

HCAM

HEVC 4K UHD Camera Transmitter

The Vislink HCAM leads the next generation of lightweight, highly portable, HEVC 4K UHD, HDR wireless systems.

HCAM offers flexibility with highly configurable mounting options and video interfaces, also providing a complimentary range of user-interchangeable RF modules and software options, for use with:

- Broadcast cameras for sporting events
- ENG cameras for news gathering
- Prosumer cameras for the ultimate application flexibility



Key Features

- HEVC 4K UHD Very Low Latency Encoder
- HDR
- Interchangeable, future-proof, dual SFP modules supporting SDI/HDMI/Fiber Optic
- Interchangeable RF module for quick & easy frequency change
- Integrated Camera Control with FocalPoint Compatibility
- Optional direct-docking V-Lock & Anton Bauer battery plates with integral power feed through
- Remote control over WiFi via web interface

Typical Applications

- Event Coverage
- Newsgathering
- Sports Coverage
- PoV Cameras



RF Parameters

Frequency Band

- 1.300–1.700 GHz¹
- 1.950–2.700 GHz¹
- 3.200–3.900 GHz¹
- 4.400–5.000 GHz
- 6.425–7.125 GHz
- 6.800–7.500 GHz
- 7.200–7.750 GHz

¹pre-distortion correction

Transmit Power

- Adjustable 10 to 250 mW up to 3.9 GHz^{*}
- Adjustable 10 to 100 mW above 3.9 GHz^{*}

^{*}or add Barrel Booster option¹

Frequency Selection

- Manual selection & 16 pre-set channels

Modulation

- 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
- Guard interval:
 - 1/32, 1/16, 1/8, 1/4

Data Rate

- DVB-T 4.98 to 31.7 Mbit/s
- LMS-T 2.90 to 43 Mbit/s, bandwidth dependent (licensed option)

Bandwidth

- DVB-T 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
- Digital pre-distortion for enhanced adjacent channel performance

^{*}Licensed option

^{**}Frequency permitting

Video & Audio Parameters

Video Encoder Profiles

- HEVC (H.265) UHD, HD & SD
 - Main, Main 10, Main 4:2:2 10
 - 4K Native and UHD (1 Service)
 - HD (Up to 4 Services)⁵
 - SD (Up to 4 Services)⁵
- MPEG-4 AVC (H.264) HD & SD
 - Main, High, Baseline up to Level 5.2, High 10/High 4:2:2
- MPEG-2 (H.262) HD & SD
 - 4:2:0 8 bit, up to 1080i60

Video Inputs

- 2 SFP+ module slots supporting electrical and optical interfaces

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/ HDSDI/3G SDI/6G SDI/ 12G SDI
- 1x analogue audio stereo pair configured as Mic/Line level
- Mic/Line level support with phantom power

Audio Encoding

- AAC (AAC-LC & HE-AAC)
- MPEG-1 (Layer 1 & Layer 2)
- Dolby E Passthrough
- Linear PCM Passthrough

Latency

- Single frame (4K UHD/1080p)²

Scrambling

- BISS-1
- BISS-E Injected
- BISS-E Buried ID

Connectors

- 2x SFP+ module slots supporting electrical and optical interfaces carrying⁶:
 - 4x SDI SMPTE-259M
 - 4x HD-SDI SMPTE-292M
 - 4x 3G-SDI SMPTE-424M
 - 2x 6G-SDI SMPTE-2081
 - 1x 12G-SDI SMPTE-2082
- Power Connector:
 - 2-pin LEMO socket
- Audio Connector:
 - 5-pin LEMO socket
- Camera Cont. & ASI Connector:
 - 7-pin LEMO socket

- Data & Tally Connector:
 - 3-pin LEMO socket
- Ethernet Control Connector:
 - RJ45 10/100
- USB Connector:
 - Micro-AB USB 2.0

- RF Output Connector:
 - 50 Ω N-Type (M)
- UHF Input Connector:
 - 50 Ω SMA (F)

Flexibility & Power Supply

Power

- Extended operation voltage range, 10V to 32.2V DC
- Power connector to connect to D-Tap power source
- Can be powered with optional IDX or Anton Bauer battery plates

Power Consumption

- 35W max.

ASI

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

PIDS

- PIDs user configurable

User Interface

- OLED display for enhanced visibility
- Ethernet control via internal webserver
- WiFi connectivity & control via internal webserver

Optional Licenses:

- HCAM-LICE-0001 - HCAM License Service 1 4K UHD HEVC Encode
- HCAM-LICE-0002 - HCAM License Service 2 HD 1080p HEVC Encode
- HCAM-LICE-0003 - HCAM License Service 3 HD 1080p HEVC Encode
- HCAM-LICE-0004 - HCAM License Service 4 HD 1080p HEVC Encode
- HCAM-LICE-0007 - HCAM License H.264 Encode
- HCAM-LICE-0009 - HCAM License Variable Bandwidth LMS-T
- HCAM-LICE-0010 - HCAM License UHF Rx Camera Control
- HCAM-LICE-0011 - HCAM License BISS Scrambling

Physical & Environmental Size & Weight

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

Environmental

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

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.
- ¹ We recommend using the optional D-TAP cable to power the Barrel Booster.
- ² End to end latency including RF, with ULRX-LD Rx.
- ³ Including removable heatsink mounts, excluding RF connectors.
- ⁴ Including removable heatsink, excluding antennas.
- ⁵ HD & SD Services 2 to 4 can be enabled via optional licenses.
- ⁶ Unit supplied with 2x 3G-SDI SFP+ modules.