

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)

industrial
networking



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.

Emissions:

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:

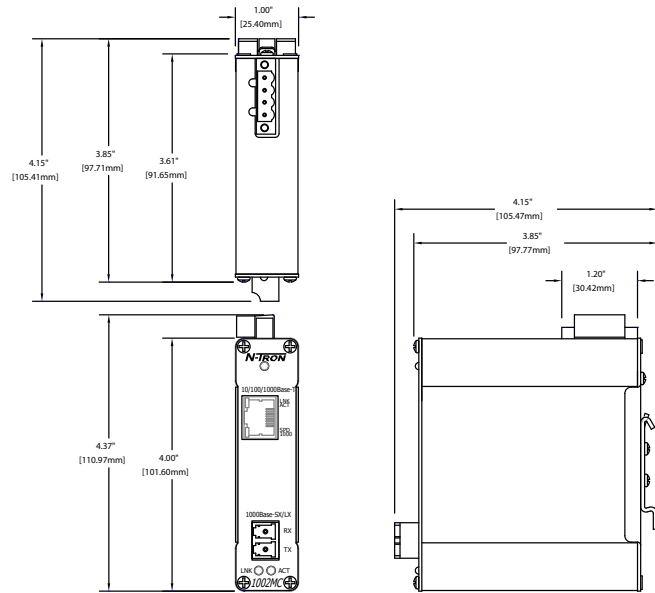
Other:

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 productivity-enhancing 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.

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