

## PRODUCT FEATURES

- · Compact, Space Saving Package
- Full IEEE 802.3 Compliance
- Eight 10/100BaseTX RJ-45 Ports
- · Six 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® 114FX6 unmanaged industrial network switch is designed to meet the most demanding communications requirements while providing high throughput and minimum downtime. The 14-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 114FX6 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 114FX6 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.

# 114FX6



For fiber optic networks, the 114FX6 supplies six 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 114FX6 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.

RUGGED • RELIABLE • AFFORDABLE

## Specifications

Switch Properties Number of MAC Addresses: Latency Typical: Switching Method:	8000 2.6 μs Store-and-Forward	
Case Dimensions Height: Width: Depth: Weight (max): DIN-Rail Mount:	4.3" 3.1" 4.6" 1.7 lbs 35mm	(10.8 cm) (7.9 cm) (11.5 cm) (0.77 kg)
Electrical Redundant Input Voltage: Input Current (max): BTU/hr: N-Tron Power Supply:	10-49 VDC (Regulated) 545mA max.@24 VDC 44.7@24 VDC NTPS-24-1.3 (1.3A@24V)	
Environmental Operating Temperature: Storage Temperature: Operating Humidity: Operating Altitude:	-40°C to 80°C -40°C to 85°C 5% to 95% (Non Condensing) 0 to 10,000 ft.	
Shock and Vibration (bulkh Shock: Vibration/Seismic:	nead mounted) 200g @ 10ms 50g, 5-200Hz, Triaxia	I
Reliability MTBF:	>2 Million Hours	
Network Media 10BaseT: 100BaseTX:	≥Cat3 Cable ≥Cat5 Cable	
Connectors 10/100BaseTX: 100BaseFX:	Eight (8) RJ-45 Copp Six (6) SC or ST Fibe	
Recommended Wiring Cle	arance	

Recommended			
Front:	4"	(10.16 cm)	
Side:	1"	(2.54 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

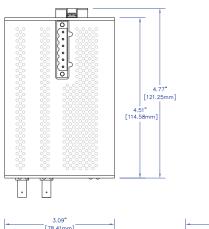
• FCC: Title 47, Part 15, Subpart B, Class A; ANSI C63.4; ICES-003

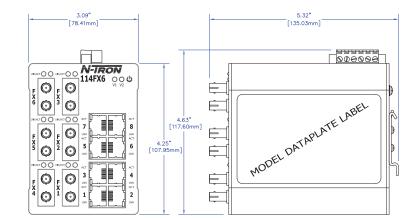
• UL /cUL: Class I, Div 2, Groups A, B, C, D and T4

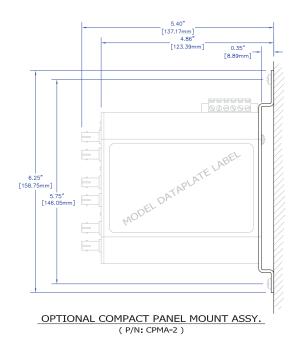
• CE: IEC 61000-4-2/3/4/5/6/8/11, EN 61000-6-2/4

• GOST-R Certified, RoHS Compliant









## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
114FX6-XX	14-port (8 10/100BaseTX, 6 100BaseFX Fiber Ports, multimode) Industrial Ethernet Switch, DIN-Rail
114FXE6-XX-YY	14-port (8 10/100BaseTX, 6 100BaseFX Fiber Ports, singlemode) Industrial Ethernet Switch, DIN-Rail
NTPS-24-1.3	N-Tron Power Supply - (1.3 Amp @ 24 VDC)
СРМА-2	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.



QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV

**ISO 9001:2008**