

XVC **ULTRA**
DECODER

4KP60
H.265/H.264
4:2:2 10BIT

ULTRA-LOW
LATENCY

SECURED

MULTIPLE
STREAMING
PROTOCOLS

LOW POWER
SMALL SIZE

HIGHEST VIDEO QUALITY

ULTRA LOW LATENCY

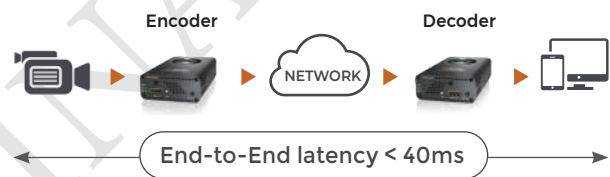


KEY FEATURES

- ▶ Next generation, H.265/H.264 UHD video over IP
- ▶ Enterprise security (HTTPS, REST API over SSL, LDAP/AD, 802.1x)
- ▶ Ultra-low Decoding latency < Two frames
- ▶ End-to-End latency < 40ms (At 60fps)
- ▶ HDMI 2.0a output
- ▶ RTP, MP2TS, RTSP⁽¹⁾ streaming protocols
- ▶ Low power consumption
- ▶ small form factor
- ▶ Scalable and future proof

ULTRA LOW LATENCY

Pairing the XVC-ULTRA encoder with the XVC-ULTRA decoder achieves an ultra low End-to-End latency of below 40ms at 2160p60



APPLICATIONS



Video distribution
point-to-point and
point-to-multipoint



Command
and control
applications



Video over wireless,
cellular, satellite
links



Medical
Share surgical and
simulation video



eLearning
Live content
streaming

VIDEO

Video Output

HDMI Type A connector, HDMI v2.0a output

Supported Resolutions

UHD: 3840x2160p 23.97, 24, 25, 29.97, 30,
50,59.94, 60 Hz

FHD: 1920x1080p 23.97, 24, 25, 29.97, 30, 50,
59.94, 60 Hz

HD: 1280x720p 50, 59.94, 60 Hz

SD: 720x576p50, 720x480p59.94

VESA: From VGA to QSXGA

Video Decoder Standard

Multi-standard decoding:

- ▶ H.264: Baseline, Main, High, High10, High4:2:2, High10 Intra, High 4:2:2 Intra up to Level 5.2
- ▶ H.265: Main, Main Intra, Main10, Main10 Intra, Main 4:2:2 10, Main 4:2:2 10 Intra up to Level 5.1 High Tier

Decoder Features:

- ▶ I/P/B frame support
- ▶ 4:2:0 or 4:2:2 chroma sub-sampling
- ▶ Bitrates: from 500Kbps to 60Mbps
- ▶ Low latency Decoding mode (< 2 frames)

Decoder Performance

- ▶ Up to 3840x2160p60 4:2:2/10bits H.265/H.264

AUDIO

Audio

- ▶ HDMI embedded audio
- ▶ Analog audio unbalanced⁽¹⁾
(PL stereo connector)

Audio Sample Format (HDMI and Line-out)

- ▶ Single stereo channel at Fs = 48KHz, 44.1KHz, 32 KHz, 16bit per/sample

Audio CODEC (Incoming IP stream)

- ▶ MPEG-2 AAC-LC (ISO/IEC 13818-7), configurable bitrate 64-256Kbps
- ▶ Linear PCM, 16bit per sample
- ▶ OPUS, 48KHz, 16bit per sample

LATENCY

- ▶ End-to-End Ultra Low latency(*): < 40ms (at all resolutions running at 60fps up to 2160p, 20Mbps) when paired to the XVC-ULTRA encoder
 - ▶ End-to-End typical latency: 100-1000ms depending on encoder and decoder settings
- (*) The stream is compliant to RTP for H.265/H.264 IPP GOP structure

NETWORK

Ethernet Communication

- ▶ RJ45, Ethernet 10/100/1000 Base-T, auto-neg, auto-sense, half/full duplex

Streaming Protocols:

- ▶ TS over UDP (unicast, multicast)
- ▶ TS over RTP (unicast, multicast)
- ▶ RTP (unicast, multicast)
- ▶ RTP/RTSP⁽¹⁾

Management

- ▶ HTTPS browser Interface
- ▶ REST API over SSL with token support
- ▶ Remote F/W upgrade via browser or REST API
- ▶ H/W button for factory defaults

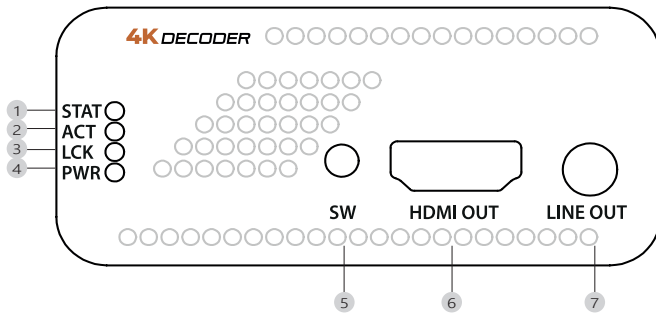
Other

- ▶ IGMP V1/V2, DHCP client, SSDP, IPv4, IPv6⁽¹⁾

PORTS / CONNECTORS

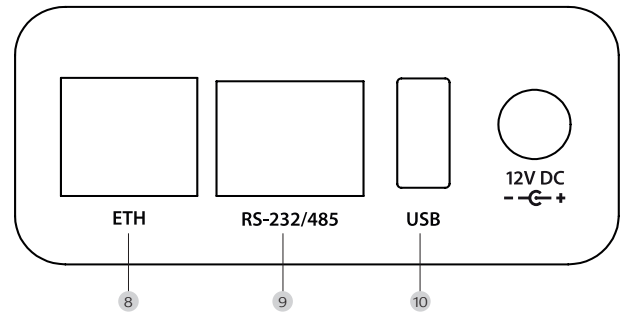
- ▶ USB 2.0/3.0 host port
- ▶ RS-232 and RS-485
- ▶ LED indicators (Streaming, Video lock, Status, Ethernet link)
- ▶ Tactile switches

FRONT PANEL VIEW

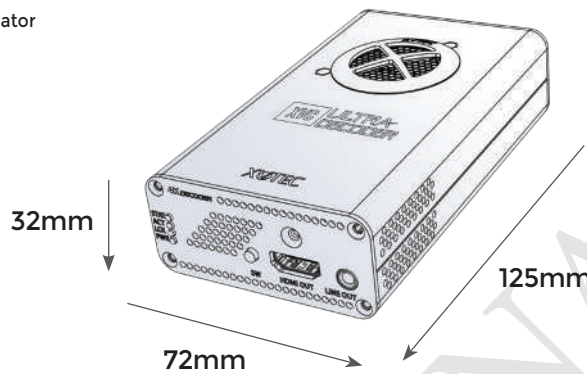


- 1 STAT - Status LED
(Indicated various conditions of the unit)
- 2 ACT - Activity Led
- 3 LCK - Video lock indicator
- 4 PWR - Power LED indicator
- 5 SW - General switch
- 6 HDMI OUT - HDMI v2.0 output
- 7 LINE OUT - Analog audio output⁽¹⁾
(unbalanced)

REAR PANEL VIEW



- 8 Ethernet port
- 9 RS-232/RS-485 port
- 10 USB - USB 2.0/3.0 host port⁽¹⁾
- 11 12VDC - Input voltage



PHYSICAL / ENVIRONMENTAL

Dimension (LxWxH): 72x125x32 mm

Connectors and Ports: HDMI In, PL In, RJ-45, USB⁽¹⁾, LEDs, Switch, RS-232⁽¹⁾, RS-485⁽¹⁾, DC jack

Weight: 400g

Operational temperature: (0-50)°C

Humidity: Up to 90% non-condensing

Power: 10-13W

DC voltage: 12V@2A

Regulatory compliance: FCC part 15 class A, CE

Ordering Information

- ▶ **XVC-U-EH1**: XVC-U Encoder HDMI, single channel
- ▶ **XVC-U-DH1**: XVC-U Decoder HDMI, single channel

Notes:

⁽¹⁾ Future release