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

EMC-N21G-U-1

Rugged, Ultra Compact Nano Size, DIN Rail Mountable

The EMC-N21G-U-1 is an unmanaged, compact, industrial-grade fiber media converter featuring two 10/100/1000Base-T Ethernet ports and one 100/1000Base-X SFP fiber interface. The SFP slot supports a variety of modules, including single-mode or multi-mode fiber and single or dual-fiber configurations to meet diverse application requirements.

Designed with an ultra-compact Nano form factor, this media converter is easy to install and can be readily integrated into other equipment. The integrated 85–250 VAC power input eliminates the need for an external power adapter, reducing both cost and space requirements. This makes it ideal for small cabinets or enclosures where an AC-DC power supply is not available.

The unit includes a pre-configured AC power cable with plug designed for use in North America. This can be removed and replaced with appropriate alternatives if needed.

The EMC-N21G-U-1 is well suited for harsh industrial environments, including manufacturing, transportation, oil and gas, chemical processing, IP surveillance, and industrial automation, where operating conditions exceed the specifications of commercial-grade networking equipment.

2+1 Nano Industrial Media Converter

Key Features

- 2x 10/100/1000Base-T RJ45 Ports, 1x 100/1000Base-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

- Rugged, ultra compact Nano aluminum housing

- Includes AC Power Cord, DIN Rail Clip, and Wall Mount Bracket

- Hardened to operate in -40°C to 80°C (40°F to +185°F)
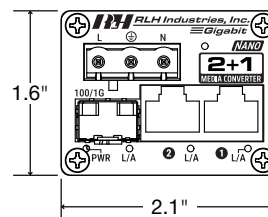
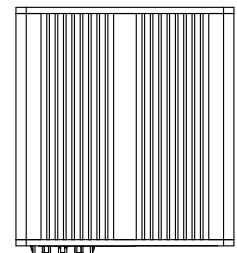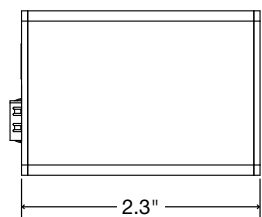- CE, FCC Class A, and RoHS Compliant

Dimensions

(DIN Rail Clip and Wall Mount Bracket not shown)

Top View

1.6"

2.1"

Front View

2.3"

Side View

CE FC RoHS COMPLIANT

General Specifications

Ethernet Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/FX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE 802.3az Energy Efficient Ethernet (EEE)
Processing Type	Store-and-Forward
Forward Filter Rate	14,880pps (10Mbps), 148,800pps (100Mbps), 1,488,000pps (1000Mbps)
Packet Buffer Memory	1MB
Max Packet Length	9KB
Address Table Size	2K MAC Addresses
Interface	2x RJ45 10/100/1000Base-T, 1x SFP 100/1000Base-X
Input Power	85~250VAC or 125VDC 3-pin terminal block
Power Consumption	5W Max.
Dimensions (WxDxH)	53mm (W) x 40mm (D) x 58mm (H) (2.09" (W) x 1.57" (D) x 2.28" (H))
Weight	0.15Kg (5.29oz)
Housing	Aluminum Alloy
Mounting Options	DIN-Rail Mount
LED Indicators	**PW** — On: Power Supply Normal; Off: Power not connected
	L/A (RJ45) — On: A network device is connected; Off: No network device connected
	L/A (RJ45) — Blinking: Data transmission
	L/A (SFP) — On: Fiber connected; Off: Fiber not connected
	L/A (SFP) — Blinking: Data transmission
Operating Temperature	-40°C to 80°C (-40°F to 176°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95% non-condensing
EMC/EMI/EMS	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
Stability Testing	IEC 60068-2-32 (free fall), IEC 60068-2-27 (shock), IEC 60068-2-6 (vibration)
Compliance	FCC Part 15 Class A, CE (EMC, LVD), RoHS
MTBF	> 200,000 hrs

Ordering Information

Description	Part Number
2+1 Nano 10/100/1G Industrial Ethernet Media Converter, 100/1G SFP, Universal Power Input 85-250VAC/125VDC	**EMC-N21G-U-1**

- Contact your RLH Sales Representative for more information

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