# 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)













# **SWITCH PROPERTIES**

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**Unmanaged Operation** 

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Full Wire Speed Communications

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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 Elhar Ontic Cabla ** LV Elhar Ontic Cabla				

#### **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)

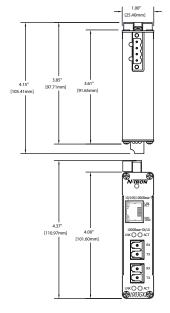
Immunity: EN 61000-6-2/4, IEC 61000-4-2/3/4/5/6 Other: ABS type approval for shipboard applications

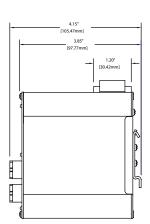
DNV-GL Type Approval Certification

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 two SFP transceivers upon shipment.		



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