



Overview:

The Chameleon Video Encoder utilizes our proprietary breakthrough encoding engine, based on a radical new meta-encoder, which achieves the most efficient audio/video encoding for live and stored content for today's global market, without the need of proprietary media players. The encoder leverages current investments in hardware and software by delivering unsurpassed compression and image quality to off-the-shelf, low cost, low power devices (i.e., smart phones, set-top boxes and web players) that companies and individuals already have... by "impersonating" other popular Codecs and video formats.

The Chameleon Video Encoder can save video distribution companies such as Cable Co's, Telco's (AT&T), Satellite Distribution Co's, content providers and ISP's millions of dollars a month in transmission and storage costs.

The audio Codec currently achieves high-fidelity stereo with audio bandwidths as low as 8 Kbps, while the video Codec is capable of encoding movies at 720p (at bitrates ranging from 1 to 1.4 Mbps), and 1080i (at bitrates ranging from 2.5 to 3 Mbps), in real-time. This compares to competitors data rates of 128 Kbps for audio and 4 to 5 Mbps for 720p and 10 to 20 Mbps for 1080i. Offline compression results in data rates as low as 300 K for 480p video, and 1.5 Mbps for 1080p video.

Demonstrations of live encoding can be seen online:

HD at 720P, 1.4 Mbps (average): <http://microvideo.com/hd>
SD at 720x400, 450 Kbps (average): <http://microvideo.com/sd>
iPhone, iPod, iPad (300 - 1000 Kbps): <http://microvideo.com/hd>
BlackBerry (150-200 Kbps): <http://microvideo.com/hd> or <http://microvideo.com/BB>

Chameleon Encoder Specifications:

Audio Inputs:

- Up to 4 digital stereo channels AES/EBU, embedded OR 2 analog stereo channels
- Input format: Analog/AES-EBU/embedded
- Integrated sample rate converter (SRC)
- Audio Coding
 - 4 Channel Stereo (8 mono)
 - MPEG1 Layer I, II and III (MP3), AAC-LC, AAC-HE
 - Adjustable Bit Rate from 16kbps to 384kbps
 - Frequencies: 44.1 and 48kHz

Video Inputs

- Video formats: NTSC/PAL/2K(both Academy or Digital Cinema)/ISDB(all required video formats)/ATSC(all required video formats)
- 1 SDI (optional)

- 1 HDMI
- Analog inputs: Composite and Component
- A/D resolution: 10-bit
- Display aspect: 4:3 and 16:9 (also supports 1.37:1 and 2.39:1 if ordered with the academy 2K or Digital Cinema 2k option)
- Video Coding – Two modes available
 - 2 1 HD (1920x1080, 16:9) and one SQVGA (160x120 or 160x90), QVGA (320x240 or 320x180) or CIF (352x288) from one single input using:
 - H.264 Part 10 (AVC) Main Profile @ Level 3 encoding rates to 10Mbps
 - 2 SD/HD channels separately configured using two different AV inputs and being coded with one of the codecs below:
 - MPEG2 Main Profile @ Main Level encoding rates to 15Mbps
 - H.264 Part 10 (AVC) Main Profile @ Level encoding rates to 10Mbps

Input TS Interface (cascading remux)

- ASI(DBV/ISDB) SCPC or MCPC 188/204 Bytes from 1 to 210 Mbps (optional)
- Gigabit Ethernet IPTV in RTP/RTSP Unicast/Multicast with Pro-MPEG CoP#3 Forward Error Correction support
- PCR Reinsertion, PID remapping up to 8191, PSI/SI (PAT, PMT, PCR, SDT, NIT) Insertion

Output TS Interfaces

- ASI (DBV/ISDB) SCPC or MCPC 188/204 Bytes from 1 to 210 Mbps (optional)
- Gigabit Ethernet IPTV in RTP/RTSP Unicast/Multicast with Pro-MPEG CoP#3 Forward Error Correction support
- PCR Re-insertion, PID remapping up to 8191, PSI/SI (PAT, PMT, PCR, SDT, NIT) Insertion

Monitoring Interfaces

- 1 HDMI and 1 SDI (optional)

For more information, contact:

Walter Schoustal at 403-286-0913, walters@microvideo.com