

HCAM

HEVC 4K UHD Camera Transmitter

The Vislink HCAM leads the next generation of lightweight, highly portable, HEVC 4K UHD, HDR-ready 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 Ready
- 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



datasheet

at the heart of the action

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