Niagara B264 Encoder

Stand Alone Model   **openGear card Model**

24x7x365 operation for demanding applications

The Niagara B264 H.264 encoder is designed for broadcast applications but can also be used for other applications such as IP transport and streaming to media servers and CDNs. The encoder is available in two models; the broadcast model has IP and ASI outputs and each one has either balanced or unbalanced audio inputs. The B264 can be purchased as a single or dual channel encoder.

The two physical models are the stand alone version and the openGear card.

Now with RIST – Reliable Internet Stream Transport

The B264 has 3 options for transmitting video over the Internet; HLS Server, RTMP (Adobe Flash) and RIST. It will operate with the BRD decoder or many other decoders, servers and CDNs.

Broad support of IP Protocols

This encoder supports the widest range of IP protocols in the industry including; UDP, RTP, RTP/ARQ, Adobe Flash and Apple's HLS. It also supports ASI input. Now with RIST!

Reliability at an affordable cost

The encoder is based on hardware compression. It consumes very little power and has a small form factor. Three can fit in 1 Rack Unit of space or you can fit 10 cards in an openGear chassis.

Ideal Solutions

> Transmit over the Internet

> Houses of worship

> Boardroom

> Government

> Broadcasters

> Education

Applications

> ENG/OB transport

> Streaming to Media Servers and CDNs

> Point to Point or Multipoint IP or ASI transmission

Key Features

> Suitable for broadcasters but affordable for other markets as well.

> Input can be set to auto detect or for manual selection

> ASIC compression and Linux ensure 24x7x365 operation

> Client software and SNMP provide setup, control and monitoring

Niagara® Video Corporation

Delivering Video Whenever, Wherever

B264 Encoder

H.264 Encoder

Stand Alone Models
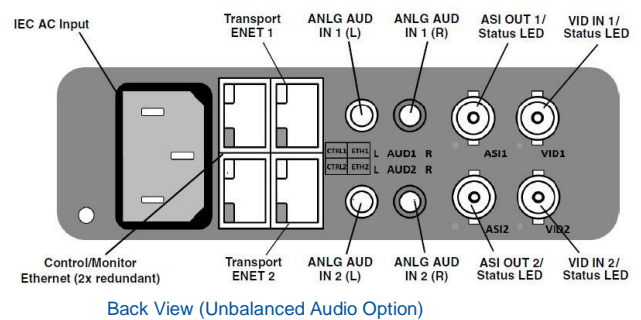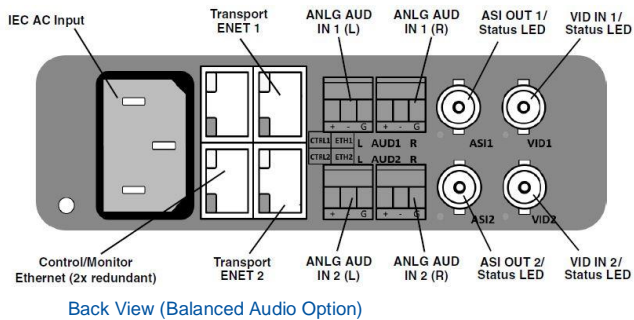
Back View (Balanced Audio Option)

Video Inputs:
• 2 x SDI (*BNC*)
 - 3G SMPTE 424 M
 - HD SMPTE 292 M
 - SD SMPTE 259 M
 - Composite Video (NTSC/PAL)

Audio Inputs:
• Embedded SDI (up to 4 *stereo pairs*)
• 1 Pair Balanced Audio (Terminal blocks)
 per channel

Back View (Unbalanced Audio Option)

Video Inputs:
• 2 x SDI (*BNC*)
 - 3G SMPTE 424 M
 - HD SMPTE 292 M
 - SD SMPTE 259 M
 - Composite Video (NTSC/PAL)

Audio Input:
• Embedded SDI (Up to 4 *stereo pairs*)
• 1 Pair Unbalanced Audio (RCA) per chan

Specifications

Video Encoding Protocols:

• Adobe® Flash® H.264 (RTMP)
• Apple® HTTP Live Streaming (HLS)
• MPEG 2 Transport Stream, UDP and RTP
• XRT (RTP/ARQ)

SMPTE Protocols:

• SMPTE 2022 FEC
• SCTE 104/35 conversion
• SMPTE 2038, frame accurate

Audio Encoding Formats:

• AAC
• MPEG1 Layer II
• AC-3 Pass through/Down-mixing

Video Format:

• HD: SMPTE 424M and 292M SDI standards
• SD: SMPTE 259M SDI, Analog NTSC and PAL

Connectivity:

• 4 x 1 Gbit Ethernet ports (Stand Alone)
• 2 x 1 Gbit Ethernet ports (openGear card)
• 2 x SDI Output
• 2 x ASI Outputs
• 1 x Balanced Analog Audio Input (Terminal
 block) or
• 1 x Unbalanced Analog Audio Input (RCA)

Software:

• Client software for PC, Mac and Linux (DashBoard)
• SNMP MIB

Hardware:

• ASIC based hardware compression
• Control and Streaming Ethernet Ports
• IP and ASI outputs

Pre-Processing:

• CEA 608 and 708
• AFD/WSS

Weight:

• 3 lb (*1.36 Kgs*)

Dimensions:

• 5.8 x 14 x 1.7 inches (3 will fit in 1 RU)
 (14.6 x 35.6 x 4.4 cm)

Power:

• 15 W maximum

Warranty:

• 3 year hardware and software warranty