

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

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)	5	8	16
MTBF (SN 29500, Mio. h)	2,783	2,088	tbd
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 mm² (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)	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 mm² - 0.22 mm², 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

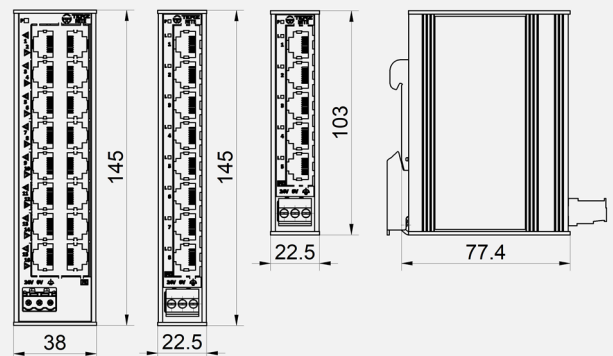
CE, DIN EN 60950-1, Listed UL 61010 (US/CA)

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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