



Gryphon PVE-2

MPEG Video Encoder

Professional Video Encoder ideal for both TV Distribution and Outside Broadcasting

Ideal for both TV Distribution and Contribution

Nearly twenty years of broadcasting experience went in to the design of the **Gryphon PVE-2** professional video encoder. We now have units deployed in almost every country in the world, helping our broadcast customers tackle the unique and demanding challenges of both TV Distribution and news and sports contribution. **Gryphon PVE-2** combines updated core technology capable of delivering new levels of performance, with an overall product design based on nearly two decades of video broadcasting experience.

Breaking News Won't Wait, Why Should You

Setting up a video encoder can be challenging at the best of times. Errors made while configuring encoders with complex menu trees in the high-pressure environment of a major sports or news event can prevent live shots from getting through. **Gryphon PVE-2** has been designed to enable operators, who might not be experts in video compression, to set up contribution links quickly and easily – getting **on-the-air in less than 60 seconds**. Extremely intuitive menus and front panel controls allow operators to define and enable compression and modulation parameters with only minimal training. For users who prefer Web based control, the built-in Browser interface is equally intuitive and easy to use.

Compatibility Tested Against Common Systems

Ensuring success in an outside broadcast transmission requires interoperability with both the content being sent, and the equipment used to receive it. The **Gryphon PVE-2** handles a very wide range of news and sports formats: including PAL or NTSC, resolutions of 480i, 576i, 720p, 1080i, or 1080P in MPEG-2 or MPEG-4, 4:2:0 and MPEG-2 4:2:2 encoding. Combined with DTVI's commitment to open standards and full interoperability testing with the world's leading decoder vendors, you can rest assured that the **Gryphon PVE-2** will work in any broadcast environment.

Ready to Grow with Your Business

At DTVI we understand that your needs may change over time. **Gryphon PVE-2's** flexible, software license-based architecture allows you to purchase only those features required today, and upgrade to a more advanced feature set including 1080P/60 High Definition compression as your requirements evolve. With a highly flexible and functional modulator, and the ability to add features such as an internal multiplexer, BISS encryption, and advanced audio and video formats, the **Gryphon PVE-2** is capable of changing to meet your business needs.

Input Interfaces

While everything else is important, impressive audio and video quality is critical to successful broadcasting. Through its unique combination of ASIC and FPGA technologies, the **Gryphon PVE-2** delivers industry leading video and audio compression quality. Advanced features including: dynamic GOP; and scene change, fade, and skin tone detection, allow **Gryphon PVE-2** to deliver the absolute best picture possible using whatever bandwidth is available. Single camera feeds can take advantage of extended GOP structures to provide outstanding video quality at extremely low bit rates.

Best in Class Video Quality

The **Gryphon PVE-2's** advanced MPEG-2 and MPEG-4 AVC compression engine allows operators to deliver outstanding audio and video feeds at a much reduced bandwidth, thus enabling more channels per multiplex, or in the case of contribution, lower satellite cooperating costs. **Gryphon PVE-2** makes standard definition news operation at 1 MSymbol/s a reality.

Applications

- Television Distribution
- Satellite Sport Contribution
- Satellite News Contribution
- IP Program Contribution and Distribution

Features

- SD and HD up to 1080p60 (option)
- Analog and Digital Video and Audio inputs
- Best-in-Class MPEG-2 and MPEG-4 Video Compression
- Advanced Audio Compression for up to 8 Stereo Pairs (2 pair standard)
- AC3 and Uncompressed Audio Pass Through
- DVB-CID compliant Internal DVB-S/S2 Modulator (option)
- ASI and Ethernet Outputs
- BISS Encryption (option)
- Internal Multiplexer (option)
- Easy to use User Interface
- Feature set upgradable using software license keys

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| STANDARD FEATURES AND SOFTWARE LICENSABLE OPTIONS | | HARDWARE OPTIONS | |
|---|--|---|--|
| ASI Output standard | <ul style="list-style-type: none"> 2 x DVB-ASI on BNC | Satellite Modulator | <ul style="list-style-type: none"> 1 to 68 MSymbol/s in DVB-S 1 to 45 MSymbol/s in DVB-S2 |
| Ethernet Output standard option GRYPVE-SW-FEC | <ul style="list-style-type: none"> 100/1000 Base-T (MPEG TS over IP) Pro MPEG Forum COP3 FEC (SMPTE 2022) supports column FEC only | GRYPVE-HW-IM-MOD OPTION | <ul style="list-style-type: none"> IF 70/140 MHz 0 to 25 dBm L-Band High Stability 950 to 2,050 MHz DVB-S (QPSK, 8PSK, 16QAM) DVB-S2 (QPSK, 8PSK, 16APSK, 32APSK) DVB-CID ETSI TS 103 129 (2013-05) |
| Video Inputs standard | <ul style="list-style-type: none"> SD Analog – NTSC and PAL SD Digital – SDI (SMPTE 259M) HD Digital – HDSDI (SMPTE 292M) | GRYPVE-HW-RMK GRYPVE-C-AA | <ul style="list-style-type: none"> Rear rack mount support kit Analog audio cable – DB26HD female to XLR female. Supports 4 audio pairs |
| Video standard | <ul style="list-style-type: none"> MPEG-2/MPEG-4 SD 4:2:0 | STATUS AND CONTROL INTERFACES | |
| options GRYPVE-2-VF-MPEG-2-4:2:2 GRYPVE-2-VF-HD GRYPVE-2-VF-1080P | <ul style="list-style-type: none"> MPEG-2 4:2:2 HD (720P & 1080i) High Definition (1080P50/60) | <ul style="list-style-type: none"> Integrated web browser Front panel with full control | |
| Video Compression 100 kb/s to 40 Mb/s | <ul style="list-style-type: none"> MPEG-2 4:2:0 MP@ML/HL/HP MPEG-4 4:2:0 (H.264 MP/HP TO L4.2) MPEG-2 4:2:2 HP@ML/HL | POWER REQUIREMENTS | |
| GRYPHON-VC-MP2-420 standard GRYPHON-VC-MP4-420 standard GRYPHON-VC-MP2-422 option | | Supply Voltage | 100 to 240 VAC, 50 or 60 Hz |
| | | Power Consumption | 60 Watts maximum |
| | | PHYSICAL PARAMETERS | |
| | | Chassis | 1 RU rackmount ears included |
| | | Dimensions (H, W, D) | 4.5 cm x 48 cm x 45.7 cm (1.75" x 19" x 18") |
| | | Weight (including modulator) | 4.2 kg (9.0 lbs.) |
| | | ENVIRONMENTAL CONDITIONS | |
| | | Operating Temperature | 0 to 50 C (32 to 122 F) |
| | | Storage Temperature | -20 to 70 C (-4 to 158 F) |
| | | Humidity | Up to 90% humidity |
| VBI Support standard | <ul style="list-style-type: none"> Embedded Closed Captioning EIA608 and 708 | | |
| Audio Inputs standard | <ul style="list-style-type: none"> Analog (optional XLR breakout cable) Digital: AES/EBU on BNC Embedded: SMPTE 272M | | |
| Audio Compression standard | <ul style="list-style-type: none"> MPEG-1 Layer II (32-384 kb/s) AC3 5.1 Pass Through (32-640 kb/s) SMPTE 302M Pass Through | | |
| GRYPVE-AAC-option | <ul style="list-style-type: none"> AAC-LC (16-576 kb/s) HE-AAC V1 and V2 (16-128 kb/s) | | |
| Audio Channels standard Additional Audio Channels GRYPVE-SW-AUD-2P option | <ul style="list-style-type: none"> Two compressed audio pairs Additional compressed audio pairs up to 8 pairs total | | |
| Transport Stream Re-Multiplexer GRYPVE-SW-MUX option | <ul style="list-style-type: none"> ASI input for internal multiplexing (200 kb/s – 80 Mb/s) | | |
| BISS Conditional Access GRYPVE-SW-BISS option | <ul style="list-style-type: none"> Basic Interoperable Scrambling System Conditional Access- Modes 0, 1, and E | | |



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