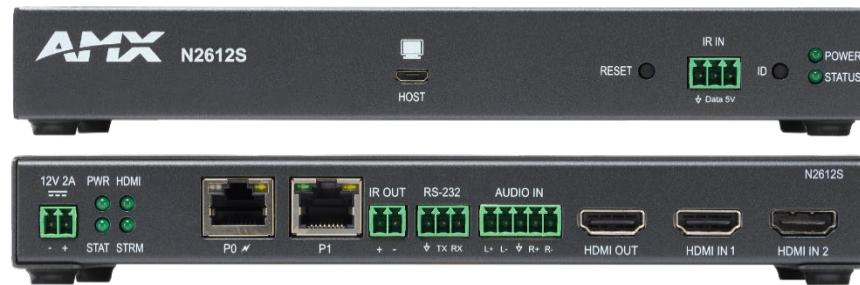# AMX SVSI NMX-ENC-N2612S

4K60 MWC/Dante AV-A & 1080p H.26x Multi-Codec, Dual-Stream Encoder
AMX-N26E001 (Stand Alone)
AMX-N26E001C (Card Version)

The AMX NMX-ENC-N2612S Multi-Codec, Dual Stream Encoder

Overview

The AMX SVSI NMX-ENC-N2612S is a cost-effective, powerfully robust multi-codec, dual-stream encoder in a stand-alone box form factor. It features a high-quality, low-latency 4K60 4:4:4 MWC codec that is ideal for encoding both live video and detailed content in classrooms, meeting spaces, courtrooms, bars, and other applications.

High-compatibility, low-bandwidth 1080p H.26x encoding is also included and perfect for distributing video over congested networks and is compatible with third-party devices and networks such as Panopto, Wowza, YouTube, and Facebook.

N2600S models support our Virtual Network USB 2.0 Hub technology. These models not only support transport of full-bandwidth USB 2.0 signals, but also enable USB device signals from up to 4 decoders to be combined and connected to a single USB host on an encoder. A laptop on the meeting room table can now simultaneously connect to multiple remote USB devices such as a camera near the display and an audio DSP in an equipment closet.

Other key features include video preview images viewable from the built-in web interface or from a touch panel and enhanced support for high-security networks.

The NMX-ENC-N2612S supports Dante AV-A, a standard for AVoIP devices created to allow for the interoperability of multiple devices on the network. With Dante AV-A, the NMX-ENC-N2612S is compatible with Dante Controller, Dante Domain Manager, and Dante Director. All signal routing, configuration, and IT-level management for your audio and video devices can now be managed using the same tools.

With the ability to stream video with multiple technologies, the NMX-ENC-N2612S is compatible with a wide variety of decoders. The MWC stream is fully compatible with the NMX-DEC-N2622S Decoder and NMX-DEC-N2625-WP Decoder Wallplate. The H.26x stream generated by the NMX-ENC-N2612S can be configured to work with N3000 series decoders and the NMX-WP-N3510 Windowing Processor, N3300 series decoders, or 3rd-party devices and streaming services.

Features

- Dante AV-A
- High-Quality 4K60 MWC encoding with sub-2ms latency
- High-Compatibility, Low-Bandwidth 1080p H.26x encoding
- Video Preview viewable from the built-in web interface or a touch panel
- Switchable Dual HDMI Inputs
- Virtual Network USB 2.0 Hub
- High-security network support and features, including multicast, VLAN tagging, and QoS
- PoE+ powered with low-power mode for energy savings.
- HControl
- Open Direct-Control API
- UL2043 – Plenum Space certification

Specifications

VIDEO	
Digital Video Input	HDMI 2.0
Digital Video Output	Network video over Ethernet via RJ45 port or HDMI
Formats	Dante AV-A, HDMI 2.0, DVI-D (through adapter), Dual-Mode DisplayPort (DP++), HDCP 2.3 content protection support DVI-D and Dual-Mode DisplayPort (DP++) are supported through a passive adapter
HDR	HDR10+, HDR10, HDR
Progressive Input Resolutions	Supports 4K60 4:4:4 and most common HD resolutions up to 1920x1200 See the user manual for a complete list. HDMI and DVI (Progressive) • Minimum resolution of 720x480p60 • Maximum horizontal resolution of 4096 or a vertical resolution of 2160 • Common acceptable resolutions include: 720x480p60 – 480p, 720x576@50, 800x600p60, 1024x768p60, 1280x720@60Hz - 720p60, 1600x1200@60Hz, 1920x1080@60Hz - 1080p60, 3840x2160(4:4:4)@60Hz UHD60 aka 4K60, 4096x2160(4:4:4)@60Hz - DCI 4K60
Interlaced Input Resolutions	Supports 1080i60 HDMI and DVI (Interlaced) • 1920x1080@50Hz - 1080i50 • 1920x1080@60Hz - 1080i60 Note: Interlaced resolutions will be de-interlaced if scaled on the decoder; otherwise, the interlaced signal will pass through to the display
Color Space	4:4:4, YUV
LocalPlay/HostPlay	8 playlists
Note	Jumbo Frames Required
Video Wall Construction	Supported within the N2622S, N2625, or N2625-EK
Network Video Recording	Only the H264 stream is compatible if the source is not HDCP.

H264/H265 VIDEO	DOES NOT SUPPORT HDCP
Digital Video Output	720P or 1080P
Frame Rate	50 or 60 Hz
Profiles	Baseline (BP), main (MP), high (HiP)
Bitrate Range	500 Kbps to 50 Mbps
Rate Control	CBR, VBR
Streaming Protocols	RTP, RTSP, RTMP, RTMP/S, MPEG2-TS, HTTP Live

AUDIO	
Input Signal Types	Embedded audio on HDMI or Analog Stereo (Balanced or Unbalanced)
Output Signal Types	Ethernet, Embedded audio on HDMI, Dante
HDMI Audio Formats	8ch PCM
Analog Audio Format	Stereo 2-channel
Dante Audio Format	2-Channel
Dante Audio Sample Rate	44.1 kHz, 48 kHz, 88.2 kHz, 96kHz

KEYBOARD AND MOUSE	
Keyboard & Mouse	Connect the decoder to the keyboard and mouse and an N2600 Series Encoder to the PC being controlled.

USB 2.0	
USB	Connect the decoder to an end device, such as a USB camera, audio, or USB 2.0 device, and an N2600 Series Encoder to the PC. It supports up to 4 N2622S or N2625-WP connected to a single N2612S or N2615-WP.

LATENCY	
Latency	<2-ms Scaling adds one frame of latency (17ms at 60fps)
Switching	Near Seamless with Last Frame Hold enabled

BANDWIDTH	
Bandwidth	Approximately 500-700 Mb/s

COMMUNICATIONS	
Ethernet	10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, and Static IP
HDMI	HDCP, EDID management

PORTS	
+12V 2A	One 12 Volt DC power input
P0 PoE+	8-wire RJ45 port 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port Provides network connection, network AV video, and power to the Encoders and Decoders PoE+ power
P1	8-wire RJ45 port 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port Provides network connection, network AV video
IR IN (front panel)	3-pin terminal Phoenix connector. Provides Infrared (IR) input only and passes signal back to connected decoder (33-60 kHz; typically, 39 kHz) IR receiver is necessary (not included)
IR OUT	2-pin terminal Phoenix connector Provides Infrared (IR) output only (33-60 kHz; typically, 39 kHz). Emitter is necessary (not included)
RS232	3-pin terminal Phoenix connector which provides a serial control interface. Full duplex communication. Available terminal speed settings: 1200-115200 baud rate
AUDIO	5-pin terminal Phoenix connector which provides user-selectable balanced/unbalanced input Dedicated audio input
HDMI OUT	HDMI video output (passive pass-through from HDMI IN only)
HDMI IN 1	HDMI video input
HDMI IN 2	HDMI video input

CONTROLS AND INDICATORS – FRONT PANEL	
RESET Button	Recessed pushbutton Press to initiate a 'warm restart' causing the processor to reset, but not lose power. A reset does NOT affect. the current settings
ID Button	Recessed pushbutton Press to send a notification out on the network to identify the unit (the notification causes a pop-up dialog in N-Able and N-Command) Holding the button for 30 seconds and releasing will cause the device to return to factory configuration.
POWER LED	On solid (green) when operating power is supplied (via PoE or local power supply)
STATUS LED	On flashing (green) when there is software activity
STREAM LED	On (green) when the unit is streaming video

POWER SUPPLY	
Power Supply, External, Optional	2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; optional NMX-ACC-N9312 (FGN9312)
Power over Ethernet (PoE+), External, Optional	Can be powered via a PoE+ switch or other equipment with a PoE+ source. Conforms to IEEE 802.3at Class 4 (802.3at Type 2) NOTE: For the unit to receive Power over Ethernet (PoE+), it must be connected to a switch or other equipment that has a PoE+ PSE (Power Sourcing Equipment) port Warning: Do not run wiring connected to a PoE+ PSE port outside of the building where the PSE resides. It is for intra-building use only

ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	85 BTU/hr

GENERAL	
Product Dimensions (HWD)	1 1⁄6" x 7 7⁄8" x 5" (26.6mm x 200mm x 127mm)
Product Weight	AMX-N26E001: 2.16 lbs. (Approx. 0.98kg) AMX-N26E001C: 0.75 lbs. (Approx. 0.34kg)
Shipping Weight	AMX-N26E001: 2.67 lbs. (Approx. 1.21kg) AMX-N26E001C: 1.30 lbs. (Approx. 0.59kg)
Regulatory Compliance	FCC, CE, KC, and UL (Including 2043)