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

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

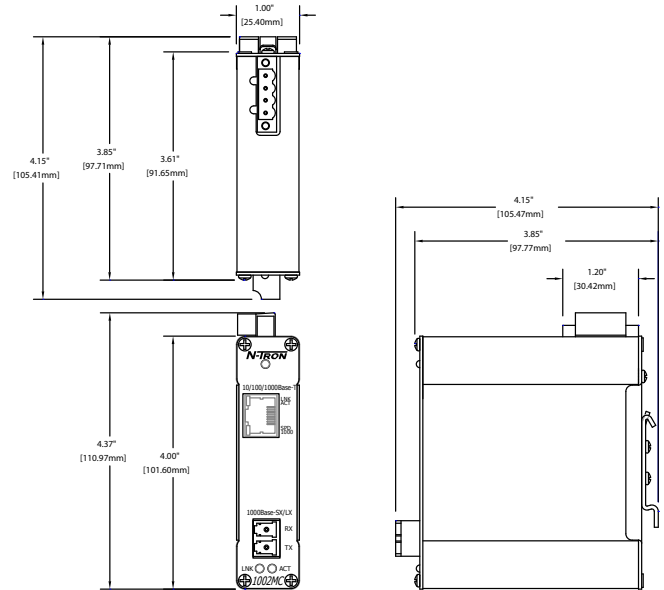## RECOMMENDED WIRING CLEARANCE

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