

NVA-400 & NVA-100HD Network Video Codec



Network Video Codec NVA400

The NVA-400 is the world's most advanced H.264 network video codec. Using HDMI video in, HD encoder is capable of encoding and streaming a single channel of HD 1080p video. The 4 SD version is capable of streaming 120FPS of real-time full-resolution D1 video providing four channels of 30FPS DVD quality NTSC/PAL video over IP.

Powerful HD/SD Decoder

On the receiving end NVA is capable of decoding and displaying up to six channels of 30FPS D1 multiplexed on a single channel of HD 1080p video. NVA's HD video quality over IP is equivalent to the latest generation of Blu-Ray players.

Maxim's Mobilygen MG3500

NVA is designed around the world's premier video codec, Maxim's Mobilygen MG3500 H.264 High Profile Hardware Codec. The NVA family is capable of encoding four H.264 or MJPEG streams and decoding up to eight H.264, MJPEG, or MPEG2 streams. H.264 is an advanced compression algorithm providing a 2:1 reduction in bit rates with equal image quality when compared to MPEG2.

HDMI Video Output

Video is only as good as your ability to display it and NVA features a HDMI output for displaying HD video with a screen resolution of up to 1920 x 1080. NVA also features a composite video output for legacy support. NVA can display the local video input or remotely captured video in a single screen, or multiplexed mode on either output. NVA includes an advanced OSD featuring 1x, 2x, 8x, 8x+ tile modes plus sequencing, picture-in-picture, scaling, advanced video analytics, motion detection with sensitivity controls, and serial

communication for PTZ control or point of sale integration. Robust SHA Watermarking complies with the highest standards for law enforcement authentication.

Elegant Interface

NVA is a power efficient and robust design. Installation and operation are easy. To simplify installation NVA features Power over Ethernet (PoE). NVA includes an advanced built-in web server that automatically discovers and pairs with other Brandywine devices. Viewing live video, plus all control and firmware upgrades are performed via a standard web browser. NVA features a USB interface for capture and playback of audio/video, or input controls via a mouse and keyboard.

Features

- 4 D1 or 1 HD Video Channels, Encoder or Decoder
- Maxim's Mobilygen MG3500 H.264 High Profile Codec
- Gigabit Ethernet (10/100/1000)
- Four Mono Audio inputs
- 1 HDMI Video Output + 1 SD Video Output
- 1 Stereo Analog Audio Output
- 2 USB Ports for Storage or Keyboard/Mouse Interface
- Sophisticated OSD including alpha blending
- Optional PoE module
- Auto Device Discovery
- 6 Pin Terminal Block for RS232 I/O and Alarm Inputs

NVA FAMILY SPECIFICATIONS

Audio/Video Inputs

No. of Video Channels	1 NTSC/PAL (NVA-100) 4 NTSC/PAL (NVA-400) 1 HDTV 1080 (NVA-100HD)
Termination	75 ohm
Connector Type	BNC (NVA-100, NVA-400) HDMI (NVA-100HD)
No. of Audio Channels	Same as video channels, line level
Connector Type	Terminal Block

Audio/Video Outputs

Video Output	1 HDMI (NVA-240)
Audio Output	1 NTSC/PAC (NVA-100, NVA-400, NVA-240, NVA-100HD)

Compression

Compression Rate	30 fps per channel
Compression Algorithm	H.264 High Profile
Resolution	HDTV (1920X1080), Full D1, CIF
Audio Compression	AAC compression, synchronized to video streams
No. of Audio Channels	1,2,4

Decompression

No. of Channels Decoded	Up to 6 SD, Up to 24 CIF
Decode Algorithm	H.264 High Profile

Time Synchronization

Network Time Protocol	NTP V3 (RFC-1305)
IRIG B	Modulated, 1-3Vpp, 600ohm
Have Quick Time Code	Per ICD-GPS-060

GPS Receiver Interface

Electrical	RS232/485, 19200, N.8,1
Protocol (Selectable)	NMEA -0183 \$GGA (from SPS receivers) ICD-GPS-153 Message 3 (from PLGR or DAGR PPS receivers)

I/O Interfaces

Ethernet	1 ea 1000BaseT
Ethernet Protocols	TCP/IP, UDP, HTTP, SNMP, DHCP, NTP
RS485/422	1 ea, USB 2.0 2 ea
RS232	1 ea (used for GPS)
Alarm Inputs	4 ea
Endspan POE	14-60V 802.3af compliant (Optional)
Auxiliary Power Input	DC 9-40V

Environmental

Temperature	Instrument: 0 to +50 °C
Humidity	95% non condensing
Power Consumption	7.5W nominal

Physical

Dimensions	6.2"W x 5.7" D x 1.2" H
Weight	Approx. 1 lb.
EMC Emission	EN 55022 FCC Chapter 15 Subpart B
EMC Immunity	EN 55024

Ordering Information

027000001H.264 VIDEO CODEC 1 CH Model NVA-100
027000002H.264 VIDEO ENCODER 2 CH Model NVA-100HD
027000003H.264 VIDEO ENCODER 4 CH Model NVA-400
027000004 H.264 VIDEO DECODER 24 CH Model NVA-240

Specifications subject to change without notice.

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