

108TX-HV Industrial Ethernet Switch

N-Tron Networking Series



▶▶▶ Unmanaged 8 Port Industrial Ethernet Switch

The N-TRON® 108TX-HV is a low-cost unmanaged, eight-port Industrial Ethernet Switch. It is housed in a hardened, metal, DIN-Rail enclosure, and is designed for use in railway, mission critical data acquisition, control, and Ethernet I/O applications.

PRODUCT FEATURES

- Compact, Space Saving Package
- Full IEEE 802.3 Compliance
- EN50155 for Railway applications
- Eight 10/100BaseTX RJ-45 Ports
- Unmanaged Operation
- Extended Environmental Specifications
 - -40°C to 70°C Operating Temperature
 - >2M Hours MTBF
- Supports Full/Half Duplex Operation
- Up to 1.6 Gb/s Maximum Throughput
- MDIX Auto Sensing Cable
- Auto Sensing Speed and Flow Control
- Full Wire Speed Communications
- Store-and-Forward Technology
- Redundant Power Inputs 10-60 VDC
- ESD Protection Diodes on all Ports
- Surge Protection Diodes on Power Inputs
- LED Link/Activity Status Indication
- Hardened Metal DIN-Rail Enclosure

PRODUCT OVERVIEW

The 108TX-HV industrial network switch is designed to solve the most demanding industrial communications requirements while providing high throughput and minimum downtime.

The 108TX-HV provides eight RJ-45 auto sensing 10/100BaseTX ports. All ports are full/half duplex capable, using "state of the art" Ethernet switching technology. The 108TX-HV auto-negotiates the speed and flow control capabilities of the eight TX port connections, and configures itself automatically.

Since the 108TX-HV is auto sensing, there will be no need to make extensive wiring changes if upgrades are made to the host computers, plant systems, or Ethernet I/O modules. The switching fabric simply scales up or down automatically to match specific network environments.



The 108TX-HV supports up to 2,000 MAC addresses, enabling these products to support extremely sophisticated and complex network architectures.

The N-TRON 108TX-HV is an ideal candidate for upgrading existing hubs and repeaters to increase bandwidth and determinism by virtually eliminating network collisions. The 108TX-HV provides an affordable network solution and maintains the plug & play simplicity of the unmanaged hub.

The 108TX-HV can simplify plant wiring by eliminating the need to bring data acquisition and control network connections back to a climate controlled environment. The 108TX-HV has extended operating environmental specifications to meet the harsh needs of the industrial environment. For cost savings and convenience the network switch can be DIN-Rail mounted alongside Ethernet I/O or other Industrial Equipment.

To increase reliability the 108TX-HV provides dual redundant power inputs. LEDs are provided to display the link status and activity of each port.

108TX-HV SPECIFICATIONS

Case Dimensions

Height:	3.5"	(8.9 cm)
Width:	1.5"	(3.8 cm)
Depth:	3.6"	(9.0 cm)
Weight:	0.7 lbs.	(0.4 kg)
DIN-Rail:	35mm	

Electrical

Input Voltage:	10-60VDC
Steady Input Current:	250mA@24V
Inrush:	8.1Amp/0.7ms@24V

Environmental

Operating Temperature:	-40°C to 70°C
Storage Temperature:	-40°C to 85°C
Operating Humidity:	10% to 95% (Non Condensing)
Operating Altitude:	0 to 10,000 ft.

Reliability

MTBF:	>2 Million Hours
-------	------------------

Network Media

10BaseT:	>Cat3 Cable
100BaseTX:	>Cat5 Cable

Connectors

10/100BaseTX:	Eight (8) RJ-45 Copper Ports
---------------	---------------------------------

Recommended Wiring Clearance

Front:	2" (5.08 cm)
Top:	1" (2.54 cm)

BENEFITS

Industrial Network Switch

- Compact Size / Small Footprint
- Extended Environmental Specifications
- Hardened Metal DIN-Rail Enclosure
- High Performance
- High MTBF >2M Hours
- ESD Protection Diodes on all Ports
- Surge Protection Diodes on Power Inputs

Ease of Use

- Plug & Play Operation
- Auto Sensing 10/100BaseTX
- Auto Negotiation Full/Half Duplex
- MDIX Auto Cable Sensing
- Unmanaged Operation

Increased Performance

- Full Wire Speed Capable
- Full Duplex Capable
- Eliminates Network Collisions
- Increases Network Determinism

Regulatory Approvals

FCC/CE CFR 47 Part 15, Subpart B, Class A

EN55022, ICES-003

EN 61000-4-3/4/5/6

EN50155 for Railway Applications

GS/CE: EN60950-1

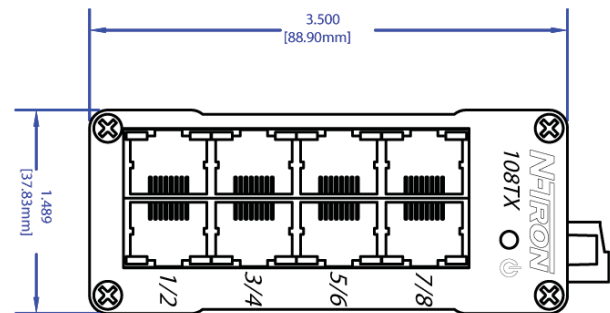
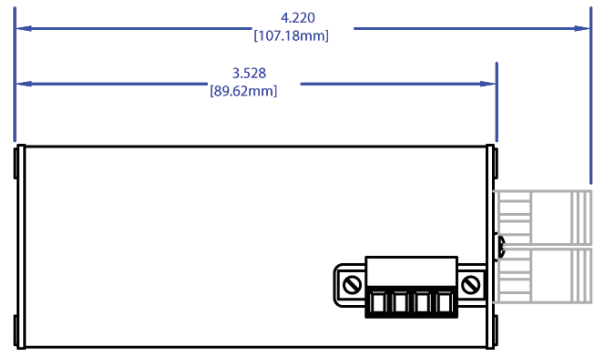
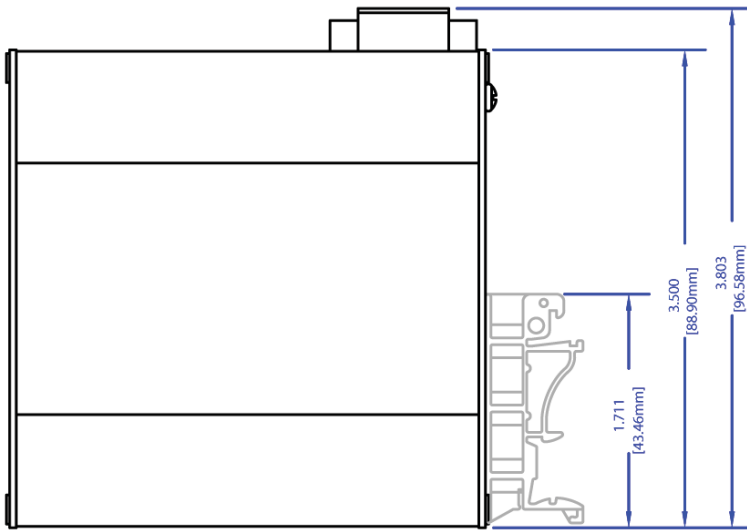
Ordering Information

108TX-HV	Eight 10/100BaseTX Ports, 10-60VDC
100-MDR-2	Metal Din Rail Option*
NTPS-24-3	DIN-Rail Power Supply 24V@3 Amp
NTPS-48-2	DIN-Rail Power Supply 48V@2 Amp

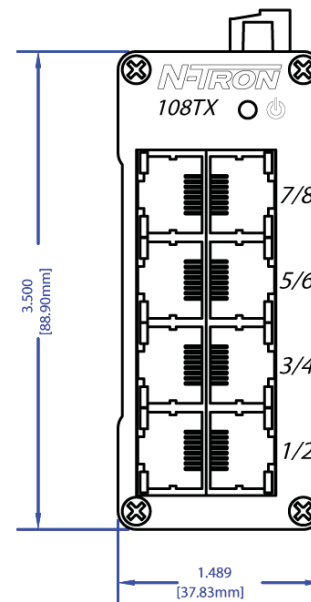
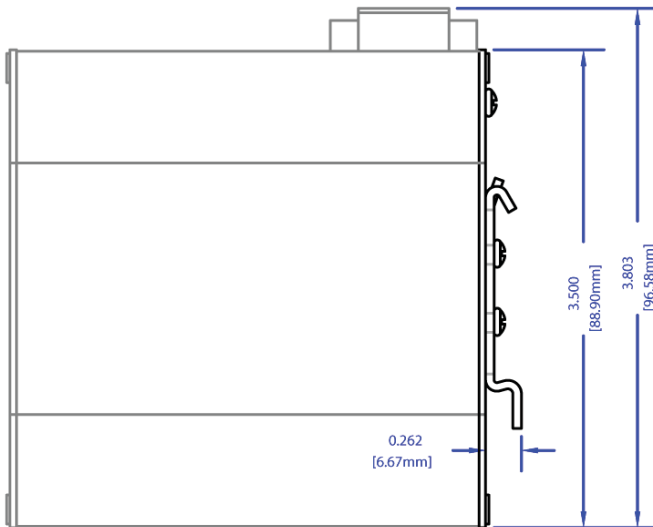
* MDR option must be specified with switch order - not field upgradable

▶▶▶ 108TX-HV Industrial Ethernet Switch Specifications

108TX-HV with Standard DIN rail Mount



Optional 100-MDR-2 Metal DIN Rail Mount



a spectris company

EXCELLENCE. REDEFINED.

www.redlion.net

+1 (717) 767-6511

As global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M 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. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company. For more information, please visit www.redlion.net. ADLD0357 031020 © 2020 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron and Sixnet are registered trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.

AMERICAS
SALES@REDLION.NET

ASIA-PACIFIC
ASIA@REDLION.NET

EUROPE, MIDDLE EAST, AFRICA
EUROPE@REDLION.NET