

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.

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

| | |
|-------------|--------------------------------------|
| 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. |

Reliability

| | |
|-------|------------------|
| 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
Designed to comply with:
UL(US and Canada) per ANSI/ISA-12.12.01-2000
Class I, Div 2, Groups A,B,C,D,T4A
IEEE 1613 for Electric Utility Substations,
ABS Standards for Shipboard Applications,
and NEMA TS1/TS2 for Traffic Control Equipment