

1005TX

The 1005TX is a low cost unmanaged five port Gigabit Industrial Ethernet Switch. It is housed in a hardened, metal, DIN-Rail enclosure, and is designed for use in mission critical data acquisition, control, and Ethernet I/O applications where gigabit capability is required.

PRODUCT FEATURES

- Compact, Space Saving Package
- Full IEEE 802.3, 802.3u, and 802.3ab Compliance
- Five 10/100/1000BaseT RJ-45 Ports
- Unmanaged Operation
- Extended Environmental Specifications
 - -40°C to 85° Operating Temperature
 - >2M Hours MTBF
- Supports Full/Half Duplex Operation
- Up to 10.0 Gb/s Maximum Throughput
- MDIX Auto Sensing Cable
- Auto Sensing Speed and Flow Control
- Full Wire Speed Communications
- Supports up to 4,000 MAC Addresses
- Store-and-forward Technology
- Redundant Power Inputs (10-30 VDC)
- LED Link/Activity Status Indication

PRODUCT OVERVIEW

The *N-TRON®* 1005TX Gigabit Industrial Network Switch is designed to solve the most demanding industrial communications requirements while providing high throughput and minimum downtime.

The 1005TX provides five RJ-45 auto sensing 10/100/1000BaseT ports. All ports are full/half duplex capable, using "state of the art" Ethernet switching technology. The 1005TX auto-negotiates the speed and flow control capabilities of the five TX port connections, and configures itself automatically.

Since the 1005TX is auto sensing, there will be no need to make extensive wiring changes if upgrades are made to the host computers, plant systems, or Ethernet I/O modules.



The switching fabric simply scales up or down automatically to match your specific network environment.

The 1005TX supports up to 4000 MAC addresses, thus enabling these products to support extremely sophisticated and complex network architectures.

The *N-TRON 1005TX* is an ideal candidate for upgrading existing hubs and repeaters to increase bandwidth and determinism by virtually eliminating network collisions. The product also keeps the network affordable, while maintaining the plug & play simplicity of the unmanaged hub.

The 1005TX can simplify plant wiring by eliminating the need to bring data acquisition and control network connections back to a climate controlled environment. The 1005TX has extended operating environmental specifications to meet the harsh needs of the industrial environment. For cost savings and convenience the network switch can be DIN-Rail, or panel mounted alongside Ethernet I/O or other Industrial Equipment.

To increase reliability the 1005TX provides dual redundant power inputs. LED's are provided to display the link status and activity of each port.



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BENEFITS

Industrial Network Switch

- Compact Size / Smaller Footprint
- Extended Environmental Specifications
- Hardened Metal DIN-Rail Enclosure
- High Performance
- High MTBF >2M Hours
- ESD Protection Diodes on RJ-45 Ports
- Surge Protection Diodes on Power Inputs

Ease of Use

- Plug & Play Operation
- Auto Sensing 10/100/1000BaseT
- Auto Sensing Full/Half Duplex
- MDIX Auto Cable Sensing
- Unmanaged Operation

Increased Performance

- Full Wire Speed Capable
- Full Duplex Capable
- Eliminates Network Collisions
- Increases Network Determinism

Contact Information

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Ordering Information

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1005TX Five 10/100/1000BaseT Ports

1000-PM Panel Mount Kit NTPS-24-1.3 DIN-Rail Power Supply

24V@1.3 Amp

SPECIFICATIONS

Physical

 Height:
 4.30" (10.92cm)

 Width:
 1.00" (2.54 cm)

 Depth:
 3.63" (9.22 cm)

 Including DIN-Rail Mount:
 3.83" (9.73 cm)

 Weight:
 0.61 lbs. (0.27 kg)

DIN-Rail: 35mm

Electrical

Input Voltage: 10-30 VDC
Steady Input Current: 230mA@24V
Inrush: 13Amp/61us@24V

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.

Reliablity

MTBF: >2 Million Hours

Network Media

10BaseT: >Cat3 Cable 100BaseTX: >Cat5 Cable 1000BaseT: >Cat5e Cable

Connectors

10/100/1000BaseT: Five (5) RJ-45 TX

Copper Port

Recommended Wiring Clearance

Front: 2" (5.08 cm) Top: 1" (2.54 cm)

Regulatory Approvals

FCC Title 47 Part 15 Class A,

CE: EN61000-6-2,4, EN55011, EN61000-4-2,3,4,5,6 UL(US and Canada) per ANSI/ISA-12.12.01-2000

Class I, Div 2, Groups A,B,C,D,T4A

Designed to comply with:

IEEE 1613 for Electric Utility Substations, ABS Standards for Shipboard Applications,

and NEMA TS1/TS2 for Traffic Control Equipment

REV 080604