

# AVN441HD

h.264 high-definition encoder blade



## OVERVIEW

Visionary Solutions' IPTV encoders can turn video from any HDMI, DVI-D, or Component (YPbPr or RGB) source into full-screen, full resolution Internet Protocol digital video in real time.

The AVN441HD encodes high definition video in an h.264 stream (MPEG-4 Part 10/AVC). It's used in a Media Processing Platform (MPP), a high density rack mount system. Plug a video source directly into the blade, plug into the network via the RJ-45 connection, and stream real-time high definition video over your LAN or WAN. The MPP with AVN441HD blades is suitable for all applications requiring cost-effective, low bit rate, high definition video distribution over IP networks.

## FEATURES

### Superior Audio/Video Quality

h.264 (MPEG-4 Part 10/AVC) hardware compression and Visionary Solutions' optimized transmission technology provide a high definition, full frame rate, IP video stream. The stream can be viewed by an unlimited number of clients on a LAN or WAN provided that bandwidth is available. Image resolutions are configurable to 720p or 1080i at 50 or 60 frames per second or 1080p at 24 frames per second. The video bit rate can be configured from 4 to 18 Mbps. The audio compression is either AAC (128 to 512 kbps audio encoding) or MPEG-1 Layer 2 (64 to 384 kbps audio encoding) with up to 48 kHz sample rate.

### Video Inputs

The AVN441HD includes three BNC connectors for component YPbPr or RGB, and one HDMI input (DVI-D with optional adaptor cable) for connecting video and audio source equipment.

### Audio Inputs

A terminal block connector provides audio inputs for Balanced and Unbalanced connections. This allows for easy onsite connections regardless of the cabling outputs of the audio source. There are also

two RCA audio connectors (L/R) which support only unbalanced connections, and the HDMI input carries audio as well. The AVN441HD features user control of audio parameters, including mute, pre-amp and volume.

### External Device Connections

The AVN441HD includes a serial connection via an RJ-45 connector. This connector can be used as an RS-232 port (full-duplex, no hand shaking) or an RS-422 (full-duplex) port. These ports allow the AVN441HD to interface with external devices such as terminal emulation equipment.

### Management & Configuration

of the device is accomplished by any of four methods: PackeTV™ Configuration Utility, console menus, a Web interface, or the AVN Control Protocol API. TCP/IP, HTTP and other Internet-related protocols are supported.

**PackeTV™ Configuration Utility** (included) enables quick and efficient setup and mass reconfiguration of key settings including bit rate, video resolution and multicast destination IP addresses.

**The IPTV Media Processing Platform from Visionary Solutions** is a high density rack mountable blade system. The MPP1700 platform, pictured at right, with dual redundant power scheme, will hold up to eight AVN441HD high definition (HD) encoder blades or seventeen standard definition (SD) blades. The MPP200 has a single power source and can hold one HD or two SD blades. Each Media Processing Platform will incorporate a growing family of modules to support transport, switching, transcoding and monitoring of IPTV.



Visionary  Solutions, Inc

# AVN441HD

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### SPECIFICATIONS

#### Input/Output

Component YPbPr or RGB  
 3 x BNC connectors  
 RCA supported via adaptors

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HDMI digital input with HDCP  
 (DVI-D with optional adaptor cable)

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Terminal block audio connector for  
 Balanced and Un-Balanced Stereo

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RCA Stereo Audio

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RJ-45 Ethernet 10/100

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RJ-45 Serial RS-232C or RS-422

#### Video Encoding

HD Video h.264 MPEG-4 AVC  
 Compression

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High Profile at level 4 (HP@L4)

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5Mbps to 20Mbps

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SD Video h.264 MPEG-4 AVC  
 Compression

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Main Profile at Level 3 (MP@L3)

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2Mbps to 20Mbps

#### Video Resolutions

1080p 24

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1080i 59.94/60

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1080i 50

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720p 59.94/60

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720p 50

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576i 50

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480i 59.94

#### Audio Encoding

MPEG-1 Layer II stereo

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128kbps to 384kbps

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MPEG-2 AAC stereo

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128kbps to 384kbps

#### Dimensions

(W x D x H)  
 40 x 131 x 175 (1.6" x 5.2" x 6.9")

#### Weight

230g or .51 lb. (approximate)

#### Power Input

DC Input 4.25 Watts

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MPP200 Chassis 100-240VAC  
 50/60Hz Adapter

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MPP1700 Chassis 100-240VAC  
 50/60Hz

#### Environmental

Operating Temperature -10°C to  
 50°C (14°F to 122°F)

#### Compliance

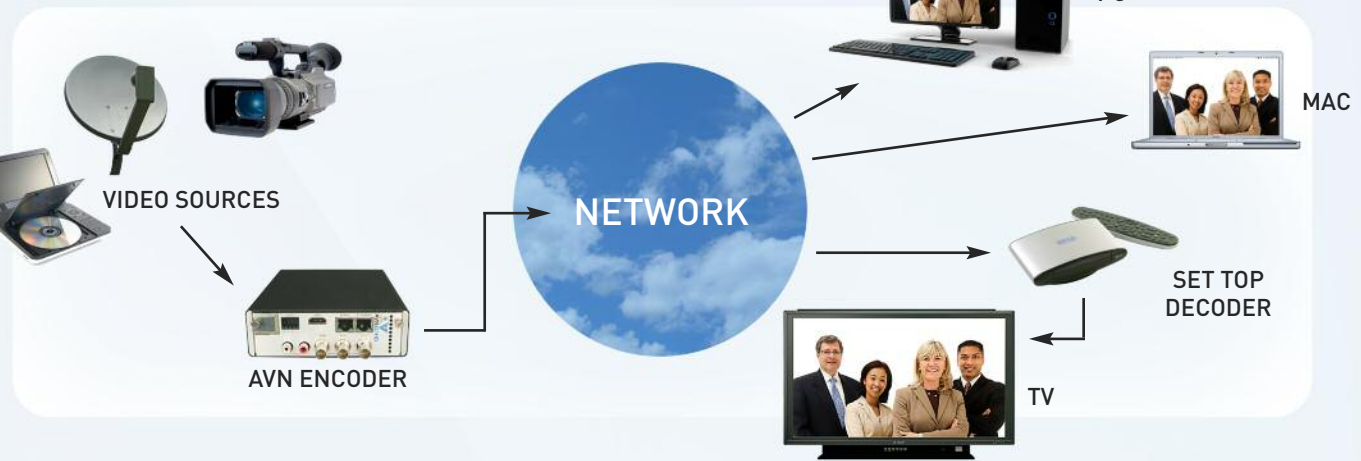
CE, UL Listed I.T.E E257717

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EMC: FCC Part 15 Class A or B  
 [MPP200] Class B, EN55022  
 [MPP1700] Class A, EN55022  
 EN61000-3-2, EN61000-3-3,  
 EN55024

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SAFETY: EN60950-1



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THE COST PERFORMANCE LEADER IN PROFESSIONAL IPTV

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 Specifications subject to change without notice. AVN441HD  
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