

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

N-TRON Corp.
820 S. University Blvd.,
Suite 4E
Mobile, AL 36609 USA
TEL: (251) 342-2164
FAX: (251) 342-6353
Website: www.n-tron.com
Email: info@n-tron.com

N-TRON Europe GmbH
Alte Steinhäuserstr 19
6330 Cham / ZG
Switzerland
TEL: +41 41 7406636
FAX: +41 41 7406637

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, UL Listed 1604 (US and Canada) per ANSI/ISA-12.12.01-2000 Class I, Div 2, Groups A,B,C,D,T4A, RoHS Compliant, Submitted for type approval from ABS for Shipboard Applications
Designed to comply with:
IEEE 1613 for Electric Utility Substations,
and NEMA TS1/TS2 for Traffic Control Equipment