



Chimera-CP

Portable MPEG Video Encoder



CHIMERA-CP IS IDEAL FOR:

Live streaming of Community Events

Transportable Fly-Away Systems

Mobile and Airborne Encoding

Encoding Rental Packages

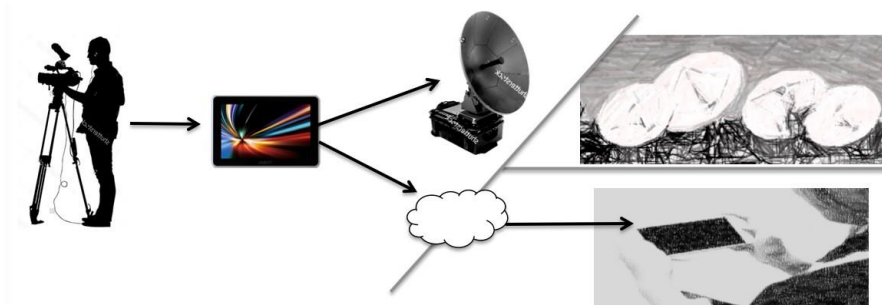
Supplementing Rack Mounted Encoders When Additional Temporary Paths are Required

Anywhere that Space and Portability are at a Premium

More than twenty years of broadcasting experience went into the design of the **Chimera-CP** portable video encoder. **Chimera-CP** was designed to address the requirement for a highly portable and easy to use video encoder in situations where weight and size are limited, thus making a rack mount design less than ideal. The ease of portability and flexible inputs and outputs while providing outstanding video quality make **Chimera-CP** the perfect encoder for many commonly encountered situations.

Controlling **Chimera-CP** is easily accomplished using its 10.1" capacitive touch screen and intuitive menu structure. The 1280 x 800 resolution of the back lit LED screen also makes an ideal confidence monitor to confirm that **Chimera-CP** is receiving a video source. A laptop is NOT required to control **Chimera-CP**.

Chimera-CP is small enough to fit into a backpack, yet powerful enough to deliver outstanding video quality.



- **Live Video Transmission**
 - DASH/HTML 5.0
 - Satellite Modulator
 - DVB-ASI
- **Multiplexing of video & data**
- **Remote or Local Management**



Made in the USA

VISION + INNOVATION



Chimera-CP

Portable MPEG Video Encoder

- Compact & Lightweight
- 10.1" Backlit Display
- HD-SDI & HDMI Inputs
- ASI, IP & Satellite outputs
- 12 VDC Power
- DASH (HTML 5.0) Streaming
- SMPTE-2022 FEC on TSoIP Output
- DVB-S/S2/S2X Modulator
- BISS Encryption
- ATSC & DVB Compliant

Specifications

Video & Audio Encoding

- MPEG-2 & H.264/AVC
- SD & HD (525i, 625i, 720p, 1080i & 1080p 30)
- 8-bit 4:2:0
- Encoded bitrate from 256 kbps to 80 Mbps
- 150 to 650 ms latency
- 8 x MPEG-1 Layer II or 2 x AC3 5.1 audio channels
- AAC-LC & HE-AAC audio encoding

Inputs & Outputs

- HD-SDI - 75 Ω BNC & HDMI 1.4a inputs (one active)
- Embedded audio
- MPEG-TS over ASI – BNC connectors, 75 Ω
- MPEG-TS (RTP/UDP – SMPTE-2022) over IP
- DASH (HTML 5.0) Internet streaming
- BISS Mode 0, 1, E

RF Outputs

- L-Band: 950 to 2,150 MHz, 1 Hz steps
N 50 Ω +7 dBm to -35 dBm, 0.1 dB steps
- IF-Band: 50 MHz to 180 MHz, 1 Hz steps
BNC 75 Ω +5 dBm to -35 dBm, 0.1 steps
- SNR > 40 dB @ 0 dBm – 16 APSK – 30 Mbaud
- Shoulders rejection < -50 dB @ 0 dBm & f/fn=1.5 for roll off of 20%
- Spurious: < -65 dBc @ 0 dBm for 50 to 180 or 950 to 2,150 MHz
-60 dBc outside the useful band
- Switchable 10 MHz insertion on L-Band RF output:
 - @1 Hz < -85 dBc/Hz
 - @10 Hz < -115 dBc/Hz
 - @100 Hz < -140 dBc/Hz
 - @1 kHz < -145 dBc/Hz
 - @10 kHz < -150 dBc/Hz
 - @1 MHz < -150 dBc/Hz

Clock & Synchronization

- Internal 10 MHz reference frequency
 - High Stability: ± 5 ppb over 0° to 70° C
 - Ageing: ± 0.05 ppb/day, ± 7.5 ppb/year

External 10 MHz input for RF synchronization

Modulation

- DVB-S / DSNG:
 - Outer/Inner FEC: Reed Solomon/Viterbi
 - QPSK: $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{5}{6}$, $\frac{7}{8}$
 - 8PSK: $\frac{2}{3}$, $\frac{5}{6}$, $\frac{8}{9}$
 - 16QAM: $\frac{3}{4}$, $\frac{7}{8}$
- DVB-S2:
 - Outer/Inner FEC: BCH/LDPC
 - QPSK: $\frac{1}{4}$, $\frac{1}{3}$, $\frac{2}{5}$, $\frac{1}{2}$, $\frac{3}{5}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{8}{9}$, $\frac{9}{10}$
 - 8PSK: $\frac{3}{5}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{5}{6}$, $\frac{8}{9}$, $\frac{9}{10}$
 - 16APSK
 - 32APSK: $\frac{3}{4}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{8}{9}$, $\frac{9}{10}$
 - PL Scrambling codes [0, 264143]
 - Supported DVB modes:
 - CCM: Constant Coding & Modulation
 - VCM: Variable Coding & Modulation
 - *SeamlessACM*: Adaptive Coding & Modulation
 - DVB-S2 Short (16 200) Normal (64 800) frames
 - Pilots ON or OFF
 - Variable symbol from 0.05 to 72 Mbaud, 1 Baud steps
- DVB-S2x Broadcast & DSNG profiles:
 - Same specifications as defined for DVB-S2
 - New constellation for DSNG profile: 64APSK
 - All new linear MODCOD for QPSK/8PSK/16APSK/32APSK/64APSK

Physical

- Power Supply: 12VDC – 60W Max
- Dimensions: 26.5 cm x 18.4 cm x 10 cm (WxDxH)
- Weight 2.5 kg
- Temperature: 0° to 50° C

April 2019 - Specifications Subject to Change

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