

710FX2

PRODUCT FEATURES

- Eight 10/100BaseTX RJ-45 Ports
- Two 100BaseFX Ports, ST or SC Style
- -40°C to 70°C Operating temperature
- Onboard Temperature Sensor
- ESD and Surge Protection Diodes on all Ports
- Auto Sensing 10/100BaseTX, Duplex, and MDIX
- Store-and-forward Technology
- Rugged DIN-Rail Enclosure
- Redundant Power Inputs (10-49VDC)
- Configurable Bi-Color Fault Status LED

FULLY MANAGED FEATURES:

- SNMP v1, v2, v3 and Web Browser Management
- Configuration backup via Optional SD card
- Detailed Ring Map and Fault Location Charting
- N-Ring[™] Technology with ~30ms Healing
- N-Link[™] Redundant N-Ring Coupling
- RSTP IEEE 802.1D
- N-ViewTM OPC Monitoring
- IGMP Auto configuration
- 802.1Q tag VLAN and Port VLAN
- 802.1p QoS, Port QoS, and DSCP
- EtherNet/IPTM CIP Messaging
- LLDP (Link Layer Discovery Protocol)
- Port Trunking
- Port Mirroring
- 802.1d, 802.1w, 802.1D RSTP
- DHCP Server, Option 82 relay, Option 61, IP Fallback
- Local Port IP Addressing
- Port Security—MAC Address Based



The N-TRON® 710FX2 compact, fully managed industrial Ethernet switch is housed in a rugged industrial metal enclosure and offers a powerful combination of eight 10/100BaseTX copper ports and two 100Base fiber ports. It is ideally suited for use in industrial and utility applications such as factory floor control networks, electric power substations, wind turbines, wastewater treatment facilities, intelligent traffic control and transportation applications, and any other application where high reliability, superior noise immunity, extreme ruggedness, and extended distance are required.

Remote Monitoring Options - Web browser and N-View OPC (OLE for process control) server software provides configuration and monitoring capability. N-View software easily combines with HMI software to monitor network traffic, alarms, and trends. SNMP is also available for switch link and status monitoring. Status LEDs are configurable to indicate power failure and N-Ring status.

N-Ring Technology - N-Ring technology provides expanded ring capacity, detailed fault diagnostics, and fast 30ms healing time. The ring manager validates the integrity of the ring using health check packets and quickly converts the ring to a linear topology within ~30ms when an error is detected. The health status of a ring comprised of all N-TRON fully managed switches may be monitored. A detailed ring map and fault location chart may be accessed by the ring manager's web browser or the OPC server. N-LinkTM allows the linking of two N-Rings. Up to 250 fully managed N-TRON switches are supported in an N-Ring topology.

Industrial Specifications - High MTBF, extended shock and vibration specifications, wide operating temperature range and redundant power inputs are standard features.

Ease of Use - The 10/100BaseTX ports are auto sensing and auto configuring. Each copper port is automatically negotiated for maximum speed and performance by default, but can also be hard coded through the user interface. A high-speed processor allows wire speed capability on all 10/100BaseTX ports simultaneously.



QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV

=== ISO 9001:2008 ===

+%\$: L&'GdYVJZWUhjcbg

Gk 1HW DfcdYfHYq

Number of MAC Addresses: 8000

Aging Time: Programmable

Latency Typical: 2.6 µs

Switching Method: Store-and-Forward

7 UgY'8]a Ybg]cbg

 Height:
 4.3"
 (10.8 cm)

 Width:
 2.4"
 (6.1 cm)

 Depth:
 4.6"
 (11.5 cm)

 Weight (max):
 1.4lbs
 (0.6 kg)

DIN-Rail Mount: 35mm

9 YWf JWU

Redundant Input Voltage: 10-49 VDC (Regulated)
Input Current (max): 415mA@24VDC
BTU/hr: 33.99@24VDC

N-TRON Power Supply: NTPS-24-1.3 (1.3A4 24V)

9bj]fcba YbtU

Operating Temperature: -40°C to 70°C Storage Temperature: -40°C to 85°C Operating Humidity: 5% to 95%

(Non Condensing)

Operating Altitude: 0 to 10,000 ft.

G\ cW_'UbX'J]VfUhjcb'flVi `_\ YUX'a ci bhYXL

Shock: 200g @ 10ms

Vibration/Seismic: 50g, 5-200Hz, Triaxial

FY]W]`lm

MTBF: - >2 Million Hours

:]VYf 'HfUbgWY]j Yf '7 \ UfUWNYf]gh]Wg'

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

BYlk cf_'A YX]U

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

7cbbYWcfg

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

100BaseFX: Two 100BaseFX Ports, ST or SC

FYWca a YbXYX'K]f]b['7 'YUfUbWY

Front: 4" (10.2 cm) Side: 1" (2.6 cm)

FY[i 'Urcfm5 ddfcj Ug

FCC: Title 47, Part 15, Subpart B, Class A;

ICES-003: Class A;

ANSI C63.4

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

GOST-R Certified, RoHS Compliant

UL/cUL: UL 508 and ANSI/ISA-12.12.01-2007 Class I, Div 2, Groups A, B, C, and D; T4

8 Yg][bYX'hc Wca d'mk]h .

IEEE 1613 for Electric Utility Substations NEMA TS1/TS2 for Traffic control

IEC-61850

7 cbhUWh≒bZcfa Uh]cb



REV 100617



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==== ISO 9001:2008 ====

710FX2 Industrial Ethernet Switch Ordering Information

710FX2-XX Eight 10/100BaseTX Ports, Two Multimode 100BaseFX Ports, ST or SC Style Fight 10/100BaseTX Ports, Two Singlemode 100BaseFX Ports, ST or SC Style Fight 10/100BaseTX Ports, Two Singlemode 100BaseFX Ports, ST or SC Style

NTCD128 Optional configuration card for backup / restore
NTPS-24-1.3 *N-TRON* Power Supply - (1.3 Amp @ 24VDC)
CPMA-1 Compact panel mount (factory installed option only)

URMK Universal Rack Mount Kit

Where: XX = ST or SC

YY = 15, 40, or 80 for Singlemode, Blank for Multimode

E = Singlemode



