

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[™] auto-member and RSTP/MSTP network redundancy
- Password encryption, IEEE 802.1X, RADIUS, MAC filtering, syslog
- ▲ Advanced management and diagnostics features

CUL)U LISTED E317425 





▲ 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.

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)

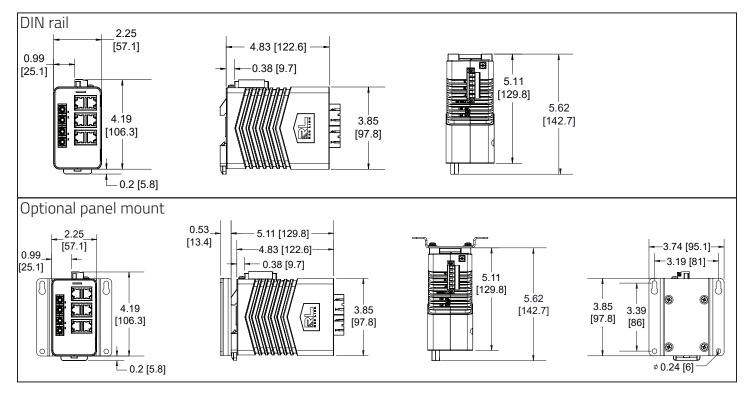
Designed to Comply With - IEEE 1613 for Electric Utility Substations and NEMA TS1/TS2 for Traffic Control Other – RoHS compliant

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)		

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

100 MB Fiber Transceiver Characteristics

* Fiber Length distances represent typical performance. Link budgets should be evaluated based on specific application conditions.



www.redlion.net

For over 50 years, Red Lion has strived to be THE Industrial Data Company[™]. The company empowers industrial organizations around the world to unlock the value of data by developing and manufacturing innovative solutions to access, connect and visualize their information. Red Lion products make it easy for companies to gain real-time data visibility that drives productivity. Red Lion is part of Spectris plc, the experts in providing insight through precision measurement. For more information, please visit www.redlion.net.

©2023 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron, N-View, N-Ring, and THE Industrial Data Company are trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.