# N-Tron® Series NT5008-FX2



# **Gigabit Managed Ethernet Switch**

THE NT5008-FX2 GIGABIT INDUSTRIAL SWITCH SETS A NEW STANDARD FOR PERFORMANCE, RELIABILITY, AND EASE OF USE. THE SWITCH FEATURES A MODERN, GRAPHICAL USER INTERFACE WITH A QUICK START WIZARD TO GUIDE USERS THROUGH SWITCH CONFIGURATION. A LOGICAL VIEW OF THE SWITCH SHOWS ACTIVE PORTS, TEMPERATURE, ALARM AND LED STATUS, ALONG WITH PORT TRAFFIC AND EVENT GAUGES IN A SINGLE EASY TO READ DASHBOARD. **FEATURES INCLUDE:** 



- ▲ Six 10/100/1000 RJ45 ports
- ▲ Two 100Base fiber ports with SC/ST connectors
- ▲ Redundant 10-49 VDC power inputs
- ▲ High shock and vibration tolerance
- N-Ring<sup>™</sup> auto-member and RSTP/MSTP network redundancy
- ▲ Password encryption, IEEE 802.1X, RADIUS, MAC filtering, syslog
- ▲ Advanced management and diagnostics features















## ▲ Ordering Guide

### **MAIN UNIT**

PART NUMBER	DESCRIPTION
NT-5008-FX2-SC00	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Multimode, 2 km, SC Style Connector)
NT-5008-FX2-SC15	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 15 km, SC Style Connector)
NT-5008-FX2-SC40	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 40 km, SC Style Connector)
NT-5008-FX2-SC80	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 80 km, SC Style Connector)
NT-5008-FX2-ST00	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Multimode, 2 km, ST Style Connector)
NT-5008-FX2-ST15	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 15 km, ST Style Connector)
NT-5008-FX2-ST40	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 40 km, ST Style Connector)
NT-5008-FX2-ST80	8-Port Gigabit Managed Industrial Ethernet Switch (6 10/100/1000BaseT RJ45 Ports, 2 100BaseFX, Singlemode, 80 km, ST Style Connector)

Model number may be followed by -CC indicating conformal coating.

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# ■ NT5008-FX2 Ordering Guide and Specifications

#### **ACCESSORIES**

PART NUMBER DESCRIPTION

NT-CPMA-03-00000 NT5000 Panel Mount Kit, Type A (Wide)

NTPS-24-1-3 DIN Rail Power Supply, 1.3 Amp @ 24 VDC

## ▲ Specifications

#### **HARDWARE**

Compact, space saving, hardened industrial design

Wide operating temperature

High shock and vibration tolerance

Shock: IEC 68-2-27: 200 g @ 10 ms Triaxial; non-operational;

panel mounted

Vibration: IEC 68-2-6: 15 g @ 5-200 Hz Triaxial; operational;

panel mounted

Reverse polarity protection

ESD and surge protection

Fast boot (traffic passes <20 seconds)

Configurable alarm contact

Configurable bi-color fault status LED

LED port status indicators

Jumbo frame support

Redundant power inputs (10-49 VDC)

Hardened industrial design

IEEE 802.3 compliance

Full wire speed communication

MDIX auto-sensing cable

Auto-sensing speed and flow control

Up to 12.4Gb/s maximum throughput

Store-and-forward technology

Number of MAC addresses: up to 4k

Latency (typical): < 1.8 μs

MTBF: 1.2M Hours

## **MANAGEMENT**

Modern, intuitive Web Interface

Configuration wizard

Graphical dashboard and logical view of the switch

Command Line Interface

Port control

IGMP v1/v2/v3 auto-configuration

SNMP v1/v2/v3

NTP

802.1Q tag VLAN and port VLAN

IEEE 802.1p QoS and port QoS

**DHCP** client

Text-based configuration file

File transfer: HTTP/HTTPS, TFTP, SNMP

#### **SECURITY**

SSH, SSL, HTTPS

**MAC Filtering** 

IEEE 802.1X with RADIUS remote server authentication Port/User lockout after failed authentication attempts

SNMPv3

Password encryption

#### DIAGNOSTIC

Port mirroring

Event log/Syslog

LLDP

Advanced cable diagnostics

#### **NETWORK REDUNDANCY**

RSTP/MSTP

Port trunking/LACP

N-Ring™ auto-member

#### **MIBs**

RFC 2674 VLAN MIB

RFC 2819 RMON (Group 1, 2, 3 & 9)

RFC 1213 MIB II

RFC 1215 TRAPS MIB

RFC 4188 Bridge MIB

RFC 4292 IP Forwarding Table MIB

RFC 4293 Management Information Base for the Internet Protocol (IP)

RFC 5519 Multicast Group Membership Discovery MIB

RFC 2863 Interface Group MIB using SMI v2

RFC 4133 Entity MIB version 3

RFC 3411 SNMP Management Frameworks

RFC 3414 User-based Security Model for SNMPv3

RFC 3415 View-based access Control Model for SNMP

IEEE 802.1AB LLDP-MIB

IEEE 802.1 MSTP MIB

# SOFTWARE TOOL TO MANAGE/SCHEDULE FIRMWARE UPDATES

N-View™ 2

## **CERTIFICATION & COMPLIANCE**

Product Safety: UL 61010 and C22.2 No. 61010 OrdLoc, UL 121201 and CSA C22.2 No. 213 Class I, Division 2 HazLoc, ATEX, IECEx and UKEx II 3 G Ex ec nC IIC T4 Gc, UL 20 ATEX 2645X, UL 22.0038X IECEx and UL22UKEX2346X

EMI/EMC: CFR 47, Part 15, Subpart B, Canada ICES-003, ANSI C63.4, EN 61000-6-2 and 4, IEC 61000-4-2, 3, 4, 5, 6 and 8

Shock & Vibration (panel mounted) - IEC 68-2-27: 200 g @ 10 ms Triaxial; non-operational, IEC 68-2-6: 15 g @ 5-200 Hz Triaxial; operational

Railway/Rolling Stock - EN 50155, EN 50121 and EN 61373

# ▲ NT5008-FX2 Dimensions and Specifications

Marine: ABS Type Approval for Shipboard Applications DNV (pending)

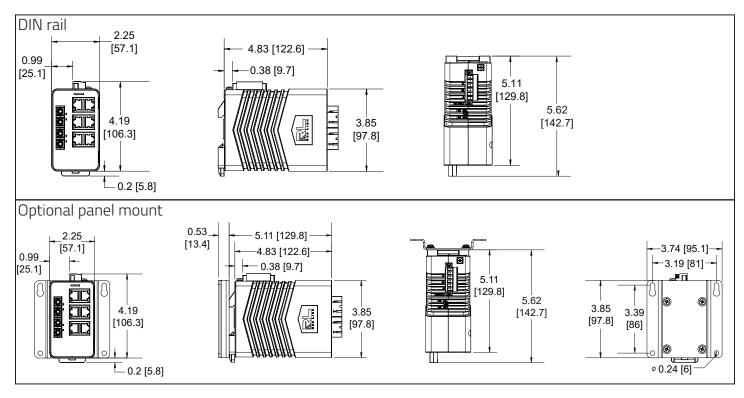
Designed to Comply With - IEEE 1613 for Electric Utility Substations and NEMA TS1/TS2 for Traffic Control Other - RoHS compliant

#### WARRANTY

3 years on design and manufacturing defects.

Specifications are subject to change. Visit www.redlion.net for more information.

## **⊿ Dimensions** In inches [mm]



NT5008-FX2 SPECIFICATIONS				
Weight	1.38 lbs. (0.62 kg)			
Input Voltage Range	10-49 VDC			
Steady Input Range	0.26 A @ 24 VDC			
BTU/hr	21.29			
Operating Temperature Range	-40 to 85 °C			
Storage Temperature Range	-40 to 85 °C			
Humidity (non-condensing)	10 to 95% RH			
Operating Altitude	0 to 10,000 ft.			

NETWORK MEDIA SPECIFICATIONS				
10BaseT	≥Cat3 Cable			
100BaseTX	≥Cat5 Cable			
1000BaseT	≥Cat5e Cable			
100BaseFX Multimode	50-62.5/125 μm			
100BaseFX Singlemode	7-10/125 μm			

CONNECTORS				
10/100/1000BaseT	Six (6) RJ45 copper ports			
100BaseFX	Two (2) SC or ST duplex fiber ports			

RECOMMENDED MINIMUM WIRING CLEARANCE					
Front	4" (101.6 mm)				
Тор	4" (101.6 mm)				

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## NT5008-FX2 Transceiver Characteristics

### 100 MB Fiber Transceiver Characteristics

Fiber Mode	MM	SM	SM	SM
Fiber Length*	2 km	15 km	40 km	80 km
TX Power Min.	-19 dBm	-15 dBm	-5 dBm	-5 dBm
RX Sensitivity Max.	-31 dBm	-34 dBm	-34 dBm	-34 dBm
Wavelength	1310 nm	1310 nm	1310 nm	1550 nm

<sup>\*</sup> Fiber Length distances represent typical performance. Link budgets should be evaluated based on specific application conditions.





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