VPX3U-H264-DUAL

FOUR CHANNEL HD-SDI TO H.264 ENCODER IN 3U VPX

KEY FEATURES

- Up to 4 Simultaneous SDI inputs
  - 4× HD-SDI (SMPTE-292M 1080p30), or
  - 2× 3G-SDI inputs (SMPTE-424M 1080p60)
- No O/S or drivers required
- Stand-alone operation
- Supports Static and Dynamic configurations
- Low latency
- Ultra low power
- STANAG 4690 KLV Metadata Injection over Ethernet or RS-232
- Output via Ethernet 10/100/1000
- Pass-through SDI Output

OVERVIEW

The VPX3U-H264-DUAL provides up to four multi-channel, low latency, SDI to H.264 encoded/encrypted UDP stream for mission-critical ruggedized applications in a 3U VPX form factor.

Real-time H.264 encoding can be enhanced with optional video processing, and multiple encode streams from a single source, all in an ultra-low power platform.

Modular Expansion Cards (MXC) allow you to leverage WOLF’s COTS product line for unique capabilities. The VPX3U-H264-DUAL encodes up to four channels of HD-SDI (or two channels 3G-SDI), using a two MXC sites.

In static configuration, no driver, operating system or user applications are required; the module begins outputting an encoded UDP stream as soon as power and SDI activity are detected.

Dynamic configuration allows real-time control of the encoder. Communicate with the encoder engine through Ethernet or RS-232 to adjust bit rate, inject metadata, change encoder stream target UDP, read-back status and more.

OPTIONAL VIDEO PROCESSING

- Deinterlacing
- Adaptive edge/contrast enhancement
- Scaling
- Noise reduction
- Colour management

SPECIFICATIONS

- Form factor: 3U VPX-REDI VITA 46.0
- Conduction-cooled: -40° to +85°C
  Rugged air-cooled: -40° to +85°C
- 40g Shock and Vibration
The VPX3U-H264-DUAL video processing modules support MPEG-4 Part 10 (AVC/h.264) encoding of: 1080p60, 1080i/60, 1080p50, 1080i/50, 1080p24, 1080p25, 720p60, 720p50, and many other resolutions. Real-time encoding is supported in MPEG-2 and MPEG-4, from SD and HD sources. Other video codecs, resolutions, and formats are also available. For a full list of capabilities, please contact WOLF.

**VIDEO**

- Multiple Codecs: H.264, MPEG2
- High Quality 1080p60 Encode
- MPEG-4 Part10/AVC/H.264 Encode High Profile Level 4.2 (up to 1920x1200@60Hz)
- MPEG2 Encode up to HD (MP@HL)
- Wide range of bitrates supported
- Support CBR, VBR, and capped VBR bitrates
- Configurable GOP structure
- Scene Change Detection
- Fade Detection
- Dynamic Parameter Changes

**AUDIO**

- Multiple Codecs: MP2, AAC-LC
- Flexible and Dynamic Bitrate Adjustment

**ADDITIONAL**

- STANAG 4609 KLV Key-Length-Value Metadata
- Additional Audio and Video codecs may be available upon request

Visit [www.wolf.ca/products/](http://www.wolf.ca/products/) for more information about this and other advanced video modules and solutions.