

# 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:** 1,522 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)	5	8	16
MTBF (SN 29500, Mio. h)	2,783	2,088	1,109
Frame Forwarding (Art.-No.)	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:** 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:** 0.75 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

**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 usage (W) Min   Max	@24VDC	0.4   0.9	0.4   1.2	1.9   2.4
	@24VAC	0.5   0.98	0.5   1.3	2.00   2.5
Input current (mA) Min   Max	@24VDC	16   36	16   48	80   100
	@24VAC	32   75	32   96	130   180
Inrush current (A)				
I <sub>peak</sub> (DC=40 μs, cold start)		8	8	16

### Mechanical properties

**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

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### 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

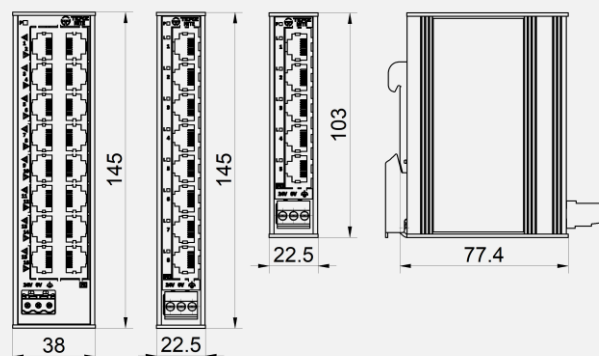
CE, DIN EN 60950-1, Listed UL 61010 (US/CA)

E-Mark E1/R10 (5 & 8 Ports)

### Status and diagnostic indicators

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

### Drawing



### Products

Article	Art.-No.	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

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