



## DVE5150 series H.264 Encoders



Compact H.264 Digital Video Encoder - DVE5151  
with optional second encoder - DVE5152  
or integrated COFDM MaxRC diversity receiver - DVE5174

### 5000 Series Overview

Vislink's established lightweight, compact, 1U half rack electronics packages are ideally suited for flyaway or vehicle mounted solutions, where weight and space are at a premium. The 5000 series of electronics can be packaged in different lightweight, ruggedised canvas flight cases, depending on units selected and system configuration.

- Compact 1/2 width 1U rack mountable units
- 1/4 of the size and 1/6th of the weight of competitors equivalent products
- Designed for contribution flyaway and DSNG vehicle applications where space and weight are critical
- Full range of units available;
  - ◇ SD and HD Digital Video Exciter
  - ◇ IP Modem
  - ◇ Multiplexer Router
  - ◇ BUCS
  - ◇ Antenna and Drive Control units
  - ◇ System IRD / Redundancy controllers
  - ◇ Protection Switches
  - ◇ L Band over fibre modems
  - ◇ Diversity Receivers
- All units field upgradeable
- All units have integral web browser facility (where applicable) for RC&M applications
- A comprehensive range of flight case solutions
- All units can also be fixed together and mounted in a standard 19" flight case or rack within a vehicle

### Features

- DVE5151 is a Standard Definition & High Definition H.264 video encoder
- DVE5152 is a dual Standard Definition & High Definition H.264 video encoder
- HD & SD H.264 4:2:0/4:2:2 encoding
- 2 pairs of audio channels from embedded SDI
- BISS1 / E conditional access
- Low delay H.264 Encoding (20mS) with Vislink decoder
- Remote control via web browser
- SNMP control
- IP Streaming output allowing encapsulation of up to 2 ASI signals
- IP input with de-capsulation of one of two IP video signals
- Field upgrade by USB memory stick
- IP data extraction from ASI / Demodulator

### Hardware Options

- DC Power option
- Second encoder - DVE5152
- Integrated 4-way diversity demodulator - DVE5174

# Specifications

## VIDEO PARAMETERS

### Inputs

- HD-SDI / SDI: SMPTE 292M SMPTE 259M / ITU-R BT.656 with embedded audio

### Video Encoding (H.264)

#### SD

- 420HP@L3 0.5 – 25Mbits
- 422HP@L3 2 – 25Mbits

#### HD

- 420HP@L4 1 – 41Mbits
- 422HP@L4 1 – 41Mbits

#### HD Resolutions

- HD 1080i/60
- HD 1080i/59
- HD 1080i/50
- HD 1080i/60
- HD 720p/60
- HD 720p/50

#### SD Resolutions

- 480 x 720 NTSC
- 480 x 704 NTSC
- 576 x 720 PAL
- 576 x 704 PAL

#### Latency (encoding)

- H.264 20mS in low delay mode

#### Scrambling

- BISS 1 & E Encryption

## IP VIDEO TRAFFIC INTERFACE

- Type: 10 / 100 / 1000 Base-T Ethernet

### Protocol

- IEEE802.3 Ethernet
- Encapsulation for ASI – RTP (RFC 2250), ARP, IPv4, IGMPv2/3, TCP/UDP

### FEC

- Pro-MPEG Forum Code of Practice #3 release 2 (CoP3) / SMPTE 2022-2007 (Columns and Rows)
- 1-7 TS packets per IP packet (configurable) with L&D following the range:
  - ◊ L\*D < 100
  - ◊ 1 < L < 20
  - ◊ 4 < D < 20

### Total Bitrate

- Max 100 Mbit/s (this is for a mux of 4 ASI's)
- 1000 Base-T Ethernet
- Ethernet MTU Length: Max 1500 bytes (IPv4)

## USER CONFIGURABLE NETWORK & MULTICAST PARAMETERS

### Source IP address:

- IP, Subnet mask, Gateway

### Destination IP address:

- Unicast & Multicast

### UDP Ports:

- User definable

## AUDIO PARAMETERS

### Inputs

- 2 stereo pairs
- Dolby E pass through / AC3 pass through

## PERFORMANCE

### THD

- <0.1% +18 dBm max input level

### S/N

- >66 dB RMS

### Frequency response

- =20 Hz-20 KHz +/- 0.5dB
- Crosstalk better than 60 dB

### Encoding

- MPEG1 Layer 2 128 kbs / 256kbs / 384 kbs / channel (Audio A & B)
- SMPTE 302 2.4MB/s / Dolby E & AC3 pass through (Audio B only)

### Remote Control

- Ethernet: Web browsers / SNMP

### Web Browser

- Supporting Internet Explorer 7, 8 & 9, Firefox, Safari and Opera

## AUDIO PARAMETERS PERFORMANCE CONNECTORS

### (HD) SDI

- 75Ω BNC female

### ASI IN

- 75Ω BNC female

### ASI out

- 75Ω BNC female

### Remote / Status

- 15W D type female
- USB for field upgrades

### Ethernet / Web Interface

- RJ45 10 / 100 / 1000 Base-T

## ENVIRONMENT & PHYSICAL

### Temperature

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

### Size

- 210mm wide by 350mm deep (8.27" wide by 13.78" deep)
- 1U half rack width

### Weight

- <1.5kg approx (4 lbs)

## POWER

### Frequency

- 47 to 63 Hz @ <50W

### Operating voltage

- 100 to 240 Vac +/- 10%