

# N3121

H.264 Compressed Video over IP Encoder



## Video

<b>Signal Types</b>	<b>Input</b>	HDMI, DVI, Dual-Mode DisplayPort (DP++), RGB/VGA, Component
	<b>Output</b>	Network video over Ethernet via RJ45
<b>Formats</b>		DVI, HDMI (through adapter), HDCP content protection support, RGBHV, YPbPr
<b>Input Resolutions</b>	<b>HDMI and DVI (Progressive)</b>	720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1366x1024@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), plus any other resolution allowed by HDMI up to 150MHz pixel clock
	<b>HDMI and DVI (Interlaced)</b>	1920x1080@50Hz (1080i50), 1920x1080@60Hz (1080i60)
	<b>VGA</b>	640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60)
	<b>Component</b>	480p, 576p, 720p50, 720p60, 1080p24, 1080i50, 1080i60, 1080p30, 1080p50, 1080p60
<b>Output Resolutions</b>		Matched to inputs or scaled to 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x800@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1080@59.94Hz (1080p59.94), 720x480@59.94Hz (480p59.94), 1280x720@59.94Hz (720p59.94)
<i>Note: Input resolutions supported @60Hz refresh rates are also supported @59.94Hz.</i>		
<b>Analog-To-Digital Conversion</b>		8-bit 150 MHz per each of three color channels

*Note: The N3121 does not accept Composite or S-Video (YC).*

## Audio

<b>Signal Types</b>	<b>Input</b>	Embedded audio on DVI-D or HDMI (through adapter), or Analog Stereo (Balanced or Unbalanced)
	<b>Output</b>	Ethernet, Embedded in DVI-D (HDMI through adapter)
<b>Formats</b>	<b>HDMI</b>	Stereo 2-channel
	<b>Analog</b>	Stereo 2-channel
<b>Analog-To-Digital Conversion</b>		16-bit 32 kHz, 44.1 kHz and 48 kHz

## Latency

<b>720p</b>	60 ms
<b>1080p</b>	60 ms

*Note: To calculate an end-to-end latency value, add the given Encoder latency (shown above) to your Decoder's latency (which is provided in the Decoder's Specifications sheet).*

## Communications

<b>Ethernet</b>	10/100/1000 Mbps, auto-negotiating, auto-sensing, full/half duplex, DHCP, Auto IP, and Static IP
<b>HDMI</b>	HDCP, EDID management
<b>Network Stream</b>	A/V Compression: H.264 high profile video, AAC audio Network Standards: MPEG-TS, RTP, RTSP, HTTP-live, RTMP

## Ports

<b>12V 2A</b>	One 12 Volt DC power input.
<b>P0 POE</b>	8-wire RJ45 female. 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port. Provides both the network connection and the power to the Encoders and Decoders.
<b>P1</b>	8-wire RJ45 female. 10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port.
<b>IR</b>	2-pin terminal Phoenix connector. Provides Infrared (IR) output only (33-60 kHz; typically 39 kHz). Emitter may be necessary (not included).
<b>RS232</b>	3-pin terminal Phoenix connector which provides a serial control interface. Full duplex communication. Available terminal speed settings: 9600-115200 baud rate.

## Ports (Continued)

<b>AUDIO</b>	5-pin terminal Phoenix connector which provides user-selectable balanced/unbalanced input. Dedicated audio input.
<b>DVI-D OUTPUT</b>	DVI-D female; HDMI/DVI digital video/audio output. Allows for video and embedded digital audio output.
<b>DVI-I INPUT</b>	DVI-I female; HDMI/DVI digital video/audio input. Allows for the use of analog or digital video sources (as well as embedded audio).

*Note: DVI-D output is the digitally converted analog signal from the DVI-I input. Appropriate adapter or interface cable required for DVI to accommodate HDMI. With the right adapter, the **DVI-I Input** port accepts component signals.*

## LEDs and Buttons

### FRONT PANEL

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

### REAR PANEL

<b>PWR LED</b>	Same as <b>POWER</b> LED described above.
<b>DVI LED</b>	On (green) when a DVI input connection exists.
<b>STAT LED</b>	Same as <b>STATUS</b> LED described above.
<b>STRM LED</b>	On (green) when the unit is streaming video.

## Power Requirements

<b>Power Supply</b>	2.0 Amp @ 12 Volts DC; 100-240 Volts AC power supply; SVSi part number N9312.
<b>Power over Ethernet (PoE)</b>	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. 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. PoE does not pass through the daisy chain (P1) port.*

## Physical


<b>Mounting Options</b>	Stand alone, surface mount, wall mount, or rack mount.*	
<b>Environmental</b>	<b>Temperature</b>	32° to 104°F (0° to 40°C)
	<b>Humidity</b>	10% to 90% RH (non-condensing)
	<b>Heat Dissipation</b>	Up to ~44 BTU/Hr
<b>Dimensions</b>	<b>Height</b>	1.05 inches (2.67 cm)
	<b>Width</b>	7.888 inches (20.04 cm)
	<b>Depth</b>	5.5 inches (13.8 cm)
<b>Weight</b>	1.55 lbs (0.7 kg)	
<b>Compliance</b>	FCC, CE, and NTRL	
<p><i>*Mounting wings (SVSi part number N9101) required for surface and wall mounting. Rack shelf (SVSi part number N9102) or card cage (SVSi part number N9206) required for rack mounting. Shelf accommodates two side-by-side N-Series encoders and decoders. Card cage accommodates up to six N-Series encoder and decoder cards (mix and match any series). Mounting accessories sold separately and are compatible with most N-Series devices. Contact SVSi sales representative or visit website for details.</i></p>		

# IT SIMPLY WORKS

Distribution | Switching | Recording | Windowing | Wall Processing | Control

© Southern Vision Systems, Inc. • 256.461.7143 • www.svsiav.com

SVSi is a trademark of Southern Vision Systems, Inc. in the United States and other countries. All other brand names, product names and trademarks are the property of their respective owners. Certain trademarks, registered trademarks, and trade names may be used to refer to either the entities claiming the marks and names or their products. SVSi disclaims any interest in the marks and names of others.  
800DOCN3121SPECREV1.0

 Made in the USA.

