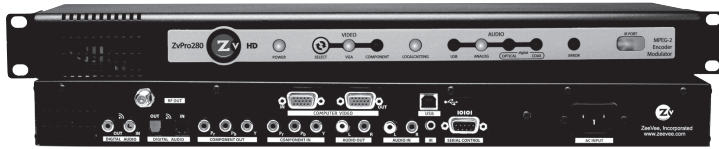




ZeeVee encoder/modulators convert video sources such as satellite receivers and media players into digital cable channels that can be broadcast over existing coaxial cabling to an unlimited number of HDTVs. By utilizing the HDTV's built in tuner, ZeeVee modulators completely replace the need for matrix switches, home run wiring and any devices at individual TVs.

## ZvPro® 280



Combo HD MPEG2 Encoder / QAM Modulator  
1080p / 1080i / 720p / 480p / 480i

### VIDEO INPUT

Component Video (Y, Pr, Pb)	RCA connectors, 75 Ohm 0 to 0.7v Buffered and looped Resolutions Supported: 1080p, 1080i, 720p, 480p, 480i 59.94 frames/fields per second
Computer VGA (Analog)	HD-15 connector, 75 Ohm RGB 0 to 0.7V, Separate H and V sync Buffered and looped Resolutions Supported: 640x480, 720x480, 800x600, 1024x768, 1152x864, 1176x664, 1280x720, 1280x768, 1280x800, 1280x960, 1280x1024, 1360x768, 1440x900 at 60 70, 72, 75, 85 Hz, 1680x1050 and 1920x1080 at 60 Hz VGA resolutions are broadcast centered in the best vertical fit into 1920x1080p30 or 1280x720p60.

### AUDIO INPUT

SPDIF Digital Audio	Physical Connections: TOSLINK optical, buffered and looped RCA 75 ohm, buffered and looped USB as PCM audio device Formats: 48K bit PCM AC-3 Pass-through
Analog	R/L via RCA, buffered and looped 16-bit 48K bit sampling
Assignment	Audio inputs can be assigned to either video input

### VIDEO ENCODER

Encoder Video Profile	MPEG2 HD Profile 2: ISO13818-2 MP@HL (1920x1080 or 1280x720)
Traffic Shaping	Variable Bit Rate
Video Transport Bit Rate	38.78 Mbps
Video Encoding Data Rates	Variable, 7 Mbs – 38 Mbs
Average Encoding Data Rate	35 Mbps
Encoding Latency	Programmable 100 msec to 400 msec
Color Profile	4:02:00
GOP Size	24
Intra DC Precision	8 to 11 bit, programmable
Video, Audio PID	Programmable
Program Information	Programmable
Content Watermarking	Digital and Visual

# ZvPro® 280

## AUDIO ENCODER

Encoder Audio Profile ATSC A/52

## RF SPECTRUM ANALYSIS

Automated spectrum scanning and reporting across all channels Detects Analog, Digital or Empty channels.  
Also detects STD/HRC/IRC cable plans

## MODULATOR/UPCONVERTER

Modulation Types	QAM 256 (ITU-T J83 Annex B) Interleaving modes: (64,2) only
Cable Standard	HRC, IRC or STD
Frequency Range	50 – 850 MHz (channels 2-135) 2 kHz resolution +/- 30 ppm accuracy +/- 35 ppm stability
Output Power	+25 dBmV typical
Output Level Adjust	5 – 25 dBmV in 1dBmV steps
MER	36 dB typical
I/Q Amplitude Imbalance	< 1% typical
Amplitude Flatness	+/- 1dB over 6 MHz typical

## CONTROL/SETUP

Powerful command line interface	RS-232 or USB / Parameters saved in NV storage
Input Switching	IR, RS-232, USB or Front Panel
RS-232 Port	9,600 baud / 8 bits, 1 stop bit, no parity / hw/sw flow control supported

## GENERAL

Power	100VAC to 240VAC, 50/60 Hz, 25 Watts
Cooling	Internal fan, front/back flow
Mounting	Detachable rack-mounting ears / Rubber feet for counter or shelf
Enclosure Type	Metal
Enclosure Dimensions	1.72" H x 17.0" W x 5.75" D / 4.37 cm H x 43.18 cm W x 14.61 cm D
Carton Dimensions (individual)	5" H x 21"W x 10" D / 12.7 cm H x 53.34 cm W x 25.4 cm D
Shipping Weight	5.5 lbs (12.13 kg)
Temperature/Humidity	Operating +32F to +113F (0C to +45C) / 10% to 80%, non-condensing
Vibration	NSTA 1A in carton
MTBF	30,000 hours
Compliance	Safety UL60065 FCC Class B
Part number	ZP280-NA
Model name	ZvPro 280
Warranty	3 years

ZvSpecs\_Rev111313



For more details and sales information, visit [www.zeevee.com](http://www.zeevee.com) or call +(1) 347-851-7364