4 AVC / H.264 Baseline Profile
 - MPEG-2 Main Profile
- **Robust transmission of Video & Audio**
 - QVidium® ARQ error correction
 - MPEG2 Transport Stream & MP4 Support
- **Compact, cost-effective solutions**
 - Compact transmitter / receiver / transcoder
 - User configurable as transmitter, receiver, or transcoder
- **User-friendly configuration and control**
 - WEB-based remote configuration & control
 - Easy integration to NMS systems with SNMP Trap support

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Specification

Video Interfaces

Input: 1x Composite / 1x S-Video (NTSC/PAL)
Output: 1x Composite / 1x S-Video (NTSC/PAL)
Connectors: 2 Female BNC (2 Composite), 2 4-pin Mini-Din (Y/C)

Audio Interfaces

Input: Stereo Analog unbalanced
Output: Stereo Analog unbalanced
Connector: 2 Stereo Mini-phonos (3.5mm)

Video Encoding (SD-Only) & Transcoding (HD & SD)

Video Encoding: MPEG4-AVC (H.264)
& Decoding: ▶ High Profile & Baseline, Level 4 & 4.1
MPEG-2 Main Profile
Bit Rates: Min to Max bitrates: 128 Kbps to 19 Mbps
Max 15 Mbps encode with ARQ
Transcoding: H.264 to MPEG-2, MPEG-2 to H.264,
MPEG-2 to MPEG-2
Resolution downscaling, Bit rate scaling

Audio Encoding

Audio Encoding: MPEG1/ Layer2, MPEG2AAC, MPEG4AAC
Sample rate: 32, 44.1, & 48 KHz
Bitrate: 56 Kbps to 384 Kbps
Transcoding: MPEG1Layer2↔MPEG4AAC↔MPEG2AAC

IP Encapsulation

Protocols: MPEG-2 Transport Stream & MP4 over RTP/UDP/IP or UDP/IP
Error Correction: QVidium® ARQ (Feedback-based)
US Patents: 7551647, 7539187, 7522528

Video Resolutions

SD Video: 625 lines, 25 frames/s (PAL 576i)
525 lines, 29.97 frames/s (NTSC 480i)

External Storage

Devices: USB Hard drives via 2 USB connectors

Network Interfaces

Type: 10/100 Base-TX Ethernet
Protocols: IEEE802.3 Ethernet
RTP, IPv4, TCP/UDP, IGMP v3
Connector: 2 RJ45

Control and Management

Type: 10/100Base-T Ethernet
Features: Element control through HTTP/WEB.
SNMP traps for integration with Network Management System (NMS). SNMP control.
Protocols: HTTP, SNMP v2 traps
Connector: RJ45
USB Ports: 2
Maintenance Port: One RS232 9 pin D-SUB

Physical and Power

Input Voltage / Power: 6 VDC to 26VDC @ 1.5 A
Chassis Dimensions: 169 x 116 x 25 mm (W x D x H)

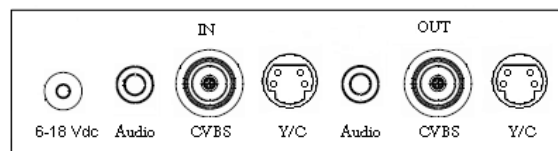
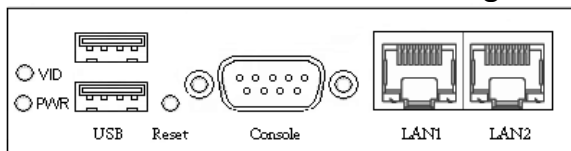
Environmental Conditions

Operating Temperature: 0°C - +50°C
Storage Temperature: -20°C - +70°C
Relative Humidity: 5% to 95% (non condensing)

Compliance

CE: 73/23/EEC (Low voltage equipment) 89/336/EEC (Electromagnetic compatibility)
Safety: IEC60950 and EN60950
EMC: EN55022, EN55024, EN6100-3-2

Front & Rear Connection Diagrams



Ordering Information

Model# QVAVC-SD

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QVAVC-HD IP Video Codec