



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.

ZvBox® 170



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

VIDEO INPUT

Component Video (Y, Pr, Pb)	RCA connectors, 75 Ohm 0 to 0.7v Resolutions Supported: 720p60, 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 VGA Resolutions Supported: 640x480, 720x480, 800x600, 1024x768, 1152x864, 1176x664, 1280x720, 1280x768, 1280x800, 1280x960, 1280x1024, 1360x768, 1440x900 at 60 70, 72, 75, 85 Hz. 1680x1050 at 60 Hz VGA resolutions are broadcast centered in the best vertical fit into 1280x720p60 or 1920x1080p30.

AUDIO INPUT

SPDIF Digital Audio	Physical Connections: TOSLINK optical RCA 75 ohm USB as PCM audio device Formats: 48k, 44.1k, 32k bit PCM AC-3 Pass-through
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 in QAM 256, 26.97 Mbps in QAM 64
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 to11 bit, programmable
Video, Audio PID	Programmable
Program Information	Programmable
Content Watermarking	Digital and Visual

AUDIO ENCODER

Encoder Audio Profile	ATSC A/52
Digital Pass-through	Dolby Digital® (AC-3) 1 to 5.1 channels

RF SPECTRUM ANALYSIS

Built-in spectrum scanning and reporting across all channels	Reports Analog, Digital or Open channels STD/HRC/IRC cable plan detection
--	--

MODULATOR/UPCONVERTER

Modulation Types	QAM 256, QAM 64 (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

CONFIGURATION AND CONTROL

Front Panel Configuration	Parameters saved in NV storage
PC software	USB
GUI or Command Line	Parameters saved in NV storage
Input Switching	Front Panel, IR, or USB

GENERAL

Power	100VAC to 240VAC, 50/60 Hz, 25 Watts
Cooling	Internal fan, side/back flow
Mounting	Optional rack-mounting ears (included) / Rubber feet for counter or shelf
Enclosure Type	Metal
Enclosure Dimensions	1.7" H x 14.8" W x 4.9" D / 4.32 cm H x 37.6 cm W x 12.45 cm D
Carton Dimensions (individual)	5.125" H x 18"W x 9.75" D / 13.0 cm H x 45.7 cm W x 24.77cm D
Shipping Weight	5.07 lbs (2.3 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	ZP170-NA
Model name	ZvBox 170
Warranty	1 year

