1002MC Industrial Media Converter

N-Tron Networking Series



▶▶▶ Industrial Media Converter

The N-Tron® 1002MC is an unmanaged 10/100/1000BaseT to 1000BaseSX/LX industrial media converter.

The N-Tron 1002MC media converter is housed in a hardened, metal, DIN-rail enclosure, and is designed for use in industrial data acquisition, control, and Ethernet I/O applications. It is designed to allow the connection of 10/100/1000BaseT ethernet devices to your 1000BaseSX/LX fiber cabling infrastructure.



APPLICATIONS

- > Factory Automation
- > Oil & Gas
- > Security Surveillance
- > Transportation
- > Mining
- > Maritime

PRODUCT HIGHLIGHTS

- > Compact, Industrial Design
- > High Environmental Specifications
- > N-Ring Advanced Ring Technology
- > Increased Networking Performance
- > Plug-and-Play Operation

FEATURES & BENEFITS

- > Unmanaged operation
- > Full IEEE 802.3, 802.3u, 802.3z, and 802.3ab compliant
- > Converts 10/100/1000BaseT to 1000BaseSX/LX
- > Choose from multimode or singlemode LC Style SFP (Mini-GBIC) Gigabit fiber transceivers
- > >2M Hours MTBF
- > RJ-45 port supports full/half duplex operation
- > Up to 2.0 Gb/s maximum throughput

- > Supports up to 1,024 MAC addresses
- > Store and forward technology
- > RJ-45 port auto senses speed and flow control
- > Full wire speed communications
- > MDIX auto cable sensing (RJ-45)
- > Hardened metal DIN-rail enclosure
- > LED link/activity status indication
- > Redundant power inputs (10-30 VDC)















1002MC Industrial Media Converter Specifications

SWITCH PROPERTIES

Compact size, small footprint

Unmanaged operation

Full IEEE 802.3, 802.3u, 802.3z, and 802.3ab Compliant

Converts 10/100/1000BaseT to 1000BaseSX/LX

Choose from multimode or singlemode LC Style SFP (Mini-GBIC)

Gigabit fiber transceivers

>2M Hours MTBF

RJ-45 port supports full/half duplex operation

Up to 2.0 Gb/s Maximum Throughput

Supports up to 1,024 MAC Addresses

Store and forward technology

RJ-45 Port Auto Senses Speed and Flow Control

Full Wire Speed Communications MDIX Auto Cable Sensing (RJ-45) Hardened Metal DIN-Rail Enclosure

LED Link/Activity Status Indication Redundant Power Inputs (10-30 VDC)

POWER INPUT

Input Voltage: 10-30 VDC

Steady Input Current: 200mA@24V

BTU/hr: 16.4@24V Inrush: 13Amp/0.8ms@24V

CONNECTORS

10/100/1000BaseT: One (1) RJ-45 TX Port

1000BaseSX/LX SFP: One (1) SFP LC Duplex Gigaabit Fiber Port

NETWORK MEDIA

10BaseT: >Cat3 cable 100BaseT: >Cat5 cable 1000BaseT: >Cat5e cable

1000BaseSX Multimode: 50-62.5/125μm 1000BaseLX Singlemode: 7-10/125µm

RECOMMENDED WIRING CLEARANCE

Front: 4" (10.16 cm) Top: 1" (2.54 cm)

CERTIFICATION & COMPLIANCE

Product Safety:

UL/cUL - UL 508 Industrial Control Equipment, ANSI/ISA-12.12.01 Class I and II, Div. 2 Groups A, B, C and D, and Class III, Div. 1 and 2 Hazardous Locations. T4A.

C22.2 No. 14-M05, Industrial Control Equipment, C22.2 No. 213-M1987 Class I Div. 2 Hazardous Locations.

FCC/CFR Title 47, Part 15, Subpart B Class A Device, ANSI C63.4, Industry Canada ICES-003: Digital Apparatus, EN 55011, EN 61000-6-4.

Immunity:

EN 61000-6-2, IEC 61000-4-2/3/4/5/6.Other:

Other:

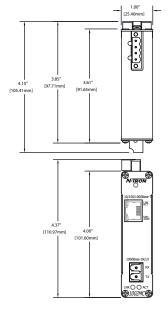
ABS Type Approval for Shipboard Applications

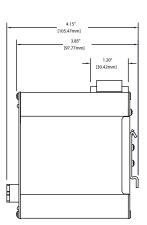
DNV-GL Type Approval Certification RoHS Compliant

Designed to comply with:

IEEE 1613 for Electrical Utility Substations NEMA TS1/TS2 for Traffic Control

DIMENSIONS





ENVIRONMENTAL

Operating Temperature: -40°C to 85°C Storage Temperature: -40°C to 85°C

Operating Humidity: 10% to 95% (Non Condensing)

Operating Altitude: 0 to 10,000 ft.

> 2m Hours MTBF

MECHANICAL

Case Dimensions Height: 4.0" (10.2 cm) Width: 1.0" (2.6 cm)

Depth: 3.7 (9.4 cm) Weight: 0.60 lbs. (0.27 kg) Mount: DIN Rail 35mm

All specifications are subject to change. Consult the company website for more information.

SFP Gigabit Fiber Transceiver Characteristics				
Fiber Length	550m for 50/125μm 275m @62.5/125μm	10km**	40km**	80km**
TX Power Min	-9.5dBm	-9.5dBm	-2dBm	0dBm
RX Sensitivity Max	-17dBm	-20dBm	-22dBm	-24dBm
Wavelength	850nm	1310nm	1310nm	1550nm
Assumed Fiber Loss	3.5 to 3.75 dB/km	.45dB/km	.35dB/km	.25dB/km

ORDERING GUIDE

PART NUMBER	DESCRIPTION	
1002MC-SX	1000BaseSX multimode fiber	
1002MC-LX-ZZ	1000BaseLX singlemode fiber	
1000-PM	Panel Mount Kit	
NTPS-24-1.3	DIN-Rail Power Supply 24V@1.3 Amp	
ZZ please specify: 10 for 10km max. fiber segment length 40 for 40km max. fiber segment length 80 for 80km max. fiber segment length		



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As global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. Red Lion is part of Spectris plc, the productivityenhancing instrumentation and controls company. For more information, please visit www.redlion.net. ADLD0274 031020 © 2020 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron and Sixnet are registered trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.