



OVERVIEW **AVN420**

The AVN420 IPTV encoder can turn video from any composite or S-video source into full-screen, full resolution Internet Protocol digital video in real time.

The AVN420 encodes standard 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 digital video over your LAN or WAN. The MPP with AVN420 blades is suitable for all applications requiring cost-effective, low bit rate, standard 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 provides a video image at full frame rates and D1 resolution. The video stream can be viewed by an unlimited number of clients on a LAN or WAN with 25fps PAL or 30fps NTSC assured, provided that bandwidth is available. Image resolutions are configurable from D1 (720x480 NTSC, 720x576 PAL) down to 160x120. The video bit rate can be configured from 100 kbps to 4 Mbps. The audio compression is either AAC or MPEG-1 Layer 2 audio encoding at 8 to 384 kbps with up to 48 KHz sample rate.

Video Inputs

The AVN420 includes one BNC composite input and one S-Video input for connecting video 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. The AVN420 features user control of audio parameters, including mute, pre-amp and volume.

External Device Connections

The AVN420 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 AVN420 to interface with external devices such as terminal emulation equipment.

Management & Configuration

of the device is accomplished by any of four methods: PackeTV™ Manager (2nd generation), console menus, a Web interface, or the AVN Control Protocol API. TCP/ IP, HTTP and other Internet-related protocols are supported.

The IPTV Media Processing Platform is a high density rack mountable blade system.

The MPP1700 platform with optional dual redundant power scheme, will hold up to seventeen single slot encoder blades, or a combination of dual and single slot blades.

The MPP200 has a single power source and can hold two single slot encoder blades or one dual slot blade.

Each Media Processing Platform will incorporate a growing family of modules to support transport, switching, transcoding and monitoring of IPTV.

MPP1700



MPP200





AVN420

h.264 standard-definition encoder blade

SPECIFICATIONS

Input/Output

Audio connector provides input for right/left, balanced and unbalanced audio

S-Video connector provides input for a Y/C video cable

CVBS connector provides input for composite video sources

RCA type composite connections via adaptor

Serial Connector for RJ-45 connector which allows RS-232C (full duplex, no handshaking) and RS-422 (full duplex) communication

Video Encoding

h.264 MPEG-4 AVC Compression
Main Profile at Level 3 (MP@L3)
100Kbps to 4000Kbps (4Mbps)

Video Resolutions

NTSC	PAL
720x480	720x576
480x480	576x576
320x480	360x576
320x240	360x288
160x120	176x144

Audio Encoding

MPEG-1 Layer II stereo
128kbps to 384kbps
MPEG-2 AAC stereo
8kbps to 384kbps

Dimensions

(W x D x H)
20 x 131 x 175 (0.8" x 5.2" x 6.9")

Weight

160g or .35 lb. (approximate)

Power Input

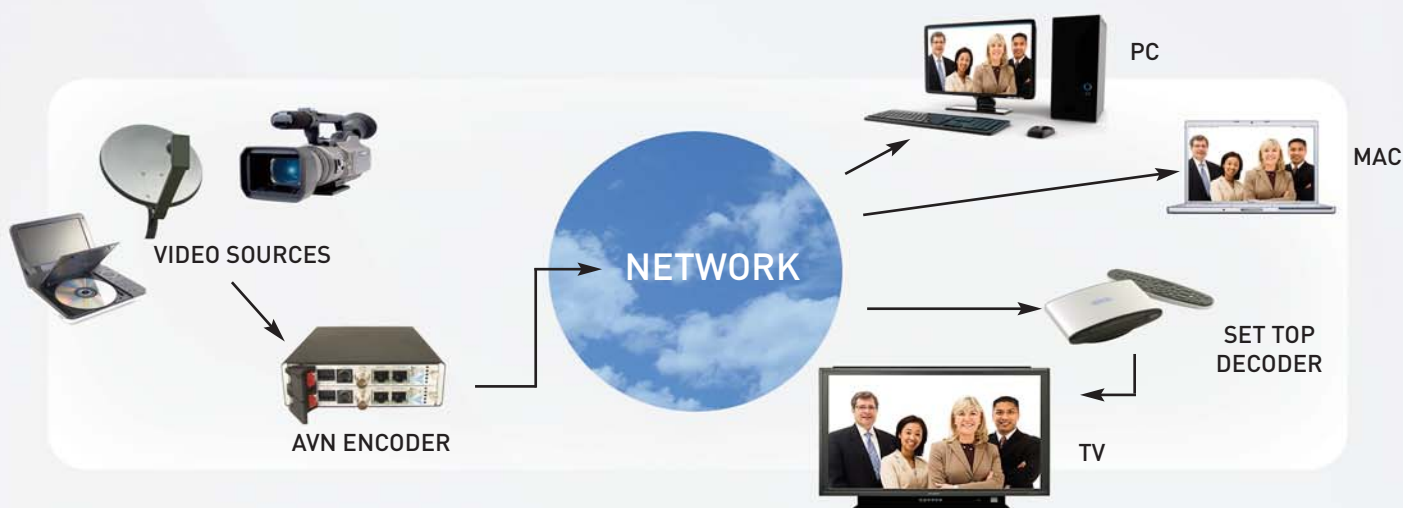
DC Input 3 Watts
MPP200 Chassis 100-240VAC
50/60Hz Adapter
MPP1700 Chassis 100-240VAC
50/60Hz

Environmental

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

Compliance

CE, UL Listed I.T.E E257717
EMC: FCC Part 15 Class A or B
[MPP200] Class B, EN55022
[MPP1700] Class A, EN55022
EN61000-3-2, EN61000-3-3,
EN55024
SAFETY: EN60950-1



MPP1700 - Multi-slot chassis for AVN-series encoder blade

Capacity

Holds up to 17 AVN 220/420/422 encoder blades or up to 8 AVN441 or AVN443 blades, or a combination

Requires 1 or 2 PSA200 power supplies

Dimensions

(W x D x H) 482.6 x 241.3 x 133.4
(19" x 9.5" x 5.25")
3 RU (rack units) high

Weight

1130g or 2.5 lbs. (approximate)

Power

AC Input: 100-240 V~ (VAC), 3A; 50-60 Hz

Rating Information: 100-240V~, 50-60 Hz, 3A

Fuse Rating: 250V, 3.15A, SlowBlow
Double pole/neutral fusing.

IEC C13/14

Compliance

CE, UL Listed I.T.E. E257717

EMC: FCC Part 15 Class B

Includes

US IEC Power Cable

RS-232 cable

Optional

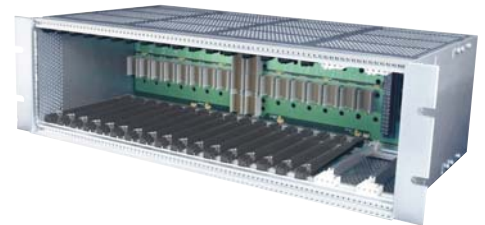
PSA200 power supply (one or two)

Unbalanced audio cable for AVN series blades

Single blanker plate

Double blanker plate

Extended Product Warranty



MPP200 - 2-slot chassis for AVN-series encoder blade

Capacity

Holds 1 or 2 AVN 220/420/422 encoder blades or 1 AVN441 or AVN443 blade

Dimensions

(W x D x H)
142.5 x 196.3 x 43.2
(5.61" x 7.37" x 1.74")
1 RU (rack unit) high

Weight

1130g or 2.5 lbs. (approximate)

Power

External power supply 5V DC, 4A (power brick)

2 pin jack w/ screw locks

Compliance

CE, UL Listed I.T.E. E257717

EMC: FCC Part 15 Class B

Includes

DC Power Supply

US IEC Power Cable

RS-232 Cable

Optional

Unbalanced audio cable for AVN series blades

MPP200 Rack Mount Kit

Extended Product Warranty



ORDERING INFORMATION

AVN420 - H.264 SD Video/Audio encoder blade with Composite and S-Video inputs and IP output

Available Options:

MPP200 - 2-slot chassis with external power supply - holds 1 or 2 AVN420 encoding blades

MPP1700 - Multi-slot chassis with one PSA200 power supply - holds up to 17 AVN420 blades