

PRODUCT FEATURES

- Compact, Space Saving Package
- Full IEEE 802.3 Compliance
- Eight 10/100BaseTX RJ-45 Ports
- Two 100BaseFX Ports, ST or SC Style
- Unmanaged Operation
- Extended Environmental Specifications
 - -40°C to 80°C Operating Temperature
 - >2 Million Hours MTBF
- Supports Full/Half Duplex Operation
- Auto Sensing 10/100BaseTX, Duplex, MDIX
- Full Wire Speed Communication
- Store-and-Forward Technology
- Redundant Power Inputs (10-49 VDC)
- ESD Protection Diodes on all RJ-45 Ports
- Surge Protection Diodes on Power Inputs
- LED Link/Activity Status Indication
- Hardened Metal DIN-Rail Enclosure



PRODUCT OVERVIEW

The N-TRON 110FX2 unmanaged industrial network switch is designed to meet the most demanding communications requirements while providing high throughput and minimum downtime. The 10-port Ethernet switch is the perfect low-cost solution for mission critical data acquisition, control, and Ethernet I/O applications.

Exceptional Quality

The ultra-compact 110FX2 provides exceptional performance and reliability under harsh conditions. Enclosed in a high-grade metal case, the switch offers a robust feature set that includes an extended temperature range, superior shock and vibration resistance, redundant power inputs, surge and ESD protection, and an exceptional MTBF—greater than two million hours. The space-saving design includes an attached DIN-rail bracket for quick installation.

Versatile Connectivity

The 110FX2 includes eight RJ-45 auto-sensing 10/100BaseTX ports. All ports support full/half duplex transmission and use N-TRON's proven Ethernet switching technology.

Setup is easy. The unit automatically configures itself on the network and auto-negotiates both speed and flow control for all copper ports.

For fiber optic networks, the 110FX2 supplies two 100BaseFX ports. These connections provide vital support for applications where EMI immunity or communication over long distances (up to 80 km) is required. N-TRON offers singlemode and multimode options, as well as SC- or ST-style connectivity.

Excellent Network Support

The 110FX2 is a brilliant plug-and-play solution for unmanaged operations, eliminating virtually all network collisions. Designed with advanced communication processing, store-and-forward programming and memory for up to 8,000 MAC-addresses, this powerful unit handles the demands of even the most complex networks. Intelligent auto-sensing 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.

110FX2 Specifications

Switch Properties

Number of MAC Addresses: 8000
Latency Typical: 2.6 μ s
Switching Method: Store-and-Forward

Case Dimensions

Height: 4.3" (10.8 cm)
Width: 2.4" (6.1 cm)
Depth: 4.6" (11.5 cm)
Weight (max): 1.5 lbs (0.6 kg)
DIN-Rail Mount: 35mm

Electrical

Redundant Input Voltage: 10-49 VDC (Regulated)
Input Current (max): 355mA max@24VDC
BTU/hr: 29.1@24VDC
N-TRON Power Supply: NTPS-24-1.3 (1.3A@24V)

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.

Shock and Vibration (bulkhead mounted)

Shock: 200g@10ms
Vibration/Seismic: 50g, 5-200Hz, Triaxial

Reliability

MTBF: >2 Million Hours

Network Media

10BaseT: \geq Cat3 Cable
100BaseTX: \geq Cat5 Cable

Fiber Transceiver Characteristics

Fiber Length	2km*	15km**	40km**	80km**
TX Power Min	-19dBm	-15dBm	-5dBm	-5dBm
RX Sensitivity Max	-31dBm	-31dBm	-34dBm	-34dBm
Wavelength	1310nm	1310nm	1310nm	1550nm

* Multimode Fiber Optic Cable
** Singlemode Fiber Optic Cable

Connectors

10/100BaseTX: Eight (8) RJ-45 Copper Ports
100BaseFX: Two 100BaseFX Ports, ST or SC

Recommended Wiring Clearance

Front: 4" (10.2 cm)
Side: 1" (2.6 cm)

Regulatory Approvals

- FCC: Title 47, Part 15, Subpart B, Class A; ANSI C63.4; ICES-003
- CE: IEC 61000-4-2/3/4/5/6/8/11, EN 61000-6-2/4
- GOST-R Certified, RoHS Compliant

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: N-TRON_info@N-TRON.com

N-TRON Asia
Suite #: 2267, 22/F, One Lujiazui
68 Yin Cheng Road Center,
Pudong New Area
200120 Shanghai, P.R. China
TEL: +86 (0) 21 6194 6777
FAX: +86 (0) 21 6194 6699

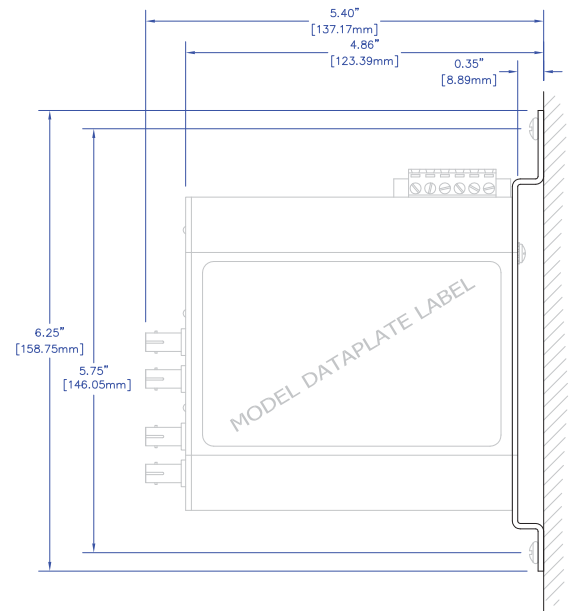
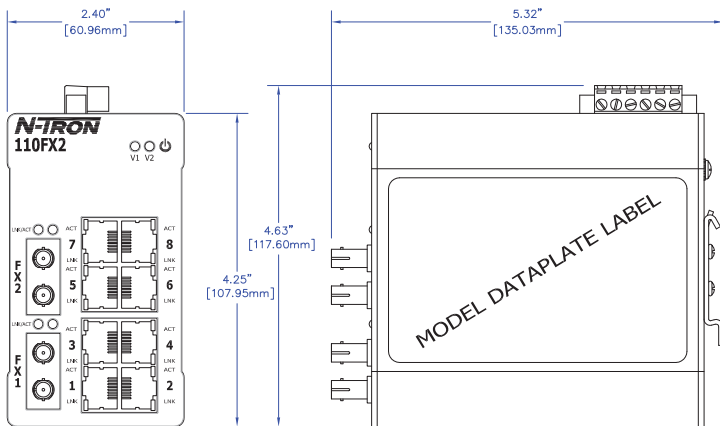
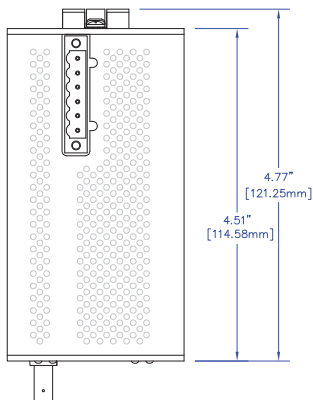
N-TRON Europe GmbH
Alte Steinhäuserstr 19
6330 Cham/Zg Switzerland
TEL: +41 41 7406636
FAX: +41 41 7406637

REV 100920

110FX2 Industrial Ethernet Switch Ordering Information

110FX2-XX	Eight 10/100BaseTX Ports, Two Multimode 100BaseFX Ports, ST or SC Style
110FXE2-XX-YY	Eight 10/100BaseTX Ports, Two Singlemode 100BaseFX Ports, ST or SC Style
NTPS-24-1.3	N-TRON Power Supply (1.3 amp @ 24VDC)
CPMA-1	Compact Panel Mount (factory installed option only)
URMK	Universal Rack Mount Kit

Where: XX = ST or SC
 YY = 15, 40, or 80 for Singlemode, Blank for Multimode
 E = Singlemode



OPTIONAL COMPACT PANEL MOUNT ASSY.
 (P/N: CPMA-1)