Minimal Proprietary Compression Video Over IP Decoder, with PoE, AES67 Compatible

NMX-DEC-N1222A (FGN1222A-SA), Stand Alone
NMX-DEC-N1222A-C (FGN1222A-CD), Card

Overview

The new NMX-DEC-N1222A model features improved digital pixel reproduction and reduces latency to an industry leading 10-ms for gigabit links. Packetized video streams not only remain visually lossless throughout distribution, they also arrive instantly.

The N1000A Series Encoders and Decoders are an affordable local AV over IP switching solution that transmits video into a minimally compressed IP format to create anywhere from a small 2×1 seamless presentation switcher up to a large 32×32 matrix switcher by connecting them directly to off-the-shelf layer-3 network switches.

The ability to send IP Media for distribution using common managed network switches in any size and configuration makes N1000A family solutions extremely flexible and easy to deploy.

Common Applications
- The NMX-DEC-N1222A is the perfect solution for any low-latency application and video matrix smaller than 32x32. Common applications include classrooms, conference rooms, performing arts, and sports bars.

Features
- **Output Scaling** – Video scaling at output allows seamless switching from any source, at any resolution, to any display or projector, while preserving video fidelity.
- **Zero-Frame Latency** – No delay for presentations, live events, or annotation.
- **Minimal Proprietary Compression (MPC)** – Visually lossless MPC algorithm.
- **Optional Compression** – Available option to disable all compression.
- **AES67 Interoperability** – 48 kHz audio stream with PTP receive only (reference recipient only)
- **Power over Ethernet (PoE)** – PoE eliminates the need for power supply.
- **Infrared (IR)** – Infrared emitter connection allows control of low-cost, IR-only display devices.
- **Onboard Control** – All N-Series Encoders and Decoders have on-board, built-in control capability via events that can trigger any number of TCP/UDP commands to other IP controllable devices.
- **Unmatched Flexibility** – Highly competitive pricing for matrices up to 32x32.
- **Two RJ45 Ports** – Decoder features two RJ45 network ports (one PoE).
- **Stand Alone or Card** – Available as a stand alone device, or card for use with NMX-ACC-N9206.

Specifications

VIDEO	
Digital Video Input	Network video over Ethernet via RJ45 ports
Video Output	HDMI, DVI-D (through adapter)
Formats	HDMI, DVI-D (through adapter), HDCP content protection support
Output Resolutions	Supports most common HD up to 1920x1200. See website for all supported resolutions.

AUDIO	
Input Signal Types	Network video over Ethernet via RJ45
Output Signal Types	Embedded audio on HDMI or DVI-D (through adapter) Ethernet standard SVSI audio stream or AES67 (user selectable)
HDMI Audio Formats	8ch PCM
Analog Audio Format	Stereo 2-channel
Digital-to-Analog Conversion	16-bit 32 kHz, 44.1 kHz and 48 kHz (matched to Encoder settings)

LATENCY	
Video Latency	10 ms at 60 fps
Audio Latency	Standard SVSi audio stream = 17-msec (synched to video) ; AES67 = <1-msec adjustable to 17-msec
Note	• Video and audio latency values are the combined encode plus decode latency. Total latency from source to screen will also include any network latency. • Scaling adds one frame of latency (17ms at 60fps).

COMMUNICATIONS	
Ethernet	P0 10/100/1000 Mbps, auto-negotiating, auto-sensing, PoE, full/half duplex, DHCP, Auto IP, and Static IP P1 10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP
HDMI	HDCP, EDID Management

PORTS	
+12V 2A	One 12 Volt DC power input
P0	8-wire RJ45 female 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port with PoE Provides network connection and power to the Encoders and Decoders.
P1	8-wire RJ45 female 10/100/1000 Mbps 10/100/1000Base-T auto-sensing

	gigabit Ethernet switch port
IR	2-pin terminal Phoenix connector Provides Infrared (IR) output only (33-60 kHz; typically 39 kHz). Emitter may be necessary (not included).
RS232	3-pin terminal Phoenix connector Provides a serial control interface. Full duplex communication. Available terminal speed settings: 1200-115200 baud rate.
AUDIO	5-pin terminal Phoenix connector Provides user-selectable balanced/unbalanced output Dedicated audio output.
HDMI OUT	HDMI video output

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).
POWER LED	On solid (green) when operating power is supplied (via PoE or local power supply). This activity is also shown by the **PWR** LED on the rear panel.
STATUS LED	On flashing (green) when there is software activity. This activity is also shown by the STAT LED on the rear panel.

CONTROLS AND INDICATORS – REAR PANEL	
PWR LED	Same as **POWER** LED described above.
HDMI LED	On (green) when there is a connection to a valid video source.
STAT LED	Same as **STATUS** LED described above.
STRM LED	On (green) when the unit is streaming video.

POWER SUPPLY	
Power Supply, External, Not Included	2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; **not included in shipment.** NMX-ACC-N9312 (FGN9312)

ENVIRONMENTAL	
Temperature	32° to 104°F (0° to 40°C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	Up to ~44 BTU/Hr

GENERAL	
Dimensions (HWD)	1.05" x 7.888" x 5" (2.67 cm x 20.04 cm x 12.7 cm)
Weight	1.47 lbs (0.67 kg)
Mounting Options	Stand alone, surface mount, wall mount, or rack mount Surface and wall mounting requires (not included): •NMX-ACC-N9101 (FGN9101), Mounting Wings for N-Series Encoders and Decoders Rack mounting requires one of the following (not included): •NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side for N-Series Encoders and Decoders •NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for six N-Series Card Units
Regulatory Compliance	FCC, CE, and NRTL
Recommended Accessories	•NMX-ACC-N9382 (FGN9382), 1RU Power Supply 16-Channel 12V for up to 16 N-Series Encoders and Decoders •NMX-ACC-N9101 (FGN9101), Mounting Wings for N-Series Encoders and Decoders •NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side N-Series Encoders and Decoders •NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for six N-Series Card Units