



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



110FX2 Industrial Ethernet Switch

N-Tron Networking Series



▶▶▶ Unmanaged Industrial Ethernet Switch

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

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):	1.4 lbs	(0.64 kg)
DIN-Rail Mount:	35mm	

Electrical

Redundant Input Voltage:	10-49 VDC (Regulated)
Input Current (max):	355mA max@24 VDC
BTU/hr:	29.1@24 VDC
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

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)

Fiber Transceiver Characteristics

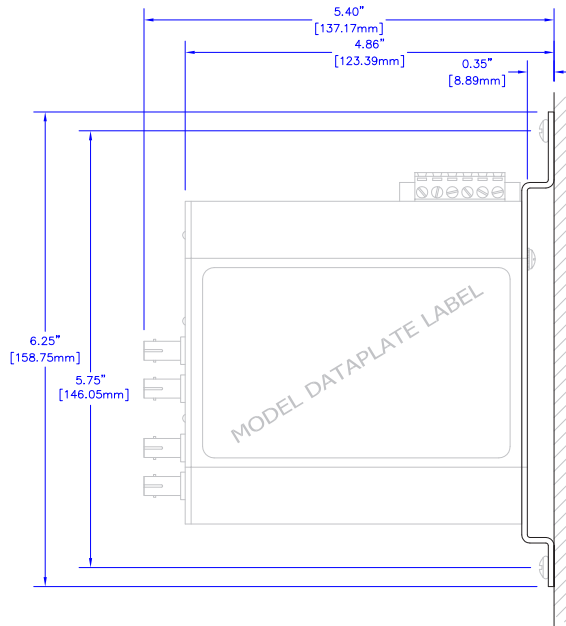
Fiber Length	2km*	15km**	40km**	80km**
TX Power Min	-19dBm	-15dBm	-5dBm	-5dBm
RX Sensitivity Max	-31dBm	-31dBm	-34dBm	-34dBm
Wavelength	1310nm	1310nm	1310nm	1550nm

* Multimode Fiber Optic Cable
** Singlemode Fiber Optic Cable

Regulatory Approvals

- FCC: Title 47, Part 15, Subpart B, Class A; ANSI C63.4; ICES-003
- UL /cUL: Class I, Div 2, Groups A, B, C, D and T4
- CE: IEC 61000-4-2/3/4/5/6/8/11, EN 61000-6-2/4
- Other: ABS Type Approval for Shipboard Applications; GOST-R certified; RoHS compliant

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

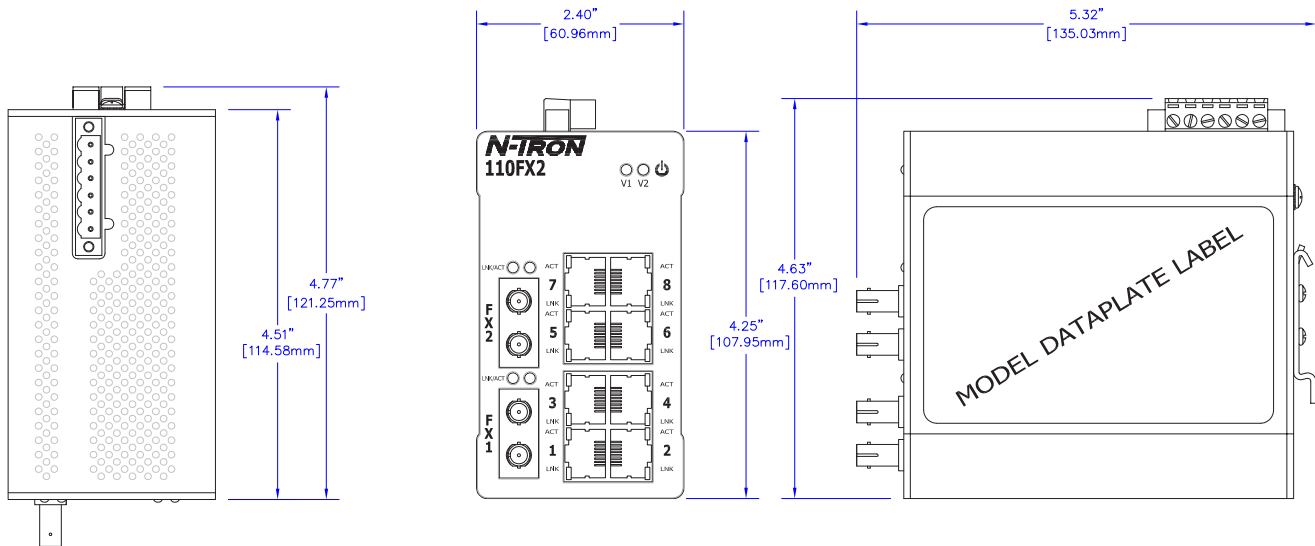


OPTIONAL COMPACT PANEL MOUNT ASSY.
(P/N: CPMA-1)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
110FX2-XX	10-Port (8 10/100BaseTX, 2 100BaseFX Fiber Ports, multimode) Industrial Ethernet Switch, DIN-Rail
110FXE2-XX-YY	10-Port (8 10/100BaseTX, 2 100BaseFX Fiber Ports, singlemode) Industrial Ethernet Switch, DIN-Rail
NTPS-24-1.3	N-Tron Power Supply (1.3 amp @ 24 VDC)
CPMA-1	Compact Panel Mount (factory installed option only)
URMK	Universal Rack Mount Kit

Where: E = Singlemode
 XX = ST for ST style fiber connector, SC for SC style fiber connector
 YY = Segment length:
 15 for 15km max. fiber segment length
 40 for 40km max. fiber segment length
 80 for 80km max. fiber segment length
Mixed fiber configurations available.



www.redlion.net

Connect. Monitor. Control.

Americas
 sales@redlion.net

Asia-Pacific
 asia@redlion.net

Europe
Middle East
Africa
 europe@redlion.net

+1 (717) 767-6511

As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our award-winning technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. For more information, please visit www.redlion.net. Red Lion is a Spectris company.