

HCAM

HEVC 4K UHD Camera Transmitter

The HCAM represents the next generation of flexible, portable, HEVC 4K UHD wireless systems from Vislink. With highly flexible and configurable mounting options and video interfaces, the unit can be mounted to broadcast cameras for sporting events, ENG cameras for news and even prosumer cameras to broaden the market reach. With user interchangeable RF modules and a range of software options, the HCAM continues the line of innovative, high performance wireless camera systems from Vislink.



Key Features

- HEVC/4K UHD Very Low Latency Encoder
- Interchangeable, futureproof, dual SFP modules supporting Quad 3/6/12G SDI/HDMI/Fiber Optic/SMPTE 2022-6 HD-SDI over IP interfaces
- Wi-Fi & Bluetooth control via dedicated Android & iOS Application
- Integrated Camera Control with FocalPoint Compatibility
- Optional direct-docking V-Lock & Anton Bauer battery plates with integral power feed through
- IFB audio receiver & camera control¹
- Compatible with L1750 RF module²
- ETSI compliant to proposed EN302-064 V2.1.1 regulations

¹Available with new RF module release in Nov 2017. IFB reception requires analogue talkback transmission system.

²Requires software change.

Typical Applications

- Event Coverage
- Newsgathering
- Sports Coverage
- PoV Cameras

Frequency Band

- 1.300–1.700 GHz*
- 1.950–2.700 GHz*
- 3.200–3.900 GHz*
- 4.400–5.000 GHz
- 6.425–7.125 GHz
- 6.800–7.500 GHz

*pre-distortion correction

Transmit Power

- Adjustable 10 to 250 mW (or add Barrel Booster option)¹

Transmit Antenna

- Omni Directional 3 dBi gain (nom.)

Frequency Selection

- Up to 16 pre-set channels for tuning

Modulation

- COFDM DVB-T
- LMS-T

UHF Receiver

- 410 to 490 MHz frequency range
- FocalPoint camera control compatibility

Modulation Modes

- QPSK, 16QAM, 64QAM
- FEC:
 - 1/2, 2/3, 3/4, 5/6, 7/8, 9/10, 14/15
- Guard interval:
 - 1/32, 1/16, 1/8, 1/4

Data Rate

- DVB-T 4.98 to 31.7 Mbit/s
- LMS-T up to 43 Mbit/s, bandwidth dependent (licensed option)

Bandwidth

- DVB-T at bandwidths of 6/7/8 MHz
- LMS-T bandwidths of 3/4/5/6/7/8/10/12/14/16/20 or 24 MHz with two carrier density options
- Optional digital pre-distortion for enhanced adjacent channel performance*

*frequency permitting

Video Encoder Profiles

- H.265 HEVC Main, Main-10
 - H.265 HEVC 8/10 Bit to 4K p60
- H.264 AVC Main, High, Baseline up to Level 5.2
 - H.264 AVC High 10/4:2:2
 - H.264 AVC 4:2:0/4:2:2 8/10 Bit to HD p60
- 4K Native and UHD (1 Service)
- HD (Up to 4 Services)⁵
 - 1.0–90 Mbps (per channel with maximum combined rate of 90 Mbps)
- SD (Up to 4 Services)
 - 4.2.0 Main 0.5–90 Mbps
 - 4.2.2 Main 2.0–90 Mbps

Video Inputs

- 2 SFP+ module slots supporting electrical and optical interfaces carrying:
 - 4 x SDI SMPTE-259M
 - 4 x HD-SDI SMPTE-292M
 - 4 x 3G-SDI SMPTE-424M
 - 2 x 6G-SDI SMPTE ST-2081
 - 1 x 12G-SDI SMPTE ST-2082

Video Formats

- 480i@29.97
- 576i@25
- 720p@50/59.94/60
- 1080i@50/59.94/60
- 1080p@23.98/24/25/29.97/30/50/59.94/60
- 2160p@23.98/24/25/29.97/30/50/59.94/60

Audio Inputs

- Embedded audio over SDI/HD-SDI/3G SDI/6G SDI/12G SDI
- 1x analogue audio stereo pair (Lemo)
 - Mic / Line level support with phantom power

Encoding

- HEVC (H.265)
- AVC (H.264)
- MPEG-2 (H.262)
- AAC
- MPEG-1
- AES / Dolby Passthrough

IP Video Interface

- 10/100/1000 Base-T Ethernet

IP Video Protocol

- IEEE802.3 Ethernet
- Encapsulation for ASI – RTP (RFC2250), ARP, IPv4, IGMPv2/3, TCP/UDP
- MultiCast

IP Video FEC

- Pro-MPEG Forum Code of Practice #3 release 2 (CoP3) / SMPTE 2022–2007

Power

- Power supply via Lemo e.g. to connect to D-Tap power source
- Extended operation voltage range 10V to 32.2V

Power Consumption

- Nominally 25W in standard configuration (with L1750-1927)

ASI

- Input for service multiplexing (Remux)
- Output
- Input and Output on multifunction pins

PIDS

- PIDs user configurable

Latency

- 70ms (4K UHD p50)²

Size & Weight

- 165 (L) x 43 (H) x 82 (W) mm³
- 600g⁴

Environmental

- Temperature
- Operating 0°C to 50°C (32°F to 122°F)

User Interface

- OLED display for enhanced visibility

Notes

- Some features specified are available via optional licenses.
- Not all encoder interface options are concurrently available.
- We reserve the right to change specifications at any time without prior notice.
- ¹We recommend using the optional D-TAP cable to power the Barrel Booster.
- ²H.264/MPEG-2 format and latency support timescales TBA.
- ³Including removable heatsink mounts, excluding RF connectors.
- ⁴Including removable heatsink, excluding antennas.
- ⁵HD Services 2 to 4 can be enabled via optional licenses.

