

116TX Industrial Ethernet Switch

N-Tron® Networking Series



►►► Unmanaged Fast Ethernet Switch

BUILT FOR EXTREME CONDITIONS

The compact N-Tron® 116TX unmanaged Industrial Ethernet switch is ideal for industrial applications that demand dependable performance under harsh conditions. The compact 16-port device offers exceptional reliability and performance for a range of mission-critical applications including data acquisition, Ethernet I/O and process control.

Delivered in a rugged industrial metal enclosure, the 116TX provides 16 high-performance 10/100BaseTX copper ports with full wire speed communications—up to 3.2 Gb/s throughput—for robust network support. The unit boasts exceptional MTBF and extended tolerances to shock, vibration, temperature fluctuations and noise—common elements in factory floor control networks, utilities, wastewater treatment, wind turbines, rail car, intelligent traffic control and transportation applications.

EASY TO USE

The compact 116TX is an excellent plug & play solution. For convenience, the unit configures itself on the network at connection and features auto sensing 10/100BaseTX ports that intuitively negotiate speed and data flow. Automatic features enable instant recognition of network changes and/or updates, adjusting communications on the fly.

Excellent Network Support

Compact and powerful, the 116TX is designed with advanced communication processing, store-and-forward technology and high-speed processing that allows full wire speed on all ports simultaneously. The unit is optimized for increased determinism and eliminates virtually all network collisions. The 16 high-performance network ports instantly recognize and resolve 10/100BaseTX, MDIX and duplex conflicts. For added convenience, LEDs are provided to display link status and activity for each port.



PRODUCT FEATURES

- Sixteen 10/100BaseTX RJ-45 ports
- Slim, space-saving design
- -40°C to 85°C operating temperature
- IEEE 802.3 compliance
- ESD and surge protection diodes on all ports
- Store-and-forward technology
- Supports full/half duplex operation
- Full wire speed communications
- Up to 3.2 Gb/s maximum throughput
- Auto negotiation, auto sensing speed, duplex, and flow control
- MDIX auto sensing cable
- Redundant power inputs (10-49 VDC)
- LED link/activity status indication
- Rugged DIN-rail enclosure
- >2M Hours MTBF

SPECIFICATIONS

Case Dimensions

Height: 5.8" (14.6 cm)
Width: 2.0" (5.1 cm)
Depth: 4.1" (10.2 cm)
Weight: 1.1 lb. (.48 kg)
DIN-Rail: 35mm

Electrical

Redundant Input Voltage: 10-49 VDC (regulated)
Input Current (max): 300 mA@24 VDC
BTU/hr: 24.6@24 VDC
N-TRON Power Supply: NTPS-24-1.3 (1.3A@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.

Shock and Vibration (Bulkhead Mounted)

Shock: 200g@10ms
Vibration/Seismic: 50g, 5-200hz triaxial

Reliability

MTBF: >2 million hours

Network Media

10BaseT: ≥Cat3 cable
100BaseTX: ≥Cat5 cable

Connectors

10/100BaseTX: Sixteen (16) RJ-45 copper ports

Recommended Wiring Clearance

Top: 1" (2.6 cm)
Front: 2" (5.1 cm)

Designed to comply with

- IEEE 1613 for electric utility substations
- NEMA TS1/ TS2 for traffic control

Regulatory Certifications

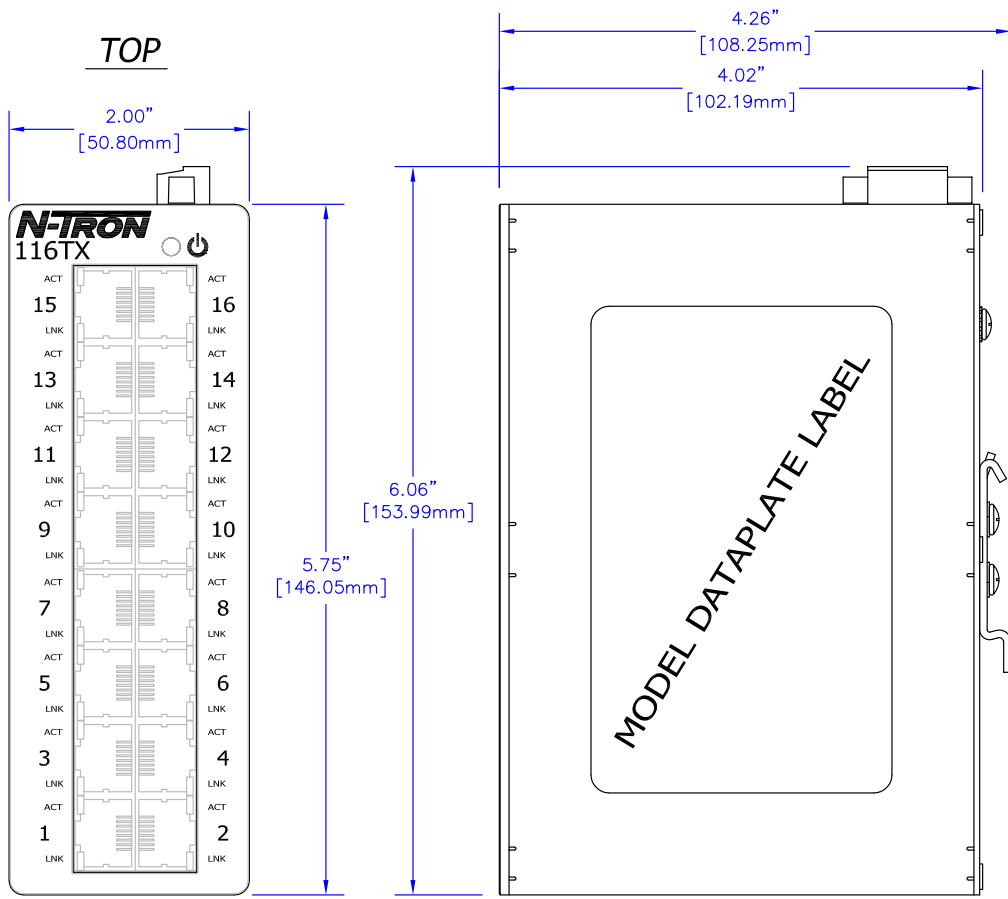
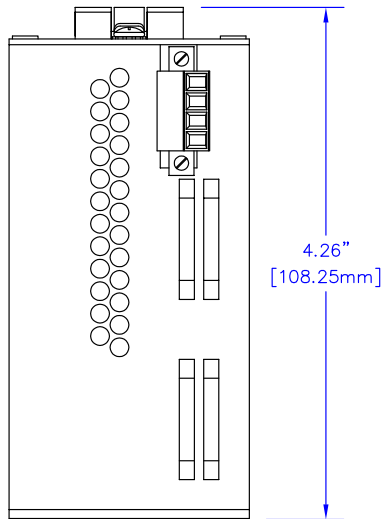
- Safety: Class I, Division 2, Groups A, B, C and D, T4
- EMI: ANSI C63.4; FCC CFR Title 47, Part 15, Subpart B - Class A; ICES-003 – Class A
- EMC: EN61000-6-4 – Class A (Emissions), EN 55024 (Immunity), EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (RF), EN61000-4-8 (PFMF), EN61000-4-11 (VDI)
- GOST-R certified

Further information regarding this product's regulatory conformity can be found on the N-Tron website at www.n-tron.com/regulatory



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
116TX.....	Sixteen-port (16 10/100BaseTX Ports) Industrial Ethernet switch
NTPS-24-1.3.....	N-TRON DIN-rail power supply (1.3 amp@24VDC)



FRONT

RIGHT SIDE