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)













▶▶▶ 1003GX2 Specifications

SWITCH PROPERTIES

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)

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 |
| * SV Eiber Ontio Cable ** LV Eiber Ontio 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)

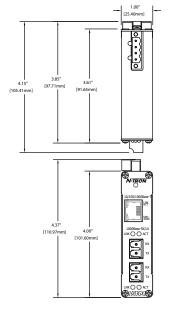
Immunity: EN 61000-6-2/4, IEC 61000-4-2/3/4/5/6 Other: ABS type approval for shipboard applications

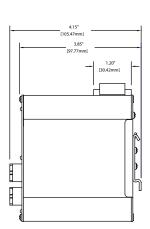
DNV-GL Type Approval Certification

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 Transeiver (two required per unit) | |
| NTSFP-LX-ZZ | One 1000BaseLX Singlemode SFP Gigabit Transeiver (two required per unit) | |
| ZZ = 10, 40, or 80 for GB Singlemode SFP Transceiver "Unit must be fully populated with <u>two</u> SFP transceivers upon shipment. | | |

