zeevee
Signal Intelligence

HDb2800 Series

Unencrypted HDMI 1080p Encoder/ RF Modulator

For organizations looking to encode and modulate unencrypted HDMI sources cost-effectively, the HDBridge 2800 Series is a great option. This four channel encoder/modulator allows you to deliver HD video up to 1080p resolution to an unlimited number of displays over almost any distance.

The HDbridge 2800 series converts high definition AV sources into an RF signal received a television's QAM (NA model) or DVB-T/C (EU model) digital tuner over coax cable. With its high 45 dBmv RF output, you can send your content to an unlimited number of displays over nearly any distance.

Multiple units can be combined to create a headend that supports over 100 channels on the RF network. This unit is designed primarily for high channel density environments where rapid deployment, advanced management, and compatibility are critical.

MODELS:

HDb2840-NA

4 HDMI inputs up to 1080i/1080p

Superior Video Quality

- Full MPEG-2 implementation
- I, P, and B Frames
- Low latency
- Full motion estimation with a wide search range

High Reliability

- Low-stress power system
- Full system instrumentation and monitoring
- Official international regulatory approval
- Forced air cooling for effective thermal control

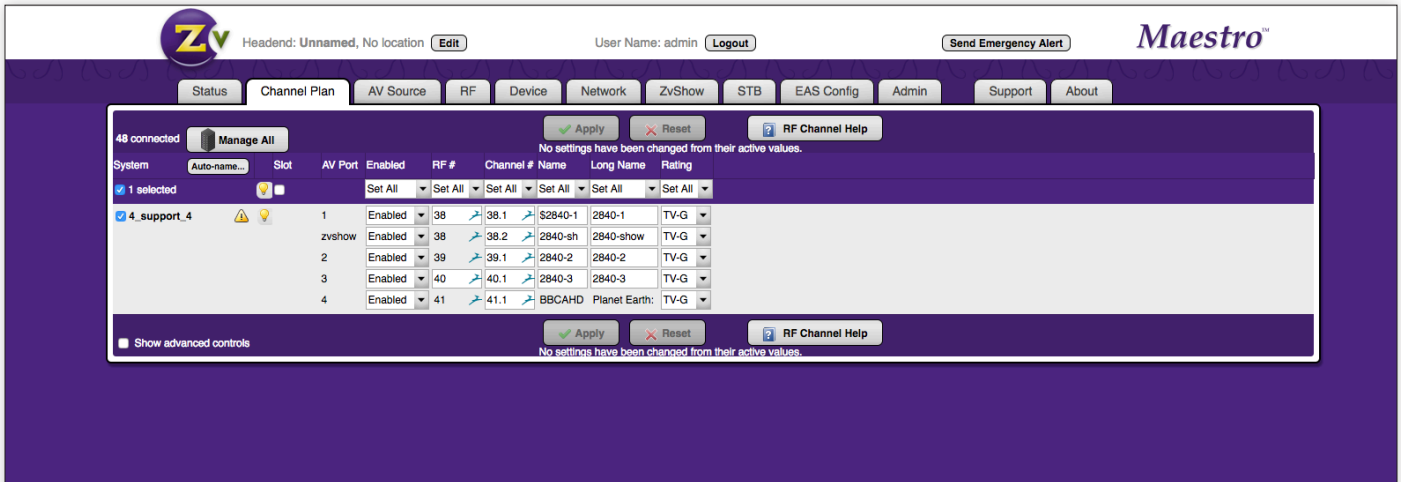
Extensible Architecture

- Easy downloadable firmware updates
- Future enhancements provided regularly
- Emergency Alert System (EAS)

Ease of Management

- Powerful, highly intuitive web interface
- On-site or remote management
- Configure/manage multiple units from
- Front Panel Display for local management

HDb2800 Series Web-based Adminstration Interface



General		
Power: 100-240 VAC 50/60 Hz, 60W max. 30W Typical IEC 60320-C14	**Cooling:** Dual internal cooling fans, Front inlet, Rear exhaust	**Temperature/Humidity:** Operating +32 F⁰ to +113 F⁰ (0 C⁰ to +45 C⁰) / 10% to 80%, non-condensing
	MBTF: 62,000 hours	**Enclosure Type:** Metal
Compliance: FCC Class A, IEC60065, EN61000 (see manual 70-00031-00), CE, RoHS, RCM C-Tick	**Enclosure Dimensions:** 1.72 in. (H) x 17.33 in. (W) (without rack mount ears) x 9.9 in. (D) 43.6 mm (H) x 440.2 mm (W) x 251.5 mm (D)	**System Weight:** 6.25 lbs. (2.84 kg)
		Shipping Weight: 7.88 lbs. (3.58 kg)
Mounting: Rack ears shipped attached, 1RU high	**Carton Dimensions (individual):** 4.25 in. (H) 30.875 in. W 12.125 in (D) 108 mm (H) 785 (mm) W 308 (mm) (D)	**Warranty:** 5 Years
		Vibration: NSTA 1A in carton
Input		
Encrypted HDMI: Four (4) ports per model up to 1080	**Closed Caption:** EIA/CEA-608 captions accepted over composite video input	**Extra Digital Channel:** MPEG2 Program stream file, up to 200 MB
Stereo Analog and Digital Audio x4 or x2	Line level input per channel DIN connector HDbridge end, RCA connector or digital SPDIF audio input. 3.5 mm pigtail connector with VGA	**Encoder Audio Profile:** ATSC A/52, Dolby® Digital (AC-3)
Video Encoder		
Encoder Video Profile: MPEG2 HD: ISO13818-2 MainProfile@ HighLevel	**Traffic Shaping:** Variable Bit Rate	**Video Encoding Data Rates:** Variable, 10 Mbs - 24 Mbs per channel
Average Encoding Data Rate: 18 Mbs per channel	**Encoding Latency:** Programmable 200 msec to 400 msec	**Color Profile:** 4:2:0
GOP Size: 15	**Video, Audio PID:** Programmable starting value	**Program Information:** Programmable program name, EIT
Modulator/Upverter		
Modulation Types: QAM 256 and 64 (ITU-T J83 Annex B) Interleaving modes: (64,2) only	**Cable Standard:** HRC, IRC or STD	**Frequency Range:** 4 paired, frequency agile QAM RF CATV Channels 2-135 • 2kHz resolution • +/- 30 ppm accuracy • +/- 35 ppm stability
Output Power: +45 dBmV typical	**Output Level Adjust:** 25 - 45 dBmV in 1dBmV steps	
I/Q Amplitude Imbalance: < 1% typical	**Spectral Tilt:** </= 1 dB over 6 MHz typical	**MER :** > 38 dB typical
Control Setup		
Network Interface	10/100 Mb Ethernet via RJ45 connection IP address via DHCP or set by user HTML/Javascript served web interface for easy configuration Telnet connection for CLI scripting Easy firmware updates All settings saved in NV storage	
Front Panel Color Display	Quickly obtain status at a glance, basic configurations, software revisions and updates	

ZeeVee, Inc.,headquartered in Littleton, Mass., and founded in 2007, is a leading global developer of digital technology and products for distributing audio-video content from any source or multiple sources to any number of displays. Manufactured in the U.S. and used primarily in commercial and corporate applications, ZeeVee products are employed worldwide by major organizations in education, government, hospitality, retail, sports, entertainment, broadcasting, healthcare, housing, energy and other industries. For more information visit **www.zeevee.com**

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