AVN 422 Encoder

H.264 HD Encoder Blade

Visionary Solutions' AVN422 H.264 Encoder transforms live video sources into full-screen, full resolution, Internet Protocol Digital Video, compatible with multicast, webcast and video-on-demand protocols. This high quality H.264 video encoder is suitable for all applications requiring cost-effective, low bit rate, HD or SD video distribution over IP networks.

The AVN422 is a key component of Visionary Solutions' modular, end-to-end PackeTV® IPTV ecosystem, which is the ideal solution for any organization looking to deliver and manage real-time and recorded video over virtually any network.

Features

Modular Flexibility

lowers the base price by allowing the user to purchase only those features they need at the moment, while maintaining the flexibility to upgrade in the future as requirements change. The list of optional add-onmodules currently include 720p, 1080i (with 1080p @24 support), 1080p @60, and Forward Error Correction (FEC).

Superior Audio/Video Quality

H.264 (MPEG-4 Part 10/AVC) hardware compression and Visionary Solutions' optimized transmission technology provide a high or standard 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 based upon purchased modules. The base model includes 480i SD encoding. Optional modules allow FEC support and image resolutions to be configured up to 720p, 1080i (with 1080p @24 support) or full 1080p at 60 frames per second. The total bit rate can be configured from 5 to 20 Mbps for HD and 2 to 10 Mbps for SD. The audio compression is either AAC (128 to 512 kbps audio encoding, average bitrate) or MPEG-1 Layer 2 (64 to 384 kbps audio encoding) with up to 48 kHz sample rate.

Forward Error Correction

For superior image quality and reliability in the most demanding network video environments, the AVN422, with optional FEC module, incorporates SMPTE-2022 Pro-MPEG FEC Code of Practice #3, Release 1 and 2. This allows FEC enabled receivers to monitor the stream and recover missing packets.

Video Inputs

The AVN422 includes one HDMI input (DVI-D with optional adaptor cable) for connecting video and audio source equipment.

Audio Inputs

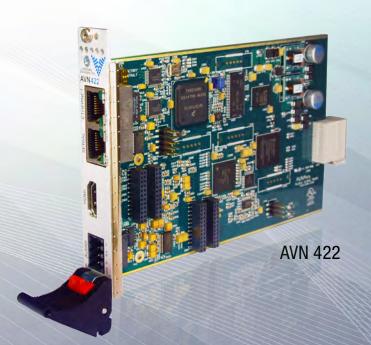
A terminal block connector provides audio inputs for Balanced and Unbalanced connections. This allows for easy onsite connections regardless of the cabling outputs of the audio source. The HDMI input can carry audio as well.

External Device Connections

The AVN422 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 AVN422 to interface with external devices such as terminal emulation equipment.

Management & Configuration

The AVN 422 can be managed and configured via a console menu, a web interface or the AVN Control Protocol API. Internet protocols such as TCP/IP and HTTP are also supported.



PACKETV AVN 422 Encoder

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The AVN 422 is designed to be enclosed in the MPP200 or MMP1700 chassis. The MPP200 is a durable, single blade enclosure and the MPP1700 is a high density, rack mountable blade system.

Specifications

Input/Output

HDMI or DVI-D with optional adaptor cable

Terminal block audio connector for Balanced and Un-Balanced Stereo

RJ-45 Ethernet 10/100

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

HD Video Encoding

H.264 MPEG-4 AVC Compression

High Profile at level 4 (HP @L4)

5Mbps to 20Mbps

IGMP v1, v2, v3

SD Video Encoding

H.264 MPEG-4 AVC Compression

Main Profile at Level 3 (MP@L3)

2Mbps to 10Mbps

IGMP v1, v2, v3

Forward Error Correction (FEC)

SMPTE-2022 Pro-MPEG FEC Code of Practice # 3, Release 1 and 2 - (requires FEC module)

Upgrade Modules

- Forward Error Correction (FEC)
- 720p
- 1080i (1080p @24 support)
- 1080p @60

Related Products

- Extended Product Warranty
- MPP1700
- MPP200
- PackeTV® IPTV System

Video Resolutions

1080p 60 - (requires 1080p60 module)

1080p 24 - (requires 1080i module)

1080i 59.94/60 - (r equires 1080i module)

1080i 50 - (requires 1080i module)

720p 59.94/60 - (requires 720p module)

720p 50 – (requires 720p module)

576i 50

480i 59.94

Audio Encoding

MPEG-1 Layer II stereo

64kbps to 384kbps

MPEG-2 AAC stereo

128kbps to 512kbps

Dimensions

 $(W \times D \times H)$

20 x 131 x 175 (.8" x 5.2" x 6.9")

Weight

PackeTV® STB A140

PackeTV® STB H140

PackeTV® System Protection

140g - .31 lb. (approximate)

Power Input

DC Input 4.25 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



AVN 422 in MPP200 Enclosure