

DVE6100

4K HEVC Multi-Format Exciter with IP Streaming

The Vislink DVE6100 is a compact 4K UHD multi-format, multi-channel exciter, ideally suited to flyaway and vehicle mounted applications, where size and weight is at a premium.



The DVE6100 offers ultimate satellite bandwidth efficiency by utilising the latest HEVC video compression and DVB-S2X satellite modulation technology - allowing a 50% reduction in leased satellite bandwidth compared to MPEG-4, DVB-S2 technology—dramatically reducing satellite OPEX.

As a multi-format encoder the DVE6100 has the ability to encode video of all resolutions from SD to highest quality 4K UHD, including High Dynamic Range. The unit's multi-channel capability means that up to 4 HD video services can be encoded by one unit—providing the user with a highly channel dense, flexible solution.

Key Features

- Flexible SFP based video inputs
- 4K UHD, HD, SD multi-format encoding
- HEVC, MPEG-4, MPEG-2 multi-standard compression
- High quality 4:2:0, 4:2:2, 8-bit/10-bit profiles
- 1x 4K or up to 4x HD services encoded
- Very low latency encoding modes
- High Dynamic Range support
- Flexible audio encode with Layer II, AAC encoding
- Linear PCM audio pass-through
- 8x stereo pairs of audio carriage
- Secure AES and BISS encryption
- DVB-S2X, S2, S satellite modulation
- L-band RF output
- ASI and IP TS inputs and outputs
- Remux capability

Typical Applications

- High quality Events coverage
- Sports coverage
- Newsgathering
- Secure SatCom
- MilGov applications



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

Outputs

- L-band main output
- L-band monitor output
- 10MHz reference
- ASI TS output
- IP TS output
- HPA Control

Video Profiles

- H.265 HEVC Main, Main 10, Main 4:2:2 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 Encoder

- HEVC 4K UHD, HD, SD encode
- MPEG-4 HD, SD encode
- MPEG-2 HD, SD encode

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

Service Encodes

- 1x 4K UHD service
- Up to 4x HD/SD services

Encryption

- BISS Mode 1 & E
- AES 128/256

Audio Encoder

- MPEG-1 Layer I encode
- MPEG-1 Layer II encode
- AAC encode
- Linear PCM pass-through

Audio Channels

- Up to 8x stereo pairs

Ancillary Data

- Closed Captions

Satellite Modulation

- DVB-S QPSK
- DVB-S2 QPSK, 8PSK, 16APSK
- DVB-S2X QPSK, 8PSK, 16APSK, 32APSK, 64APSK, 128APSK, 256APSK

Modulation Parameters

- All FECs as applicable to modulation modes
- 5%, 10%, 15%, 20%, 25%, 30%
- Short Frames & Long Frames

Modulated Output

- 950 - 2150 MHz in 1kHz Steps
- Output power -5 to +5dBm
- Monitor level -20dB relative to main