

7815VP-3G-F-2, 7815VP-HD-F-2, 7815VP-AES8-3G-F-2, 7815VP-AES8-HD-F-2

Dual Path 3G and HD Video Processor and Up/Down/Cross Converter

Typical broadcast and other professional media applications require that a number of common processing and utility functions be performed on signals entering and being generated at various points within the facility:

- Frame Synchronization
- Up/Down/Cross Conversion
- Audio Processing
- Optical/Electrical Conversion
- Streaming Encode for Monitoring
- Ancillary Data Embedding and Processing

Typically, multiple products would need to be used to perform the above functions. The 7815VP is a single powerful product which supports these functions on two independent conversion paths. This offers exceptional value and density while reducing interwiring, rack space and power requirements. Models are available to support common SD, HD and 3G video formats.

Synchronization and Up/Down/Cross Conversion

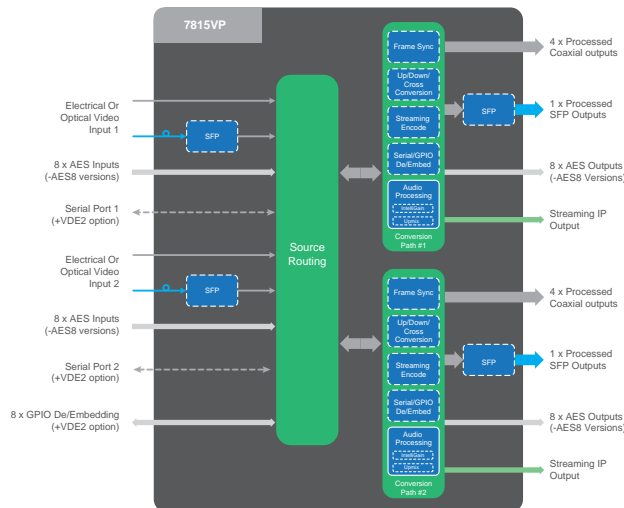
The 7815VP series supports frame synchronization and video up/down/cross conversion capabilities. AFD driven or user-controlled scaling, video proc, detail enhancement, RGB based color legalization and ITU Rec. 709 ↔ 601 color space conversion processes are also available. Audio delay is automatically synchronized with video delay. Additional audio and video delay are also available. CEA 608/708 Closed Caption (Line 21 & SMPTE 334-2 CDP), OP42/OP47 Teletext (ETSI EN 300 706 & SDP), and time code information (SMPT 12M – DVITC, ANC-VITC, ANC-LTC) are transferred from input to output performing all HD ↔ SD data translations and time code re-calculations.

Audio Processing

As standard features, the 7815VP series supports 16 channels of embedded audio, 5.1 to stereo down-mixing (LoRo or LTR), global audio delay, audio channel shuffling, gain, inversion and mono-mix capabilities. Optional audio processing features include IntelliGain audio loudness control (+IG2 option) and stereo to 5.1 upmix (+UMX2 option). -AES8 versions add eight discrete AES input pairs (16 audio channels) and eight discrete AES output pairs (16 audio channels) per path. Full audio routing capability allows outgoing embedded and discrete AES audio to be sourced from any combination of embedded audio, discrete AES inputs or processed audio.

Optical/Electrical Conversion

In addition to coaxial inputs and outputs, the 7815VP also offers added I/O via Evertz pluggable SFP modules (ordered separately). Whether the card uses the SFP or coaxial inputs is software selectable on a per path basis. On the output side, in addition to the four coaxial outputs per path, one output per path is available via a dual-output SFP. Optical SFP's may be installed (ordered separately) to facilitate optical inputs and/or outputs.



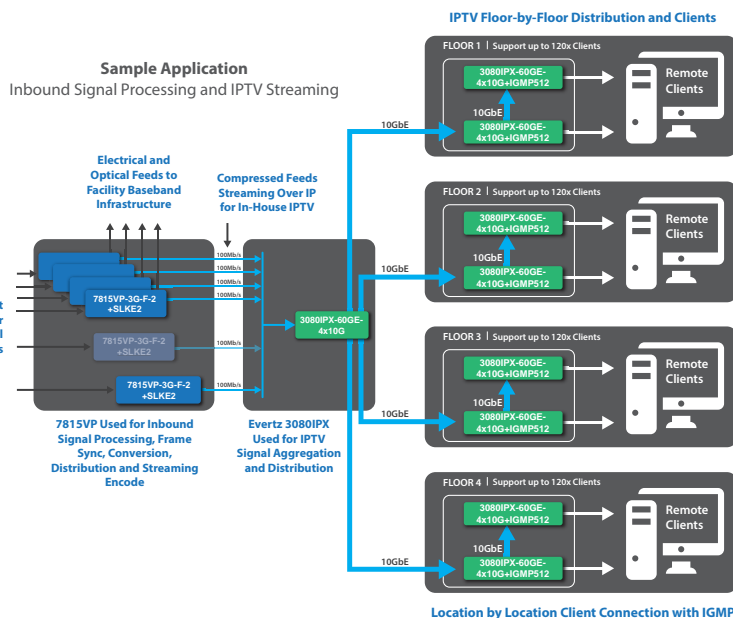
Streaming Encode

Ideal for in-house IPTV systems and other monitoring applications, the +SLKE2 option adds the generation of monitoring quality H.264/MPEG2 encoded video (4:2:0) with MPEG1 Layer 2, AAC-LC or HE-AAC-V1/2 encoded audio for streaming over IP. This encoded output can include CEA 708 Closed Captioning and is suitable for PC-based streaming decoder applications, stand-alone IPTV set top box decoders and dedicated modular card-based decoders. The 7815VP's video encoding resolution may be set to follow the card's baseband output or may be set to output a different resolution. Common resolutions are supported and range from 240p up to 1080p. A stereo pair of audio is encoded, which may be sourced directly from any of the 16-channels embedded in the baseband SDI output, or from a dedicated 5.1 to stereo downmixer.

Ancillary Data Embedding and Processing

The 7815VP series supports Full AFD input processing and output stamping. It is also capable of generating and embedding timecode via synchronization with NTP or extracting it from VITC embedded on the genlock reference. Additionally, a generic ancillary data pass through feature provides flexibility to route any desired ANC data packets from input to output with full user control, ensuring non-standard or proprietary packets are not lost during the conversion process. Source ID identification tags may be generated and embedded to VANC. This technology provides reliable signal source identification which may be appended and/or extracted and displayed by other Evertz Source ID-enabled equipment. With the +VDE2 option, two serial data streams and GPIO states can be embedded and de-embedded to/from VANC. This embedded serial and GPIO data is also supported by Evertz' companion 7721DE4-HD+VANC and 7721DD4-HD+VANC cards.

The 7815VP is a dual slot card providing up to 14 paths of processing when housed in a 7800FR/7800FR-QT frame within a 3RU form factor. These modules are SNMP capable for remote monitoring, control and configuration purposes using VistaLINK® PRO. VistaLINK® PRO control and monitoring is available when modules are used with a Frame Controller card installed in the appropriate position in the frame.

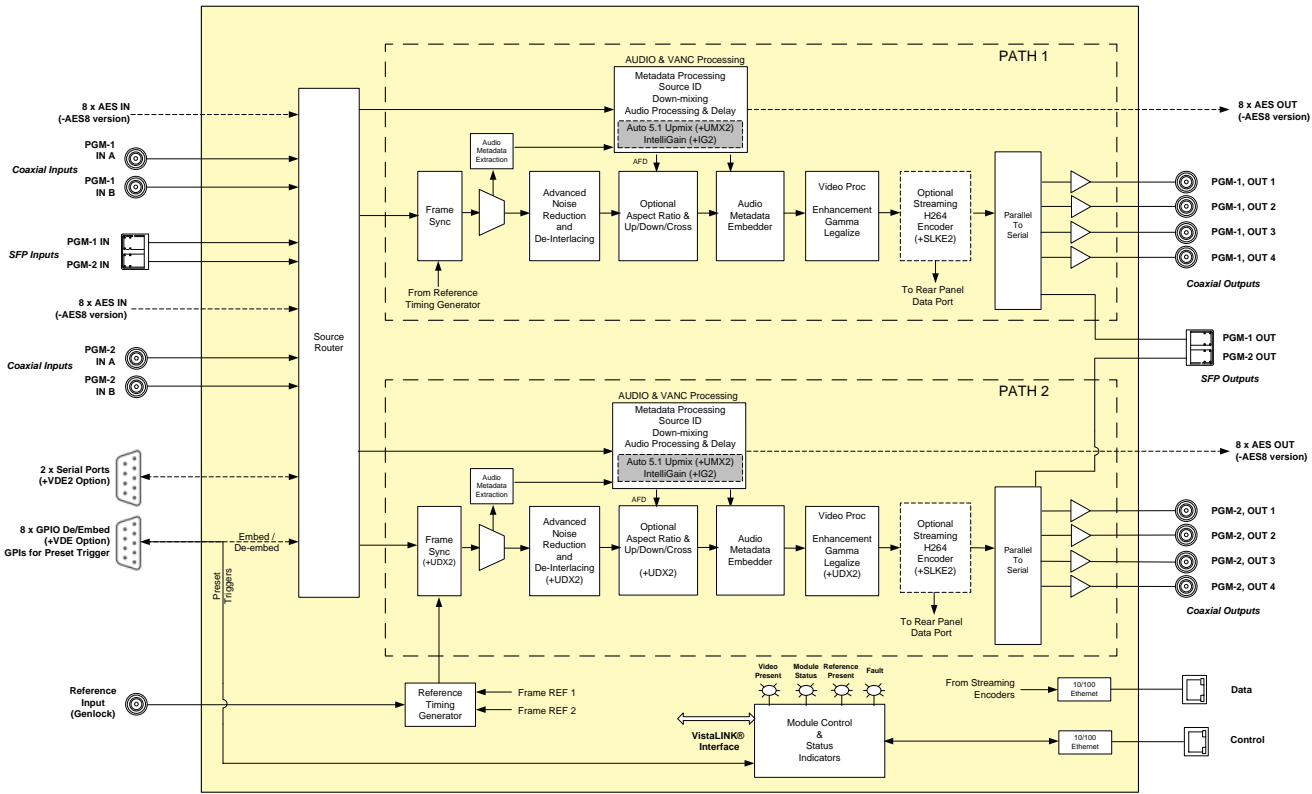


The Complete Solution Provider



7815VP-3G-F-2, 7815VP-HD-F-2, 7815VP-AES8-3G-F-2, 7815VP-AES8-HD-F-2

Dual Path 3G and HD Video Processor and Up/Down/Cross Converter



Features & Benefits

- Dual path Video Processor and Up/Down/Cross Converter
- 14x paths of processing in 3RU
- Frame Sync and Up/Down/Cross conversion
 - Broadcast quality up/down/cross conversion with de-interlacing
 - Video proc, detail enhancement, color space conversions
- Full processing of CEA 608/708 Closed Captions and time code with all required data translations and time code re-calculations
- Mini DIN 1.0/2.3 I/O connectors (consult factory for optional HDBNC)
- Fiber inputs and outputs are available when fiber SFP transmit and/or receive modules are installed
- Input may be sourced from coaxial or SFP sources, and through software selection may be manually forced to available inputs or may operate in an automatic mode based on loss of video
- Source routing allows video, AES, serial and GPIO sources to be routed to conversion path 1 or path 2.
- Source ID identification tag generation and embedding in VANC for reliable signal source identification
- Support for 16 channels of embedded audio per path
- -AES8 version adds eight discrete AES inputs and outputs per path
- 5.1 to stereo down-mixing (LoRo or LTRt)
- Optional stereo to 5.1 upmix [+UMX2]
- Optional Intelligain audio loudness processing [+IG2]
- Optional monitoring quality MPEG2/H.264 encoder [+SLKE2]
 - User selectable encode bit rate
 - Compatible with PC, STB or dedicated modular decoders
- AAC-LC, HE-AAC-V1/2, MPEG 1 Layer 2 encoded audio
- Optional Serial and GPI data embedding [+VDE2]
 - Embed or de-embed up to 8 GPIO status
 - Embed or de-embed a single serial data stream per path
- VistaLink Pro and SNMP enabled

Ordering Information

7815VP-HD-F-2	Dual Path HD Video Processor and Up/Down/Cross Converter
7815VP-AES8-HD-F-2	Dual Path HD Video Processor and Up/Down/Cross Converter with 8x Discrete AES Inputs and Outputs Per Path
7815VP-3G-F-2	Dual Path 3G Video Processor and Up/Down/Cross Converter
7815VP-AES8-3G-F-2	Dual Path 3G Video Processor and Up/Down/Cross Converter with 8x Discrete AES Inputs and Outputs

Evertz SFP Modules (Sold separately, please specify at the time of ordering)	
SFP3R-2	Dual fiber optic receiver SFP module
3405T13-2	Dual fiber optic transmitter SFP module, 1310nm FP lasers
3405T13-2-S	Dual short-haul fiber optic transmitter SFP module, intra-facility and multimode applications, 1310nm FP lasers
3405Txx/yy-2	Dual fiber optic transmitter SFP module, CWDM DFB lasers (1270-1610nm available)

Ordering Options

+SLKE2	Dual Channel Monitoring Quality MP2/H.264 Encoding
+IG2	Dual Path (16 Channels each) Intelligain Loudness Processing
+UMX2	Dual Path Stereo to 5.1 Upmix Capability
+VDE2	Dual Path Serial Data and GPIO Embed and De-Embed

Consult factory for CWDM multiplexers and other optical accessories.

Rear Plate Suffix

+3RU	+3RU Rear Plate
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Enclosure

7800FR	3RU Multiframe which holds up to 15 single slot modules
7800FR-QT	3RU Multiframe which holds up to 15 single slot modules, low noise
7801FR	1RU Multiframe which holds up to 4 single slot modules