7026TX Industrial Ethernet Switch

N-Tron Networking Series

▶▶▶ Managed Industrial Ethernet Switch

PRODUCT FEATURES

- Twenty-four (24) 10/100BaseTX RJ-45 ports
- Two (2) gigabit full duplex SFP ports supports optional:
  - · 1000BaseSX/LX Fiber tranceiver with LC style connectors
  - · 1000BaseT Copper transceiver with RJ-45 connectors
- -40°C to 80°C operating temperature (includes onboard sensor)
- Auto sensing 10/100BaseTX, duplex, and MDIX on copper ports
- Up to 8.8 Gb/s maximum throughput
- ESD and surge protection diodes on all ports
- Hardened rackmount enclosure
- Fault relay support
- Configurable bi-color (red/green) fault status LED
- 7026TX: 18-49 VDC redundant inputs
- 7026TX-AC: 90-264 VAC/90-300 VDC (regulated) input

FULLY MANAGED FEATURES

- SNMP v1, v2, v3 and web browser management
- EtherNet/IP™ CIP messaging
- Configuration backup via optional SD card (part number NTCD-128)
- Detailed ring map and fault location charting
- N-Ring™ technology with ~30ms healing
- Redundant ring coupling
- N-View™ OPC monitoring
- RSTP - 802.1d, 802.1w, 802.1D
- IGMP auto configuration
- 802.1Q Tagged VLAN and port VLAN
- 802.1p QoS, port QoS and DSCP
- LLDP (Link Layer Discovery Protocol)
- DHCP Server, Option 82 Relay, Option 61, IP Fallback
- Port mirroring and trunking
- Local port IP addressing
- Port security—MAC address-based

BUILT FOR EXTREME CONDITIONS

The N-Tron® 7026TX and 7026TX-AC fully managed Industrial Ethernet Switches deliver expanded port offerings, including gigabit capability, in a standard 1U rackmount form factor. Loaded with a powerful combination of twenty-four (24) 10/100BaseTX copper ports and two (2) gigabit full duplex SFP ports, the 7026TX series is designed for high-traffic industrial environments including process control, Ethernet I/O, data acquisition and other mission-critical applications. Select the model based on your input power source—the 7026TX uses DC power; the 7026TX-AC accepts high-voltage AC or DC power.

ADVANCED RING TECHNOLOGY

Advanced N-Ring technology provides expanded capacity, detailed fault diagnostics, and fast ~30ms healing times in rings composed of N-Tron fully managed switches. The integrity of the N-Ring is continually monitored for error conditions. If a fault is detected, the ring converts to a daisy chain topology and restores communications within ~30ms. For convenience, users can easily access a detailed ring map and fault location chart through the ring manager's browser or the OPC server. Each N-Ring accommodates up to 250 fully-managed N-Tron switches. N-Link easily connects multiple N-Rings, creating additional pathways to critical applications and increasing overall network resiliency.

MONITORING OPTIONS

N-Tron provides multiple means of network monitoring. A robust browser interface offers convenient interaction with device settings and options, as well as viewing of network traffic, alarms, and trend information. N-View OPC server software dispenses important switch data that can be used by comprehensive monitoring and HMI applications. Finally, a highly-visible user-configurable LED on the front panel clearly indicates switch status.

EASY TO USE

Both 7026TX models feature 24 auto sensing and auto configuring 10/100BaseTX ports. Each copper port automatically negotiates maximum speed and performance. If preferred, these variables can be easily hardcoded through the user interface. A high-speed processor allows full wire speed on all ports simultaneously.

industrial networking

SPECIFICATIONS

Switch Properties
Number of MAC Addresses: 8000
Aging Time: Configurable
Latency (typical): 2.6 µs
Switching Method: Store-and-Forward

Case Dimensions
Height: 1.8" (4.6 cm)
Width: 16.1" (40.9 cm)
Depth: 5.4" (13.7 cm)
Weight (maximum): 5.5 lbs (2.5 kg)
19" Rackmount 1U

Electrical
7026TX:
Dual Redundant Power Inputs: 18-49 VDC (regulated)
Input Current (max): 605mA @ 24 VDC
BTU/hr: 49.6 @ 24 VDC
N-TRON Power Supply: NTPS-24-1.3 (1.3A @ 24V) (sold separately)
7026TX-AC:
Input Voltage: 90-264 VAC/90-300 VDC (regulated)
Input Current (max): 215mA @ 120 VAC/110mA @ 124 VDC
BTU/hr: 100 @ 120 VAC/47 @ 124 VDC

Environmental
Operating Temperature: -40°C to 80°C
Storage Temperature: -40°C to 85°C
Operating Humidity: 5% to 95% (non condensing)
Operating Altitude: 0 to 10,000 ft.

Reliability
MTBF: >1 million hours

Network Media
10BaseT: ≥Cat3 cable
100BaseTX: ≥Cat5 cable
1000BaseT: ≥Cat5e cable
1000BaseSX Multimode: 50-62.5/125µm
1000BaseLX Singlemode: 7-10/125µm

Connectors
10/100BaseTX: Twenty-four (24) RJ-45 copper ports
1000BaseT: Up to two (2) RJ-45 gigabit copper ports
1000BaseSX: Up to two (2) LC duplex gigabit fiber ports

Recommended Wiring Clearance
Front: 4" (10.2 cm)
Side: 1" (2.6 cm)
Back (allows for power input):
7026TX: 1" (2.6 cm)
7026TX-AC: 2" (5.1 cm)

SFP Gigabit Fiber Transceiver Characteristics

Fiber Length	550m for 50/125µm 275m @ 62.5/125µm*	10km**	40km**	80km**
TX Power Min	-9.5 dBm	-9.5 dBm	-2 dBm	0 dBm
RX Sensitivity Max	-17 dBm	-20 dBm	-22 dBm	-24 dBm
Wavelength	850 nm	1310 nm	1310 nm	1550 nm
Assumed Fiber Loss	3.5 to 3.75 dB/km	0.45 dB/km	0.35 dB/km	0.25 dB/km
Laser Type	VCSEL	DFB	DFB	DFB

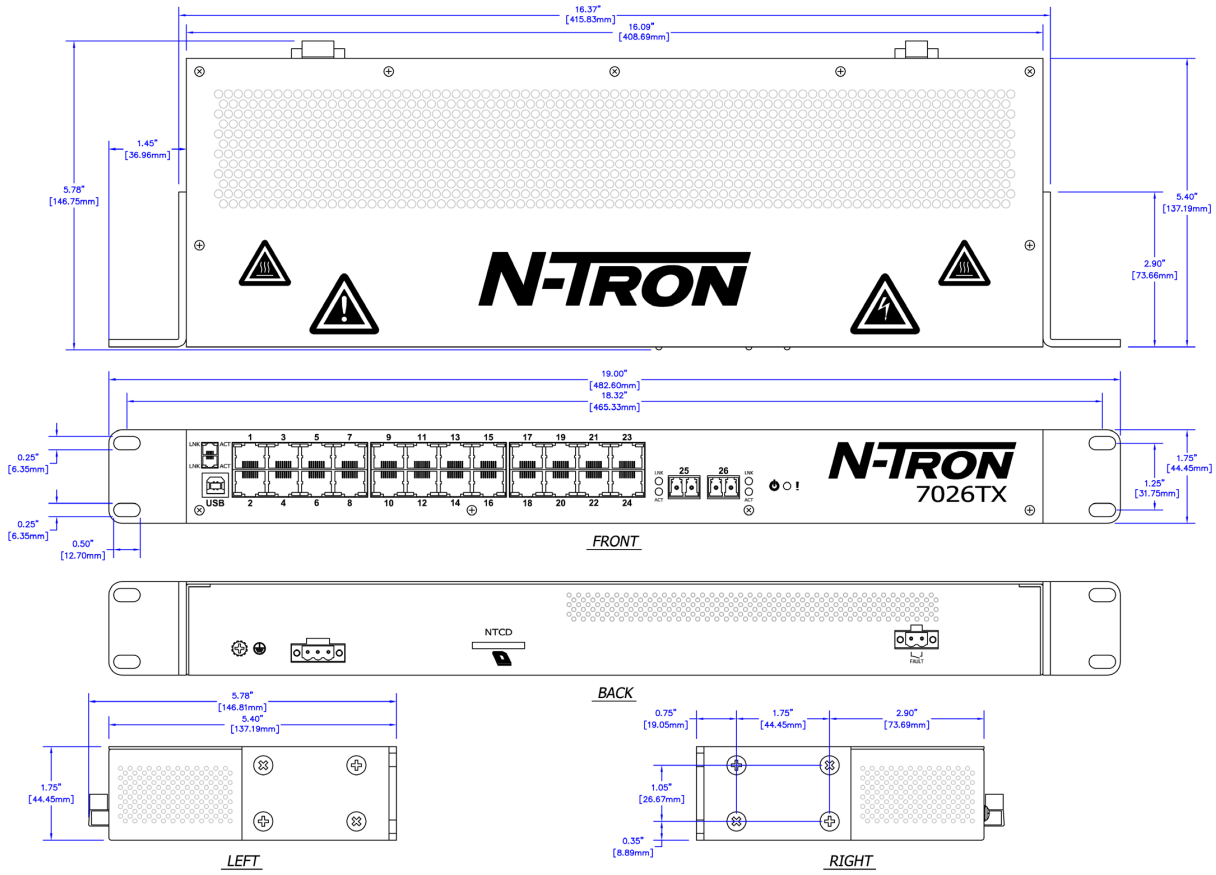
* SX Fiber Optic Cable
** LX Fiber Optic Cable

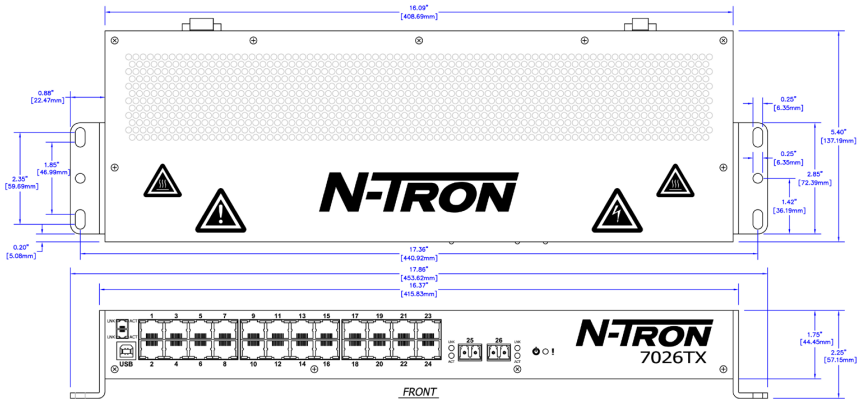
Regulatory Certifications
- UL 508 and C22.2 No. 14 for Industrial Control Equipment ANSI/ISA-12.12.01 and C22.2 N0. 13-M1987 for Class I, Div. 2 Groups A, B, C and D. T4
- EMI: ANSI C63.4; FCC CFR Title 47, Part 15, Subpart B - Class A; ICES-003 – Class A
- EMC: EN 61000-3-2/3 (Emissions), EN 55022 (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

c UL us LISTED 65SN

RoHS compliant

EtherNet/IP





Drawing shows 7026TX dimensions with optional panel mount kit attached.
7026TX-PMK.....**Panel mount kit**

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
7026TX	26-port (24 10/100BaseTX, 2 1000Base SFP mini-GBIC gigabit expansion ports) fully-managed Industrial Ethernet switch, 19" rackmount design, redundant 18-49 VDC power input
7026TX-AC	26-port (24 10/100BaseTX, 2 1000Base SFP mini-GBIC gigabit expansion ports) fully-managed Industrial Ethernet switch, 19" rackmount design, 90-264 VAC/90-300 VDC power input
NTSFP-TX	1000BaseT copper SFP pluggable mini-GBIC transceiver (RJ-45 connector)
NTSFP-SX	1000BaseSX multimode fiber SFP pluggable mini-GBIC transceiver (LC style connector)
NTSFP-LX-ZZ	1000BaseLX singlemode fiber SFP pluggable mini-GBIC transceiver (LC style connector)
NTCD-128	Optional configuration card for backup/restore
7026TX-PMK	Panel mount kit
7026TX Power Supply	
NTPS-24-1.3	N-Tron DIN-rail power supply (1.3 amp @ 24 VDC)

Where: ZZ = 10, 40, or 80 for GB singlemode (if SFP transceivers are not specified at the time of purchase, ports will remain empty with covers)

red lion®

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