



RLH Industries, Inc.

fiberopticlink.com

PRODUCT  
DATA SHEET

DS-226 2026-0113

## 2+1 Nano 10/100/1G PoE+ Industrial Ethernet Media Converter with SFP

EMC-N21GP-U-1

### Rugged, Ultra Compact, DIN Rail Mountable

The EMC-N21GP-U-1 is an unmanaged, compact, industrial-grade fiber media converter featuring two 10/100/1000Base-T IEEE 802.3at PoE+ Ethernet ports and one 100/1000Base-X SFP fiber interface. The SFP slot supports single-mode or multi-mode fiber and single- or dual-fiber transceivers, providing deployment flexibility for a wide range of applications.

The unit is designed with an ultra-compact form factor for easy installation and integration into other equipment. An integrated 85–250 VAC power input eliminates the need for an external power adapter, reducing system cost and space requirements and making the device suitable for small cabinets or enclosures where a separate AC-DC power supply is not available.

The PoE+ Ethernet ports supply data and power to compliant Powered Devices (PDs), delivering up to 30 W per port in accordance with the IEEE 802.3at standard.

A North America–style power cord is pre-installed and may be removed or replaced to meet regional installation requirements.

The EMC-N21GP-U-1 is designed for operation in harsh industrial environments, including manufacturing, transportation, oil and gas, chemical processing, IP surveillance, and industrial automation, where operating conditions exceed those of commercial-grade networking equipment.

### Key Features

- 2x10/100/1000Base-T RJ45 PoE Ports, 1x100/1000Base-X SFP Fiber Port
- Integrated 85-250VAC power input, AC power cord included
- Supports Full/Half-duplex, Auto-negotiation
- Supports 9KB Jumbo frame and 1MB packet buffer
- Vertical connections for housings with a low installation depth
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- Supports DIN-Rail & Wall-mount installation
- Small & Compact Size
- Robust aluminum housing
- Hardened to operate in -40°C to 80°C (40°F to +185°F)
- CE, FCC Class A, and RoHS Compliant



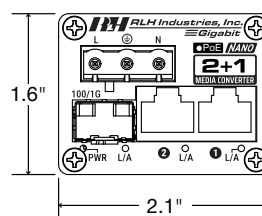
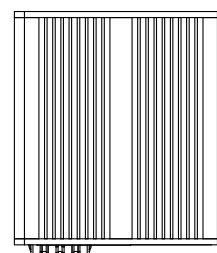
2+1 Nano Industrial PoE Media Converter



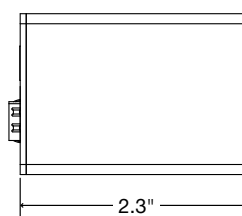
### Dimensions

(DIN Rail Clip and Wall Mount Bracket not shown)

Top View



Front View



Side View



## General Specifications

<b>Ethernet Standards</b>	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/FX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE 802.3az Energy Efficient Ethernet (EEE), IEEE 802.3at/af Power over Ethernet (PoE)	
<b>Processing Type</b>	Store-and-Forward	
<b>Forward Filter Rate</b>	14,880pps (10Mbps), 148,800pps (100Mbps), 1,488,000pps (1000Mbps)	
<b>Packet Buffer Memory</b>	1MB	
<b>Max Packet Length</b>	9KB	
<b>Address Table Size</b>	2K MAC Addresses	
<b>Interface</b>	2x RJ45 10/100/1000Base-T, 1 x SFP 100/1000Base-X	
<b>Input Power</b>	85~250VAC or 125VDC 3-pin terminal block	
<b>Power Consumption</b>	5 W maximum, excluding PoE load	
<b>PoE Standard</b>	IEEE 802.3at Power over Ethernet Plus/PSE	
<b>PoE Power Supply Type</b>	Mid-span	
<b>Power Pin Assignment</b>	4/5 (+), 7/8 (-)	
<b>PoE Power Output</b>	Per port 54V DC, Max. 30 watts	
<b>PoE Power Budget</b>	30W Max per PoE port, 40W PoE Max Budget	
<b>Dimensions (WxDxH)</b>	53mm (W) x 40mm (D) x 58mm (H) (2.09" (W) x 1.57" (D) x 2.28" (H))	
<b>Weight</b>	0.15Kg (5.29oz)	
<b>Housing</b>	Aluminum Alloy	
<b>Mounting Options</b>	DIN-Rail Mount	
<b>LED Indicators</b>	PW	On: Power Supply Normal; Off: Power not connected
	PoE	PoE Status
	L/A (RJ45)	On: A network device is connected; Off: No network device connected Blinking: Data transmission
	L/A (SFP)	On: Fiber connected; Off: Fiber not connected Blinking: Data transmission
<b>Operating Temperature</b>	-40°C to 80°C (-40°F to 176°F)	
<b>EMC/EMI/EMS</b>	EN61000-4-2 (ESD): LEVEL 4, IEC 6100-4-2 (EFT): LEVEL 4, IEC 6100-4-2 (Surge): LEVEL 4, IEC 6100-4-2 (CS): LEVEL 3, IEC 61000-4-2(PFMP): LEVEL 5, EN61000-4-3 (RS): LEVEL 4	
<b>Stability Testing</b>	IEC 60068-2-32 (free fall), IEC 60068-2-27 (shock), IEC 60068-2-6 (vibration)	
<b>Compliance</b>	CE, FCC Class A, and RoHS Compliant	
<b>MTBF</b>	> 200,000 hrs	

## Ordering Information

Description	Part Number
2+1 Nano 10/100/1G PoE+ Industrial Ethernet Media Converter, 100/1G SFP, Universal Power Input 85-250VAC/125VDC	EMC-N21GP-U-1

- Contact your RLH Sales Representative for more information

## Contact

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