

# UltraCoder

## HEVC Encoder

Being the lightest in the world, the Vislink UltraCoder is the new lightweight 1RU, ½ rack HEVC encoder from Vislink capable of encoding 4K UHD, HD & SD video.

The system uses the latest advanced HEVC encoding techniques to offer up to 50% bit rate reduction compared to H.264, resulting in the delivery of high quality video at low bit rates. It has the ability to encode one 4K UHD video or up to 4 simultaneous HD video streams, making it the most advanced encoder in its range. Being so lightweight, it's ideal for flyaway or vehicle mounted applications, where weight and space is critical.

Along with Vislink's UltraDecoder this product provides a complete end to end HEVC & 4K encode and decode solution.



### Key Features

- Capable of encoding 4K UHD, HD & SD video
- The product uses the latest advanced HEVC encoding techniques to offer 50% bit rate reduction compared to H.264
- The ability to encode one 4K UHD channel or up to 4 simultaneous HD video streams
- User configurable SFP Video Interface
- The UltraCoder can be used with the UltraDecoder to provide a complete end to end encode and decode solution

### Typical Applications

- SNG
- ENG
- IP Networks



**VIDEO PARAMETERS**

**Video Encoder Profiles**

- 4K UHD
  - Main 10 - 8/10bits 4.2.0
  - Main 4.2.2 10 – 8/10 bits 4.2.0 / 4.2.2
- 1.0 - 25Mbps
- HD
  - Main 10 - 8/10bits 4.2.0
  - 1.0 - 20Mbps
  - Main 4.2.2 10 – 8/10 bits 4.2.0 / 4.2.2
- 1.0 - 20Mbps
- SD
  - 4.2.0 Main 0.5 - 6Mbps
  - 4.2.2 Main 2.0 - 6Mbps

**Video Inputs**

- 2 SFP+ module slots supporting electrical and optical interfaces carrying:
  - 4 x 3G-HDSDI (UHD)
  - 4 x independent HDSDI

**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

**IP VIDEO OUTPUT TRAFFIC INTERFACE**

**Type:**

- 10 / 100 / 1000 Base-T Ethernet

**Protocol**

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

**FEC**

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

**AUDIO PARAMETERS**

**Audio Encoder**

- ISO 14496-3 2006 (HE-AAC) 8 pairs
- Dolby E pass thru'

**Audio Inputs**

- Embedded

Audio pairs assignment examples				
	Video Stream 1	Video Stream 2	Video Stream 3	Video Stream 4
Valid	2	2	2	2
	4	2	2	0
	4	4	0	0
	6	2	0	0
	8	0	0	0
Invalid	4	2	1	1

Example Audio Configurations for HD channels on one UltraCoder. The Audio pairs can be split across up to 4 Video streams or used on just one stream as shown above. Pairs must be used in even numbers (2,4,6 or 8) and odd pairs are invalid.

4K UHD audio is supported via Dolby E Pass thru'.

**FLEXIBILITY**

**Remote Control**

- Ethernet
- HTTP
- SNMP

**Outputs**

- IP
- ASI

**ENVIRONMENT & PHYSICAL**

**Dimensions**

- 210mm wide by 350mm deep (8.27" wide by 13.78" deep)
- 1RU, ½ rack

**Weight**

- 1.9kg approx (4 lbs)

**Temperature**

- Operational: 0°C to +50°C(32°F to 122°F)
- Storage: -20°C to +70°C (-4°F to 158°F)

**Power**

- <100VA
- 90 to 264 Vac
- 50/60 Hz

**LICENCES**

The following licences are available on the UltraCoder:

- Additional HD encoding (up to 3 licences)
- 4K UHD encoding

