![TERZ Industrial Electronics logo]

NITE-RF

Unmanaged Industrial Ethernet Switch RJ45
Fast Ethernet

Reliable, space-saving networking in the control cabinet with only 32.5 mm installation depth

- ▶ Flexible use with 24 VAC/VDC
- ▶ Minimal installation depth 32.5 mm
- ▶ Temperature range -40 to +70°C
- ▶ Polarity protection

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

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Fast Ethernet

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With an installation depth of only 32.5 mm and a height of 105 mm, the Industrial Ethernet switches impress with their extremely flat and high-quality aluminium housing. The ultra-compact switches can be used in any control cabinet thanks to the 24 VAC/VDC power supply with inrush current limiting and reverse polarity protection. Due to the reduced footprint and the arrangement of all connections on the front, switch cabinets and cabling can be optimized to reduce the costs. The high-quality DIN rail holder made of metal ensures a firm and secure hold on the DIN rail. Like all TERZ Industrial Ethernet switches, the flat NITE-RF are available in two frame forwarding variants and fully suitable for PROFINET applications.

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)	2,709	2,005	1,109

Frame Forwarding (Art.-No.)		xxxxx**0**	xxxxx**1**
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 5,8 ports: 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

PCB Conformal Coating: No

Protection category: III

Isolation: 0.75 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 | 167
Inrush current (A)		8 A I_{peak} (DC=40 µs, cold start)		

Mechanical properties

Housing material: Anodised aluminium, stainless steel

Mounting: 35mm DIN rail

IP Protection class (operation)**:** IP30

Port count (RJ45)	5	8	16
Width (mm)	42	58	110
Height (mm)	105	105	105
Depth (mm)	32.5	32.5	32.5
Weight (g)	205	255	405

Ethernet Interfaces

IEEE Standards: 802.3 10BaseT, 802.3u 100BaseT(X)

Isolation: 0.75 kVDC; Ethernet Port ⇔ housing | Port ⇔ Port

Connection type: RJ45

Port Count | Speed: 5,8 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 - 61000-6-2, 55024

EMC radiated emission: DIN EN 61000-6-4, 55032
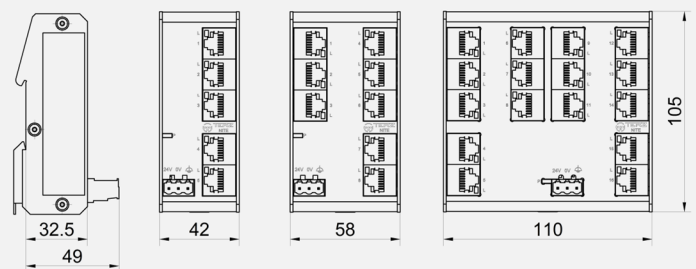
Mechanical stability: DIN EN 61373

Approvals and certifications

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

Status and diagnostic indicators

LED: Power | Link/Activity per Port

Drawing

Products

Article	Art.-No.	Specification
NITE-RF5-1100	111400	5xRJ45, IP30, FE, 24 V
NITE-RF8-1100	111600	8xRJ45, IP30, FE, 24 V
NITE-RF16-1100	111800	16xRJ45, IP30, FE, 24 V
NITE-RF5-1101	111401	5xRJ45, IP30, FE, 24 V, LLDP Blocking
NITE-RF8-1101	111601	8xRJ45, IP30, FE, 24 V, LLDP Blocking
NITE-RF16-1101	111801	16xRJ45, IP30, FE, 24 V, LLDP Blocking

Mounting accessories

Adapter for different alignments and wall mounting