

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

Port count (RJ45)	5	8
MTBF (SN 29500, Mio. h)	1,829	1,345

Frame Forwarding (Art.-No.)	xxxxx0	xxxxx1
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LLDP, PTCP Delay 01:80:C2:00:00:0E	Forwarding	Blocking
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RSTP BPDU 01:80:C2:00:00:00	Forwarding	Forwarding
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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 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

PCB Conformal Coating: No

Protection category: III

Isolation: 2.25 kVDC; Vin ⇔ Ethernet Ports | Vin ⇔ housing

Port count (RJ45)		5	8
Power usage (W)	@24VDC	1,5 3,2	1,5 3,5
	Min Max		
	@24VAC	1,8 3,9	1,8 4,2
Input current (mA)	@24VDC	60 130	60 145
	Min Max		
	@24VAC	120 260	120 290
Inrush current (A)			
I _{peak} (DC=40 µs, cold start)		16	16

Mechanical properties

Housing material: Anodised aluminium, stainless steel

Mounting: 35 mm DIN rail

IP Protection class (operation): IP30

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

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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 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

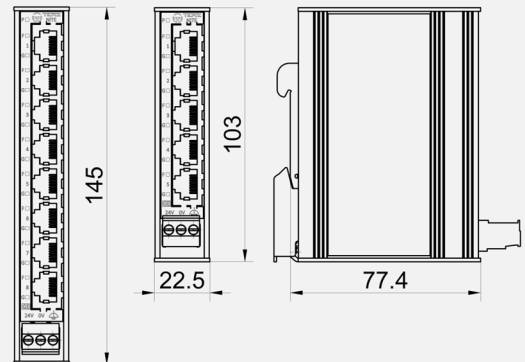
Approvals and certifications

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

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

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