N-Tron® Series NT116



Unmanaged Ethernet Switch

The compact N-Tron® NT116 unmanaged Industrial Ethernet switch is ideal for industrial applications that demand dependable performance under harsh conditions. The compact 16-port device offers exceptional reliability and performance for a range of mission-critical applications including data acquisition, Ethernet I/O, and process control. Delivered in a rugged industrial metal enclosure, the NT116 provides 16 high performance 10/100BaseTX copper ports with full wire speed communications—up to 3.2 Gb/s throughput—for robust network support. The unit boasts exceptional MTBF and extended tolerances to shock, vibration, temperature fluctuations and noise—common elements in factory floor control networks, utilities, wastewater treatment, wind turbines, rail car, intelligent traffic control and transportation applications. Features include:



- Sixteen 10/100BaseTX RJ45 ports
- Redundant 10–49 VDC power inputs
- High shock and vibration tolerance
- Slim, space-saving design
- -40°C to 85°C operating temperature
- IEEE 802.3 compliance
- ESD and surge protection diodes on all ports
- Store-and-forward technology
- Supports full/half duplex operation
- Full wire speed communications
- Up to 3.2 Gb/s maximum throughput















Ordering Guide

Main Unit

	Part Number	Description		
	NT-116-0000-0000	16-Port 10/100 Unmanaged Industrial Ethernet Switch (16 10/100BaseTX RJ45 Ports)		
Model number may be followed by -CC indicating conformal coating.				

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

NT116 Specifications

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 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 3.2 Gb/s maximum throughput

Store-and-forward technology

MTBF: 1.2M Hours

NT116 Specifications		
Weight	1.8 lbs. (0.82 kg)	
Input Voltage Range	10-49 VDC	
Steady Input Range	0.26 A @ 24 VDC	
BTU/hr	21.22	
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.	

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 Ex ec IIC T4 Gc, IECEX UL 23.0092X and UL 23 ATEX 3128X

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 Marine: ABS Type Approval for Shipboard Applications 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.

Network Media Specifications		
10BaseT	≥Cat3 Cable	
100BaseTX	≥Cat5 Cable	

Connectors		
10/10	DBaseTX	Sixteen (16) RJ45 copper ports

Recommended Minimum Wiring Clearance		
Front	2" (50.8 mm)	
Тор	2" (50.8 mm)	

NT116 Dimensions

Dimensions In inches [mm]



