

1003GX2 Industrial Ethernet Switch

N-Tron Networking Series



▶▶▶ Unmanaged Gigabit Industrial Ethernet Switch

The N-TRON® 1003GX2 is an unmanaged three port Gigabit Industrial Ethernet Switch.

It is housed in a hardened, metal DIN-Rail enclosure, and is designed for use in industrial data acquisition, control, and Ethernet I/O applications. The 1003GX2 Gigabit Industrial Ethernet Switch is designed to solve the most demanding industrial communications requirements while providing high throughput and minimum downtime.



APPLICATIONS

- > Factory Automation
- > Utilities
- > SCADA
- > Security Surveillance
- > Transportation
- > Alternative Energy

PRODUCT HIGHLIGHTS

- > Compact, Industrial Design
- > Up to 3 port connections
- > High Environmental Specifications
- > N-Ring Advanced Ring Technology
- > Increased Networking Performance
- > Plug-and-Play Operation

FEATURES & BENEFITS

- > Compact Size, Small Footprint
- > Unmanaged Operation
- > Full IEEE 802.3, 802.3u, 802.3z, and 802.3ab Compliance
- > One 10/100/1000BaseT RJ-45 Port
- > Two 1000BaseSX/LX SFP (Mini-GBIC) Ports
- > Mix-and-Match Multimode and Singlemode
- > LC Style SFP Gigabit Fiber Transceivers
- > > 2m Hours MTBF
- > RJ-45 Port Supports Full/Half Duplex Operation
- > Up to 6.0 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



1003GX2 Specifications

SWITCH PROPERTIES

Compact Size, Small Footprint
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 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) RJ45 TX Port
 1000BaseSX/LX SFP: Two (2) SFP LC Duplex Gigaabit Fiber Ports

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)

SFP Gigabit Fiber Transceiver Characteristics

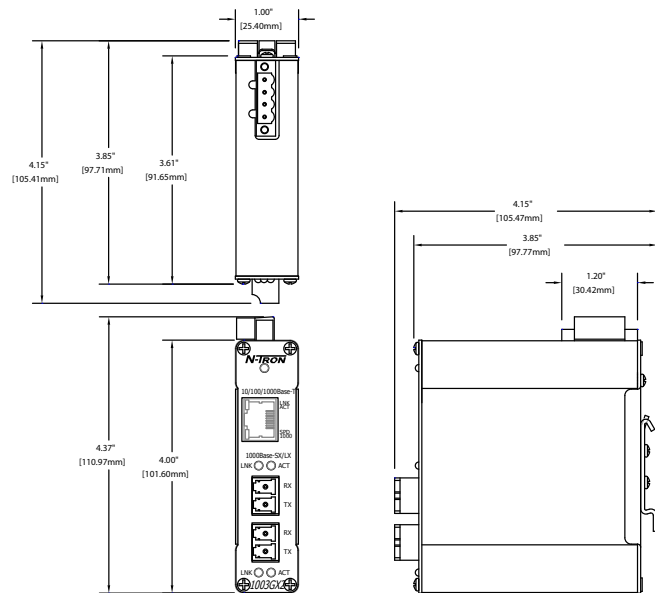
| Fiber Length | 550m for 50/125µm 275m @62.5/125µm | 10km** | 40km** | 80km** |
|--------------------|---------------------------------------|----------|----------|----------|
| TX Power Min | -9.5dBm | -9.5dBm | -2dBm | 0dBm |
| RX Sensitivity Max | -17dBm | -20dBm | -22dBm | -24dBm |
| Wavelength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

* SX Fiber Optic Cable, ** LX Fiber Optic Cable

CERTIFICATION & COMPLIANCE

Product Safety: UL/cUL: Class I, Division 2, Groups A, B, C and D;
 T4 UL 508, ICE and ANSI/ISA-12.12.01-2007
 Emissions: EN 55011, ICES-003, FCC/CE (CFR 47, Part 15,
 Subpart B, Class A)
 Immunity: EN 61000-6-2/4, IEC 61000-4-2/3/4/5/6
 Other: ABS type approval for shipboard applications
 DNV-GL Type Approval Certification
 RoHS Compliant
 IEEE 1613 for Electric 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: 0.76 lbs. (0.27 kg)
 Mount: DIN Rail 35mm

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

ORDERING GUIDE

| PART NUMBER | DESCRIPTION |
|---------------|---|
| 1003GX2-B | One 10/100/1000BaseT Port; Two 1000BaseSX/LX Ports with mix-and-match SFP Transceivers* |
| 1003GX2-SX | One 10/100/1000BaseT Port; Two 1000BaseSX SFP Transceivers |
| 1003GX2-LX-10 | One 10/100/1000BaseT Port; Two 1000BaseLX-10 SFP Transceivers |
| 1003GX2-LX-40 | One 10/100/1000BaseT Port; Two 1000BaseLX-40 SFP Transceivers |
| 1003GX2-LX-80 | One 10/100/1000BaseT Port; Two 1000BaseLX-80 SFP Transceivers |
| 1000-PM | Panel Mount Kit |
| NTPS-24-1.3 | DIN-Rail Power Supply 24V@1.3 Amp |
| NTSFP-SX | One 1000BaseSX Multimode SFP Gigabit Transceiver (two required per unit) |
| NTSFP-LX-ZZ | One 1000BaseLX Singlemode SFP Gigabit Transceiver (two required per unit) |

ZZ = 10, 40, or 80 for GB Singlemode SFP Transceiver
 *Unit must be fully populated with two SFP transceivers upon shipment.



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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. ADLD0273 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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