

The *N-TRON*® 104TX is a low cost unmanaged four port Industrial Ethernet Switch. It is housed in a hardened, metal, DIN-Rail enclosure, and is designed for use in mission critical data acquisition, control, and Ethernet I/O applications.

PRODUCT FEATURES

- Compact, Space Saving Package
- Full IEEE 802.3 Compliance
- American Bureau of Shipping(ABS) Type Approval
- EN50155 for Railway applications
- Four 10/100BaseTX RJ-45 Ports
- Unmanaged Operation
- Extended Environmental Specifications
 - -40°C to 80° Operating Temperature
 - >2M Hours MTBF
- Supports Full/Half Duplex Operation
- Up to 800 Mb/s Maximum Throughput
- MDIX Auto Sensing Cable
- Auto Sensing Speed and Flow Control
- Full Wire Speed Communications
- Store-and-forward Technology
- Redundant Power Inputs (10-30 VDC)
- LED Link/Activity Status Indication
- Hardened Metal DIN-Rail Enclosure

PRODUCT OVERVIEW

The 104TX Industrial Network Switch is designed to solve the most demanding industrial communication requirements while providing high throughput and minimum downtime.

The 104TX provides four RJ-45 auto sensing 10/100BaseTX ports. All ports are full/half duplex capable, using "state of the art" Ethernet switching technology. The 104TX auto-negotiates the speed and flow control capabilities of the four TX port connections, and configures itself automatically. Since the 104TX 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 104TX supports up to 2,000 MAC addresses, enabling these products to support extremely sophisticated and complex network architectures.

The 104TX is an ideal candidate for upgrading existing hubs and repeaters to increase bandwidth and determinism by virtually eliminating network collisions. The *N-TRON* 104TX combines affordability and the plug & play simplicity of the unmanaged hub.

The 104TX can simplify plant wiring by eliminating the need to bring data acquisition and control network connections back to a climate controlled environment. The 104TX 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 104TX provides dual redundant power inputs. LED's are provided to display the link status and activity of each port.

104TX SPECIFICATIONS

Case Dimensions

Height:	2.9"	(7.3cm)
Width:	1.5"	(3.8 cm)
Depth:	3.6"	(9 cm)
Weight:	0.6 lbs.	(0.28 kg)
DIN-Rail:	35mm	

Electrical

Input Voltage:	10-30 VDC
Steady Input Current:	215mA @24V
Inrush:	7.8Amp/0.7ms@24V

Environmental

Operating Temperature:	-40°C to 80°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
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Network Media

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

Connectors

10/100BaseTX:	Four (4) RJ-45 TX Copper Ports
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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 RJ-45 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 Title 47 Part 15 Class A

ICES-003- Class A

CE: EN61000-6-2,4

EN61000-4-2,3,4,5,6

EN55011 Class A

UL Listed (US and Canada) per ANSI/ISA-12.12.01-2000,
Class I, Div 2, Groups A,B,C,D, T4A

ABS Type Approval for Shipboard Applications

DNV Type Approval Certification

EN50155 for Railway Applications

RoHS Compliant; GOST-R Certified

Designed to comply with:

IEEE 1613 for Electric Utility Substations;

and NEMA TS1/TS2 for Traffic Control Equipment

Contact Information

Ordering Information

104TX	Four 10/100BaseTX Ports
NTPS-24-1.3	DIN-Rail Power Supply 24V@1.3 Amp

Secure online
ordering
24/7/365 from

B & B electronics
MANUFACTURING COMPANY

International Headquarters: 707 Dayton Road - PO Box 1040 - Ottawa, IL 61350 USA
815-433-5100 Fax 815-433-5104 www.bb-elec.com orders@bb-elec.com support@bb-elec.com

European Headquarters: Westlink Commercial Park - Oranmore Co. Galway - Ireland
+353 91 792444 Fax +353 91 792445 www.bb-europe.com orders@bb-europe.com support@bb-europe.com

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