

# NITE-RS

**Unmanaged Industrial Ethernet Switch RJ45**  
Full Gigabit Ethernet



## Simple and space-saving networking in the control cabinet with high bandwidth

- ▶ Flexible use with 24 VAC/VDC
- ▶ Minimal installation width 22.5 mm
- ▶ Temperature range -40 to +70°C
- ▶ Polarity protection
- ▶ 9 kB Jumbo Frames Support
- ▶ Inrush current limitation
- ▶ Stable mounting on 35mm DIN rail
- ▶ PROFINET suitable

# Unmanaged Industrial Ethernet Switch RJ45

## Full Gigabit Ethernet



With an installation width of just 22.5 mm, 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:** 9,216 Bytes Jumbo Frames

**MAC table size:** 2,000 addresses

**Quality of Service:** Yes – 8 priority queues

**Energy Efficient Ethernet:** No

**Flow Control:** No

**PROFINET suitable:** Yes

<b>Port count (RJ45)</b>	<b>5</b>	<b>8</b>
<b>MTBF (SN 29500, Mio. h)</b>	1,829	1,345
<b>Frame Forwarding (Art.-No.)</b>	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 50/60 Hz / 24 VDC

**Permitted voltage range:** 12 to 28 VAC / 9 to 36 VDC

**Connection type:** 3-pole pluggable, screw connector (+ - FE)

**Wire cross-section:** 0.75 to 2.5 mm<sup>2</sup> (AWG 20 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

**PCB Conformal Coating:** No

**Protection category:** III

**Isolation:** 2.25 kVDC; Vin ↔ Ethernet Ports | Vin ↔ housing

<b>Port count (RJ45)</b>		<b>5</b>	<b>8</b>
<b>Power usage (W)</b>	@24VDC	1,5   3,2	1,5   3,5
	Min   Max		
<b>Input current (mA)</b>	@24VDC	60   130	60   145
	Min   Max	@24VAC	120   290
<b>Inrush current (A)</b>		16	16

### Mechanical properties

**Housing material:** Anodised aluminium, stainless steel

**Mounting:** 35 mm DIN rail

**IP Protection class (operation):** IP30 (not part of the UL approval)

<b>Port count (RJ45)</b>	<b>5</b>	<b>8</b>
<b>Width (mm)</b>	22.5	22.5
<b>Height (mm)</b>	103	145
<b>Depth (mm)</b>	77.4	77.4
<b>Weight (g)</b>	225	295

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 © 2020 TERZ Industrial Electronics GmbH. All rights reserved.

### Ethernet Interfaces

**IEEE Standards:** 802.3 10Base-T, 100Base-TX, 1000Base-T

**Isolation:** 2.25 kVDC; Ethernet Port ↔ housing | Port ↔ Port

**Connection type:** RJ45

**Port Count | Speed:** 5,8 Ports | 10/100/1000 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

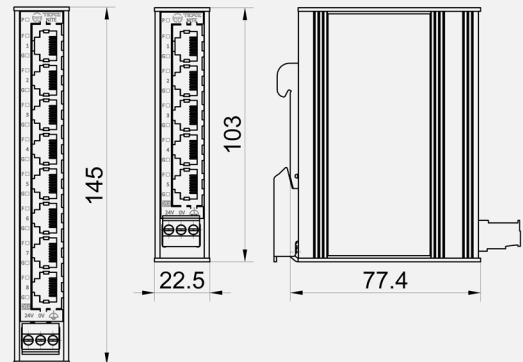
### Approvals and certifications

CE, DIN EN 60950-1

### Status and diagnostic indicators

**LED:** Link/Activity/Speed per Port

### Drawing



### Products

Article	Art.-No.	Specification
NITE-RS5-2100	221400	5xRJ45, GE, 24 V
NITE-RS8-2100	221600	8xRJ45, GE, 24 V
NITE-RS5-2101	221401	5xRJ45, GE, 24 V, LLDP Blocking
NITE-RS8-2101	221601	8xRJ45, GE, 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

041120  
TZDS22140XEA\_NITE-RS  
www.terz-ie.com  
info@terz-ie.com

