Chipsmall

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!

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The *N-TRON® 508FX2* Series Industrial Ethernet Switch offers outstanding performance and ease of use. It is ideally suited for connecting Ethernet enabled industrial and/or security equipment and can be optionally configured with advanced Ethernet communication management functions

PRODUCT FEATURES
• Full IEEE 802.3 and 1613 Compliance
• NEMA TS1/TS2 Compliance
• American Bureau of Shipping (ABS) Type Approval
• Six 10/100 BaseTX RJ-45 Ports
• Two 100BaseFX Ports, ST (shown) or SC
• Extended Environmental Specifications
• Auto Sensing 10/100BaseTX, Duplex, and MDIX
• Store-and-forward Technology
• Up to 2.6 Gb/s Backplane Throughput
• Rugged Industrial DIN-Rail Enclosure
• Redundant Power Inputs (10-30 VDC)
• Bi-Color LED's For Link, Speed, Activity & Duplex Status

Advanced Management Features (With -A option only):
• IGMP Snooping
• VLAN
• QoS
• Trunking
• Mirroring
• N-View™ (Remote Monitoring Using OPC Technology)

Advanced Management Functions
The *508FX2-A* offers several management functions that can be easily configured using the COM Port (DB 9 Connector located on the right side of the switch).

IGMP Snooping - Internet Group Management Protocol is a feature that allows the *508FX2-A* switch to forward and filter multicast traffic intelligently.

VLAN - Virtual Local Area Network allows segmentation of the switch in order to create two or more separate local area network domains.

QoS - Quality of Service provides prioritization of network traffic in order to provide better network service. The primary goal of QoS is to improve the latency of prioritized Ethernet packets required for ring management, real-time and other interactive applications.

Trunking - Trunking (aggregation) enables multiple physical ports to be linked together and function as one uplink to another *N-TRON* trunking capable switch configured in the same manner, thereby increasing the bandwidth between switches. This configuration can provide increased bandwidth and redundancy to applications requiring high levels of fault tolerant operation.

Port Mirroring - This *508FX2-A* function allows the traffic on one port to be duplicated and sent to a designated mirror port. Port mirroring can be used to monitor Ethernet traffic on the designated source port using the assigned mirror port.

N-View OPC Switch Monitoring (With -A or -N Option Only)
The *N-TRON* N-View OLE for Process Control (OPC) server software can be combined with popular HMI software packages to add network traffic monitoring, trending and alarming to any application using *N-TRON* switches configured with the N-View option. *N-TRON's* N-View OPC server collects 41 different traffic variables per port and 5 system level variables per switch. This information can provide a complete overview of the network load, service quality, and packet traffic. OPC client software can use N-View OPC Server data to resolve network problems quickly and improve system reliability.

Industrial Packaging and Specifications
The *N-TRON 508FX2* is designed to operate in industrial environments. It is housed in a rugged steel enclosure that can be DIN-RAIL or panel mounted, and an optional rackmount kit is also available. The *508FX2* comes standard with extended temperature rating, extended shock and vibration specs, redundant power inputs, and a high MTBF (greater than 2M hours).

Ease of Use
The *N-TRON 508FX2* requires no setup unless the advanced port functions are utilized. The six 10/100BaseTX ports are auto sensing and auto configuring. Each copper port is automatically negotiated for maximum speed and performance by default. The two fiber optic ports support full 200Mb/s communications via 100BaseFX. Bi-color LED's are provided to display the link status, link speed and activity of each port as well as power on/off status.

Performance
The *N-TRON 508FX2* uses "state of the art" IEEE 802.3 Fast Ethernet 10/100BaseTX switching technology. This technology eliminates network collisions and increases network determinism. Up to 4,000 MAC addresses are supported enabling sophisticated and complex network architectures. A high speed processor and backplane allows wire speed capability on all ports simultaneously.

508FX2 Industrial Ethernet Switch Ordering Information

508FX2-A-XX	Six 10/100BaseTX Ports, Two Multimode 100BaseFX Fiber Optic Ports
508FX2-A-XX-S*	Six 10/100BaseTX Ports, Two Multimode 100BaseFX Fiber Optic Ports
508FXE2-A-XX-YY	Six 10/100BaseTX Ports, Two Singlemode 100BaseFX Fiber Optic Ports

Where: A = A for Advanced Management Features,
or N for N-View, and Blank Otherwise, N-View included in -A;
XX = ST or SC, YY = 15, 40 or 80 for singlemode, blank for multimode
*S = Standard Temperature Rating -20ºC to 70ºC, Blank for -40ºC to 85ºC

508FX2-A Specifications

Switch Properties
Number of MAC Addresses:	4,000
Aging Time:	20s, Programmable (-A)
Latency Type.:	2.1 μs
Backplane Speed:	2.6Gb/s
Switching Method:	Store & Forward

Case Dimensions
Height:	2.3"	(5.8cm)
Width:	5.9"	(15.0cm)
Depth:	3.8"	(9.7cm)
Weight:	1.6 lbs	(0.8kg)
Din-Rail:	35mm	

Electrical
Redundant Input Voltage:	10-30 VDC
Input Current:	380 mA@24V
Inrush:	8.5Amp/0.2ms@24V

Environmental
Operating Temperature:	-20ºC to 70ºC (Standard)
	-40ºC to 85ºC (Extended)
Operating Humidity:	10% to 95%
	(Non Condensing)
Operating Altitude:	0 to 10,000 ft.

Shock and Vibration (bulkhead mounting)
Shock:	200g @ 10ms
Vibration/Seismic:	50g, 5-200Hz, Triaxial

Reliability
MTBF:	>2Million Hours

Network Media
10BaseT:	>Cat3 Cable
100BaseTX:	>Cat5 Cable
100BaseFX	
Multimode:	50-62.5/125μm
Singlemode:	7-10/125μm

Connectors
10/100BaseTX:	Six (6) RJ-45 Copper Ports
100BaseFX:	Two (2) SC or ST Duplex Ports

Fiber Transceiver Characteristics

Fiber Length	2km*	15km**	40km**	80km**
TX Power Min	-19dBm	-15dBm	-5dBm	-5dBm
RX Sensitivity Max	-32dBm	-29dBm	-34dBm	-34dBm
Wavelength	1310nm	1310nm	1310nm	1550nm

* Multimode Fiber Optic Cable
** Singlemode Fiber Optic Cable

Serial Configuration Port
Com Parameters:	9600,n,8,1

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

Regulatory Approvals
FCC/CE (CFR 47, Part 15, Subpart B, Class A)
EMC Dir 89/336/EEC, EN 50204, EN 55011
EN61000-4-2/3/4/5/6/8/11, EN61000-6-2/4
ANSI C63.4, ICES-003
UL /cUL: Class I, Div 2, Groups A, B, C, D and T4A
UL 508 and UL 1604
CAN/CSA-C22.2 No.213, ATEX II 3 G Ex nA
ABS Type Approval for Shipboard Applications
GOST-R Certified, RoHS Compliant

Designed to comply with:
IEEE 1613 for Electric Utility Substations
NEMA TS1/TS2 for Traffic Control

Contact Information

N-TRON

THE INDUSTRIAL NETWORK COMPANY

6.20"
[157.42mm]

4.23"
[107.40mm]

4.70"
[119.31mm]

LINK SPEED   ACT DPLX

LINK SPEED   ACT DPLX

N-TRON
508FX2

1   3   5

2   4   6

TX RX   LNK ACT   TX RX   LNK ACT

2.27"
[57.58mm]

5.89"
[149.48mm]

V₁ + V₁ -   V₂ + V₂ -   COM

3.79"
[96.29mm]