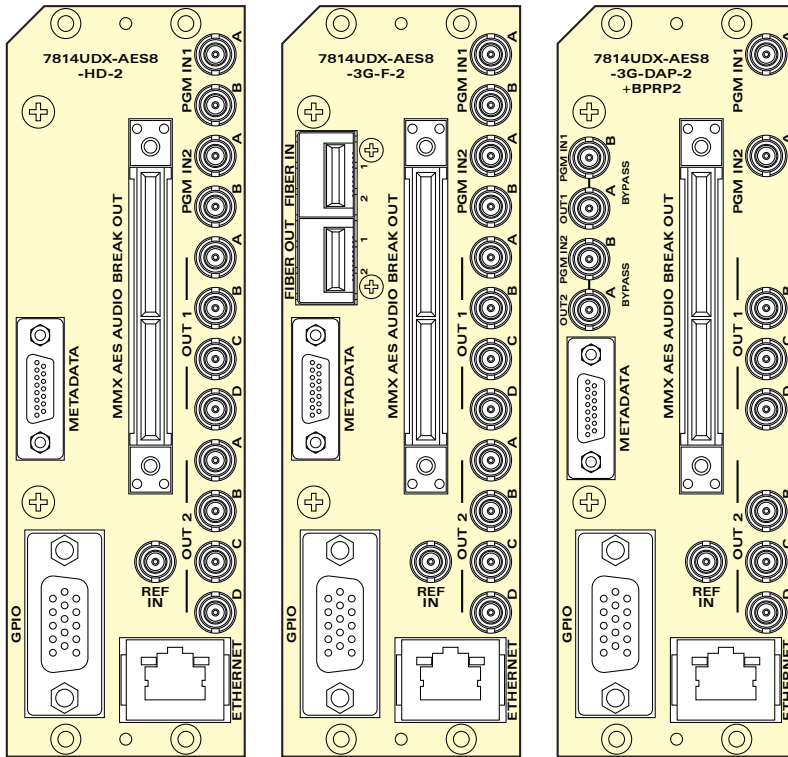


# 7814UDX Series

Dual Path 3G/HD Up/Down/Cross Converters with Frame Sync



The 7814UDX series are dual path broadcast quality up/down/cross converters that convert between common SD/SMPTE ST 259M and HD/SMPTE ST 292M video signals. “-3G” versions add support for common 3G/SMPTE ST 424M video signals. These modules support frame synchronization and external genlock inputs (card and frame reference) for video timing adjustments.

The 7814UDX series incorporates advanced motion adaptive spatial-temporal (3D) noise reduction and next generation de-interlacing techniques ensure superior resolution and artifact reduction, generating the highest quality video suitable for broadcast and other professional media applications.

The 7814UDX series supports broadcast quality scaling and offers both standard and user-defined ARC modes. AFD (SMPTE 2016) based steering of ARC modes and stamping AFD codes is fully supported. Transitions between AFD modes are frame accurate/glitch free.

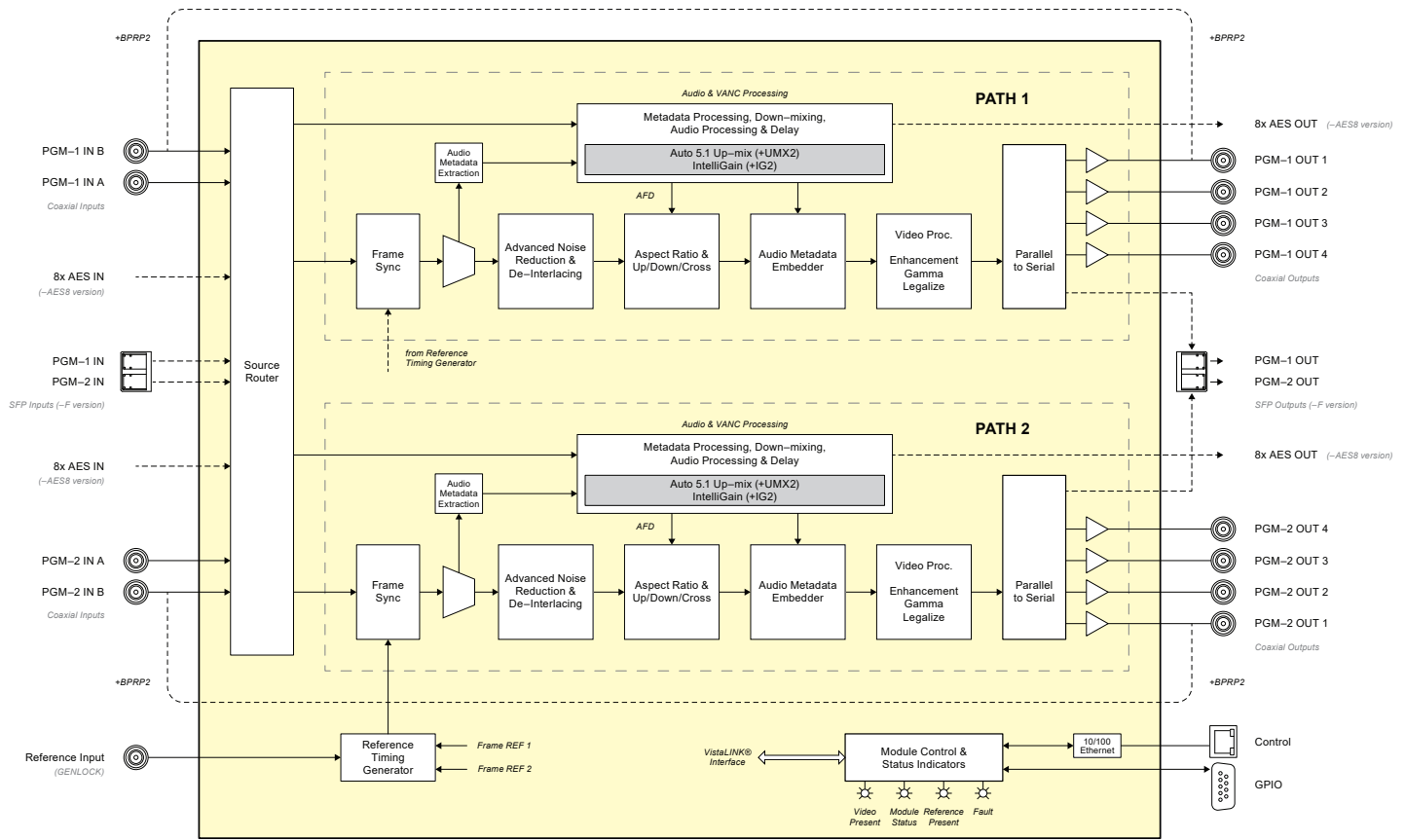
Full broadcast quality color correction and detail enhancement processors are also integrated in the 7814UDX series. RGB-based color legalization is also supported. ITU Rec. 709 ↔ 601 color space conversions are performed as needed.

## Features & Benefits

- Dual path processing in a single modular form factor
- Broadcast quality up/down/cross conversions between common SD/HD video signals
- Support for common 3G video signals (–3G versions)
- Integrated frame synchronizers
- Support for card reference connection and two sources of 7800FR frame reference (software–selectable from the three sources)
- Advanced 3D noise reduction and next generation de–interlacing technologies ensure the highest quality video without compromise for broadcast and professional media applications
- Supports standard and user–defined aspect ratio conversions
- Fully AFD–enabled with frame–accurate transitions between AFD modes
- Broadcast quality color corrector and detail enhancement engines
- ITU Rec 709 ↔ 601 color space conversions
- Full processing of CEA 608/708 Closed Captions and time code with all required data translations and time code re–calculations
- 16x channel embedded audio support
- Audio delay automatically tracks video delay
- Full audio proc and channel–swapping

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## Features & Benefits (continued)

- 5.1 surround sound-to-stereo (Lt/Rt and Lo/Ro) down-mixing as a standard feature
- Supports 8x external AES inputs and 8x AES outputs per path (-AES8 versions only)
- "-F" versions add fiber inputs and outputs when fiber SFP transmit and/or receive modules are installed (ordered separately)

The 7814UDX series supports 16x channels of embedded audio with audio delay automatically matching video delay. Additional audio delay can be applied. Full audio processing is supported with standard proc features, including audio channel shuffling, gain and inversion, 5.1-to-stereo down-mixing (LoRo or LtRt) and mono-mixing. With "-AES8" variants, 8x discrete AES inputs and outputs are provided on a per-path basis.

Advanced audio processing options include stereo-to-5.1 upmixing (+UMX2) and IntelliGain™ audio loudness management (+IG2). Full audio routing capability allows outgoing embedded and discrete AES audio (-AES8 versions) to be sourced from any combination of embedded audio, discrete AES inputs (-AES8 versions) or processed audio. Dolby® encoding and Dolby® decoding options are also available with the -DAP variant of the 7814 series card.

"-F" versions of the card offer 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.

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These modules are SNMP-capable for remote monitoring, control and configuration capabilities using VistaLINK® PRO, CP-2116E or CP-2232E control panels. VistaLINK® is available when modules are used with the 3RU 7800FR series or 1RU 7801 frames and a 7700/7800/7801FC VistaLINK® frame controller module is installed. Each 7814UDX series card occupies two slots in the frame.

## Ordering Information

<b>7814XXX-3G-2</b>	Dual path 3G/HD/SD up/down/cross converter with frame synchronizer
<b>7814XXX-HD-2</b>	Dual path HD/SD up/down/cross converter with frame synchronizer
<b>7814XXX-3G-F-2</b>	Dual path 3G/HD/SD up/down/cross converter with frame synchronizer and fiber I/O (SFPs ordered separately)
<b>7814XXX-HD-F-2</b>	Dual path HD/SD up/down/cross converter with frame synchronizer and fiber I/O (SFPs ordered separately)
<b>7814XXX-AES8-3G-2</b>	Dual path 3G/HD/SD up/down/cross converter with frame synchronizer and discrete AES I/O
<b>7814XXX-AES8-HD-2</b>	Dual path HD/SD up/down/cross converter with frame synchronizer and discrete AES I/O
<b>7814XXX-AES8-3G-F-2</b>	Dual path 3G/HD/SD up/down/cross converter with frame synchronizer, discrete AES I/O and fiber I/O (SFPs ordered separately)
<b>7814XXX-AES8-HD-F-2</b>	Dual path HD/SD up/down/cross converter with frame synchronizer, discrete AES I/O and fiber I/O (SFPs ordered separately)
<b>7814XXX-AES8-3G-DAP-2</b>	Dual path 3G/HD/SD up/down/cross converter with frame synchronizer, discrete AES I/O and Dolby® audio processing
<b>7814XXX-AES8-HD-DAP-2</b>	Dual path HD/SD up/down/cross converter with frame synchronizer, discrete AES I/O and Dolby® audio processing

All options above can be ordered with the following options:

<b>UDX:</b>	Up/down/cross conversion
<b>HDC:</b>	High quality downconverter
<b>XC:</b>	Cross converter
<b>UC:</b>	Upconverter

## Ordering Options:

<b>+IG2</b>	Dual IG core
<b>+BPRP2</b>	Dual video bypass relay option
<b>+UMX2</b>	Dual up-mixing core (for -AES8 only)
<b>+DD2/4/6/8</b>	Dolby® E/AC3/Plus decoder for 7814UDX-HD-DAP-2
<b>+AC3E2/4/6/8</b>	Dolby® AC-3 Encoder for 7814UDX-HD-DAP-2
<b>+DEE2/4/6/8</b>	Dolby® E Encoder for 7814UDX-HD-DAP-2
<b>+DPE2/4/6/8</b>	Dolby® Digital Plus Encoder for 7814UDX-HD-DAP-2

DAP modules can handle up to 8x Dolby® processes maximum. Each option will add an equivalent amount of processes per path. Eg. +DD2 will add one Dolby® decoder per path.

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## Ordering Information (continued)

SFP Interface Options for use with “-F” Product Versions:

<b>SFP3R-2</b>	Dual Optical SFP Receiver Module (FOR ROUTER & 7700 SERIES PRODUCTS)
<b>3405T13-2</b>	3G/HD/SD Dual Channel 1310nm, SFP Transmitter, Non-Reclocking
<b>3405T13-2-S</b>	3G/HD/SD Dual 1310nm SFP Transmitter, Non-reclocking, Short-haul or Multimode use
<b>3405Tx/yy-2</b>	3G/HD/SD Dual Channel CWDM SFP Transmitters, Non-Reclocking (Wavelength 27 to 61)

*Sold separately, please specify at the time of ordering. Consult factory for CWDM multiplexers and other optical accessories.*

Rear Plate Suffix:

<b>+3RU</b>	3RU rear plate
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Enclosures:

<b>7800FR</b>	3RU Multiframe Which Holds up to 15 Single Slot Modules with AC Power Supply
<b>7800FR-QT</b>	Quiet Multiframe with Intelligent Front Fan Cooling
<b>7801FR</b>	1RU Multiframe Which Holds up to 4 Single Slot or 2 Dual Slot Modules, Requires Rear Plate Option for Modules