



The 105TX is a low cost unmanaged five port 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.

PRODUCT FEATURES

- Compact, Space Saving Package
- Full IEEE 802.3 Compliance
- Five 10/100BaseTX RJ-45 Ports
- Unmanaged Operation
- Extended Environmental Specifications
 -40°C to 80° Operating Temperature
 - >2M Hours MTBF
- Supports Full/Half Duplex Operation
- Up to 1.0 Gb/s Maximum Throughput
- MDIX Auto Sensing Cable
- Auto Sensing Speed and Flow Control
- Full Wire Speed Communications
- Store-and-forward Technology
- Redundant Power Inputs (10-30 VDC)
- LED Link/Activity Status Indication
- Hardened Metal DIN-Rail Enclosure

PRODUCT OVERVIEW

The *N-TRON*[®] *105TX* Industrial Network Switch is designed to solve the most demanding industrial communications requirements while providing high throughput and minimum downtime.

The 105TX provides five RJ-45 auto sensing 10/100BaseTX ports. All ports are full/half duplex capable, using "state of the art" Ethernet switching technology. The 105TX auto-negotiates the speed and flow control capabilities of the five TX port connections, and configures itself automatically.

Since the *105TX* 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 *105TX* supports up to 2,000 MAC addresses, thus enabling these products to support extremely sophisticated and complex network architectures.

The *N*-*TRON 105TX* 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 105TX can simplify plant wiring by eliminating the need to bring data acquisition and control network connections back to a climate controlled environment. The 105TX 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 mounted alongside Ethernet I/O or other Industrial Equipment.

To increase reliability the *105TX* provides dual redundant power inputs. LED's are provided to display the link status and activity of each port.



105TX

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 10/100BaseTX
- Auto Sensing Full/Half Duplex
- MDIX Auto Cable Sensing
- **Unmanaged** Operation

Increased Performance

- Full Wire Speed Capable ٠
- Full Duplex Capable
- **Eliminates Network Collisions** ٠
- Increases Network Determinism

Contact Information

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Ordering Information

105TX Five 10/100BaseTX Ports

NTPS-24-1.3

DIN-Rail Power Supply

24V@1.3 Amp

SPECIFICATIONS

Physical

Height:	2.88"	(7.31cm)
Width:	1.50"	(3.81 cm)
Depth:	3.55"	(9.02 cm)
Including DIN-Rail Mount:	4.22"	(10.72 cm)
Weight:	0.54 lbs. (0.25 kg)	
DIN-Rail:	35mm	

Electrical

Input Voltage: Steady Input Current: Inrush:

10-30 VDC 215mA@24V 7.8Amp/0.7ms@24V

-40°C to 80°C

-40°C to 85°C

(Non Condensing) 0 to 10.000 ft.

>2 Million Hours

>Cat3 Cable

>Cat5 Cable

10% to 95%

Environmental

Operating Temperature: Storage Temperature: **Operating Humidity:**

Operating Altitude:

Reliablity

MTBF:

Network Media

10BaseT: 100BaseTX:

Connectors

Top:

10/100BaseTX:	Five (5) RJ-45 TX
	Copper Port

Recommended Wiring Clearance

2" (5.08 cm) Front: 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 (US and Canada) per ANSI/ISA-12.12.01-2000 This apparatus is suitable for use in 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 070808

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