DATA SHEET

# H.264 Compressed Video over IP Encoder, PoE, SFP, HDMI, USB for Record

NMX-ENC-N3132 (FGN3132-SA), Stand Alone
NMX-ENC-N3132-C (FGN3132-CD), Card


## Overview

**The N3000 Video over IP Series extends the reach of SVSI's Networked AV solutions to the WAN for streaming, video to desktop, digital signage, set-top boxes, or mobile devices applications. Fully integrated with existing Networked AV control options, the N3000 Series delivers the highest quality HD video content at the lowest bandwidth for the most demanding applications. Moving video to or from the Cloud just became a lot easier with the N3000.**

**The N3000 Series' H.264 compression engine delivers low-latency 1080p60 video at half the bandwidth of comparable encoders. High profile H.264 encoders output unicast or multicast to one or more N3000 Series decoders with the same seamless switching capability as the N1000 and N2000 lines. Multiple selectable streaming protocols (RTP, RTSP, and more) allow for software endpoints during video to the desktop applications or third-party hardware endpoints like Roku, Amino, or Google TV. Adjustable bit-rates from 32-Kbps to 10-Mbps give the highest video fidelity at the lowest bandwidths on the market in keeping with SVSI's commitment to provide unsurpassed Networked AV quality.**

**H.264 encoder includes IR, serial, balanced audio, RJ45 and 1GB SFP (fiber or copper) network connections, digital HDMI and analog VGA video input. H.264 encoder card requires NMX-ACC-N9206 cage.**

**Common Applications**

- The NMX-ENC-N3132 is the perfect solution for quality streaming over low bit rate WAN. Common applications include distance education, Multi-Site Enterprise, and IPTV Streaming.

**Features**

- **Input and Output Scaling** – Video scaling at either input or output allows seamless switching from any source, at any resolution, to any display or projector, while preserving video fidelity.
- **Power Over Ethernet (PoE) –** Eliminates requirement for local power supply and speeds installation. Units can still be powered locally from 12VDC allowing for easy rack-mountable, high-density installations.
- **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.
- **Unlimited Scalability**
- **Pass-Through HDMI** – HDMI interface allows easy installation with local display such as desktop PC applications.
- **Stand Alone or Card** – Available as a stand alone device, or card for use with NMX-ACC-N9206.

## Specifications

| VIDEO | |
|---|---|
| Digital Video Input | HDMI, DVI-D, Dual-Mode DisplayPort (DP++), RGB/VGA<br><br>DVI-D and Dual-Mode DisplayPort (DP++) are supported through a passive adapter |
| Analog Video Input | HD-15 VGA, Component<br><br>Component is supported through a passive adapter |
| Video Output | Network video over Ethernet via RJ45 port or fiber via 1G SFP port, HDMI, DVI-D<br><br>DVI-D is supported through a passive adapter |
| Formats | HDMI, DVI-D (through adapter), HDCP content protection support, RGBHV, YPbPr |
| Progressive Input Resolutions | Supports most common HD up to 1080p60.<br>See website for all supported resolutions. |
| Interlaced Input Resolutions | Supports 1080i60.<br>See website for all supported resolutions. |
| Analog Input Resolutions | Supports most common HD up to 1080p60.<br>See website for all supported resolutions. |
| Note | Input resolutions supported @60Hz refresh rates are also supported @59.94Hz |
| Output Resolutions | Matched to inputs. |
| Analog-To-Digital Conversion | 8-bit 165 MHz per each of three color channels |
| Note | The N3132 Encoder does not accept Composite or S-Video (YC) |

| AUDIO | |
|---|---|
| Input Signal Types | Embedded audio on HDMI (DVI-D through adapter) or Analog Stereo (Balanced or Unbalanced) |
| Output Signal Types | Ethernet, Embedded audio on HDMI or DVI-D (through adapter)<br><br>HDMI output refers to pass-through video on the HDMI OUT port |

| | |
|---|---|
| HDMI Audio Formats | Stereo 2-channel |
| Analog Audio Format | Stereo 2-channel |
| Analog-To-Digital Conversion | 16-bit 32 kHz, 44.1 kHz and 48 kHz |
| Note | HDMI output refers to pass-through video on the HDMI OUT port. |

| **LATENCY** | |
|---|---|
| Latency | 175 ms at 60 fps |
| Note | • This is the combined encode plus decode latency. Total latency from source to screen will also include any network latency.<br>• Scaling adds one frame of latency (17ms at 60fps) |

| **COMMUNICATIONS** | |
|---|---|
| Ethernet | P0<br>10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP<br><br>P1<br>1 Gbps port which accepts compatible fiber transceivers or direct attach cables (fiber or copper cabling) |
| HDMI | HDCP, EDID management |

| **PORTS** | |
|---|---|
| +12V 2A | One 12 Volt DC power input |
| P0 | 8-wire RJ45 female<br><br>10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port<br><br>Provides the network connection, network AV video, and power to the Encoders and Decoders |
| P1 | SFP port (SFP fiber transceiver or direct attach cable not included)<br><br>Provides the network connection and network AV video |
| IR | 2-pin terminal Phoenix connector<br><br>Provides Infrared (IR) output only (33-60 kHz; typically 39 kHz). Emitter may be necessary (not included) |
| RS232 | 3-pin terminal Phoenix connector<br><br>Provides a serial control interface. Full duplex communication. Available terminal speed settings: 9600-115200 baud rate |
| AUDIO | 5-pin terminal Phoenix connector<br><br>Provides user-selectable balanced/unbalanced input. Dedicated audio input |
| HDMI OUT | HDMI video output (passive pass-through from **HDMI IN**) |
| HDMI IN | HDMI video input |

| | |
|---|---|
| VGA IN | DB15 analog input |
| USB connector (front panel) | One USB-A for audio/video stream recording |

| **CONTROLS AND INDICATORS – FRONT PANEL** | |
|---|---|
| RESET Button | Recessed pushbutton<br><br>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<br><br>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)<br><br>This activity is also shown by the **PWR** LED on the rear panel |
| STATUS LED | On flashing (green) when there is software activity<br><br>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 display |
| STAT LED | Same as **STATUS** LED described above |
| STRM LED | On (green) when the unit is streaming video |

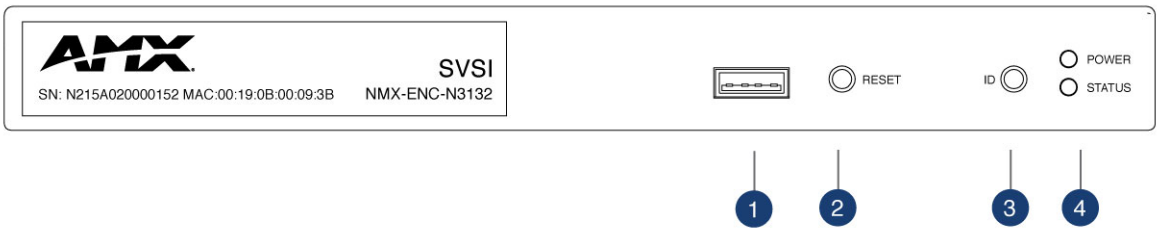
| **POWER SUPPLY** | |
|---|---|
| Power Supply, External, Optional | 2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; optional. NMX-ACC-N9312 (FGN9312) |
| Power over Ethernet (PoE), External, Optional | Can be powered via a PoE switch or other equipment with a PoE source. Conforms to IEEE 802.3af Class 3 (802.3at Type 1) |
| Note | In order 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.<br><br>Warning: Do not run wiring that is 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 | Up to ~44 BTU/hr |

| **GENERAL** | |
|---|---|
| Dimensions (HWD) | 1.05” x 7.888” x 5.5” (2.67 cm x 20.04 cm x 13.8 cm) |
| Weight | 1.55 lbs (0.7 kg) |

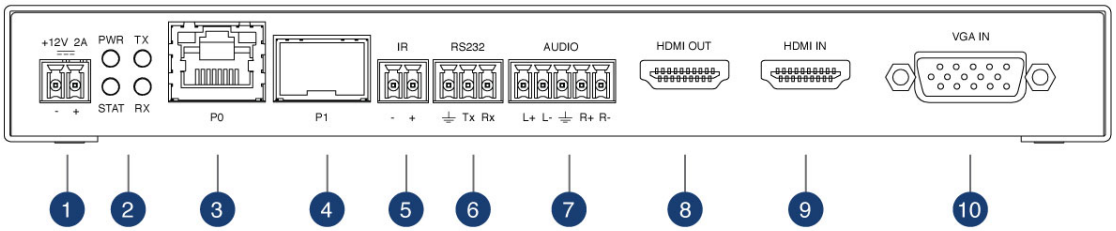
| | |
|---|---|
| Mounting Options | Stand alone, surface mount, wall mount, or rack mount<br><br>Surface and wall mounting requires (not included):<br>•NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N-Series Encoders and Decoders<br><br>Rack mounting requires one of the following (not included):<br>•NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side for SVSI N-Series Encoders and Decoders<br>•NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six SVSI N-Series Card Units |
| Regulatory Compliance | FCC, CE, and NTRL |
| Recommended Accessories | •NMX-ACC-N9312 (FGN9312), Power Supply 12V External<br>•NMX-ACC-N9382 (FGN9382), 1RU Power Supply 16-Channel 12V for up to 16 SVSI N-Series Encoders and Decoders<br>•NMX-ACC-N9101 (FGN9101), Mounting Wings for SVSI N-Series Encoders and Decoders<br>•NMX-ACC-N9102 (FGN9102), 1RU Rack Shelf for Two Side-by-Side SVSI N-Series Encoders and Decoders<br>•NMX-ACC-N9206 (FGN9206), 2RU Rack Mount Cage with Power for Six SVSI N-Series Card Units |

## NMX-ENC-N3132 Front View




1) USB-A audio/video stream recording input
2) Device reset button
3) Device ID discovery button
4) Power/Status indicators

# NMX-ENC-N3132 Rear View




1) 12VDC Input
2) Status Indicators
3) RJ-45 auto-sensing gigabit Ethernet switch port
4) SFP fiber connector
5) Infrared (IR) emitter connection
6) RS232 connection
7) Analog Audio Input connection
8) HDMI Video Output
9) HDMI Video Input
10) DB-15 (analog) Input

**About AMX by HARMAN**
**Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 3.25.16. ©2016 Harman. All rights reserved. Specifications subject to change.**

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