

# NITE-RS

Unmanaged Industrial Ethernet Switch RJ45 Fast Ethernet



# Simple, reliable and space-saving networking in the control cabinet

- Flexible use with 24 VAC/VDC
- Minimal installation width 22.5 mm
- Temperature range -40 to +70°C
- Polarity protection

- IP30 metal housing
- Inrush current limitation
- Stable mounting on 35 mm DIN rail
- PROFINET suitable

# Unmanaged Industrial Ethernet Switch RJ45 Fast Ethernet



With an installation width of just 22.5 mm (5&8 Port) and 38 mm (16 Port), the NITE-RS switches impress with their extremely slim and high-quality metal housing. The narrow Industrial Ethernet switches for DIN rail mounting operate extremely energy efficient and reliable. The Plug&Play switches convince with their quick and easy commissioning and enable a cost-effective extension of existing or new network installations. Due to the wide temperature range of -40°C to +70°C, a 24 VAC/VDC power supply with polarity protection and inrush current limitation, the switches can be used in every application. Two frame forwarding variants (LLDP/PTCP) support all applications perfectly and the compatibility for PROFINET networks is given.

### General

Switch: IEEE802.3 Store and Forward; non-blocking wire speed

Auto-Negotiation, Auto-MDI-X, Auto-Polarity: Yes

Frame size: 2,048 Bytes

MAC table size: 2,000 addresses

Quality of Service: Yes - 4 priority queues

Energy Efficient Ethernet: No

Flow Control: No

PROFINET suitable: Yes

Port count (RJ45) MTBF (SN 29500, Mio. h)	<b>5</b> 2,783	<b>8</b> 2,088	<b>16</b> tbd
Frame Forwarding (ArtNo.)		xxxxx0	xxxxx1
LLDP, PTCP Delay 01:80:C2:00:00:0E		Forwarding	Blocking
RSTP BPDU 01:80:C2:00:00:00		Forwarding	Forwarding

#### **Power supply / electronics**

Nominal voltage: Vin 24 VAC / 24 VDC Permitted voltage range: 8 to 28 VAC / 9 to 36 VDC Permitted voltage range 16 ports: 12 to 28 VAC / 9 to 36 VDC Connection type: 3-pole pluggable, screw connector (+ - FE) Wire cross-section: 0.08 to 2.5 mm (AWG 28 to 13) Supply circuit: SELV DIN 60950 (circuit breaker 10 A) Inrush current limiter: Yes Input fuse: Yes, Interrupting rating 50 A @ 125 VAC / VDC Polarity protection: Yes Power failure bridging: 10 ms DIN 50155 (5 & 8 Ports) PCB Conformal Coating: No Protection category: III Isolation: 2.25 kVDC; Vin ⇔ Ethernet Ports | Vin ⇔ housing Port count (RJ45) 5 8 16 Power consumption (W) Idle | full load 0.4|0.9 0.4 1.15 1,9 | 2,4 Input current (mA)

# Mechanical properties

Inrush current (A)

Idle | full load

Housing material: Anodised aluminium, stainless steel Mounting: 35 mm DIN rail

IP Protection class (operation): IP30

Port count (RJ45)	5	8	16
Width (mm)	22.5	22.5	38
Height (mm)	103	145	145
Depth (mm)	77.4	77.4	77.4
Weight (g)	225	295	420

16 | 36

8

16 | 48

8

80 | 100

16

Note: We reserve the right to make technical changes to this document without prior notice. TERZ assumes no responsibility or liability for any errors or inaccuracies in this document. All rights to this document and its contents are reserved. Duplication, use of the content or announcement to third parties in any form is not permitted without written permission from TERZ. Copyright © 2019 TERZ Industrial Electronics GmbH. All rights reserved.

#### **Ethernet Interfaces**

IEEE Standards: 802.3 10BaseT, 802.3u 100BaseT(X) Isolation: 2.25 kVDC; Ethernet Port ⇔ housing | Port ⇔ Port Connection type: RJ45 Port Count | Speed: 5,8,16 Ports | 10/100 Mbit/s Cable length: 100 m (Twisted Pair, 0.14 mm<sup>2</sup> - 0.22 mm<sup>2</sup>, Cat 5)

# **EMC** and environmental specifications

Operating temperature: -40°C to +70°C Storage temperature: -40°C to +85°C Relative humidity (operation): 0%-95% (not condensing) Relative humidity (storage): 0%-95% (not condensing) Atmospheric pressure (operation): 2,000 m (795 hPa) EMC immunity: DIN EN - 50121-3-2, 61000-6-2, 55024 EMC radiated emission: DIN EN - 50121-3-2, 61000-6-4, 55032 Mechanical stability: DIN EN 61373 Fire protection: DIN EN 45545 (5 & 8 Ports)

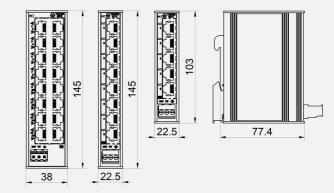
### Approvals and certifications

CE, DIN EN 60950-1

# Status and diagnostic indicators

**LED:** Power | Link/Activity per Port

# Drawing



Products			
Article	ArtNo.	Specification	
NITE-RS5-1100	211400	5xRJ45, FE, 24 V	
NITE-RS8-1100	211600	8xRJ45, FE, 24 V	
NITE-RS16-1100	211800	16xRJ45, FE, 24 V	
NITE-RS5-1101	211401	5xRJ45, FE, 24 V, LLDP Blocking	
NITE-RS8-1101	211601	8xRJ45, FE, 24 V, LLDP Blocking	
NITE-RS16-1101	211801	16xRJ45, FE, 24 V, LLDP Blocking	
Mounting accessories			

#### Adapter for different alignments and wall mounting

TERZ Industrial Electronics GmbH Gewerbepark 5a D-49143 Bissendorf Tel. +495402 60 80 970 Fax. +495402 60 80 979

080819 TZDS21140XEA\_NITE-RS www.terz-ie.com info@terz-ie.com

