# NITE-RW

## Unmanaged Industrial Ethernet Switch RJ45
## Fast Ethernet



## Reliable, space-saving networking in the control cabinet with only 28 mm installation depth

- ▶ Flexible use with 24 VAC/VDC
- ▶ Minimal installation depth 28 mm
- ▶ Temperature range -40 to +70°C
- ▶ Polarity protection

- ▶ IP30 metal housing
- ▶ Inrush current limitation
- ▶ Stable wall mounting
- ▶ PROFINET suitable

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## Fast Ethernet

**TERZ** Industrial Electronics

With an installation depth of only 28 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 wall mounting brackets made of metal, ensure a firm and secure hold. Like all TERZ Industrial Ethernet switches, the flat NITE-RW 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:** 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) | 2,709 | 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 | 8 | 8 |

## Mechanical properties

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

**Mounting:** M4 hole for wall mounting

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

| Port count (RJ45) | **5** | **8** | **16** |
|---|---|---|---|
| **Width** (mm) | 69 | 85 | 137 |
| **Height** (mm) | 105 | 105 | 105 |
| **Depth** (mm) | 28 | 28 | 28 |
| **Weight** (g) | 190 | 240 | 380 |

## 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

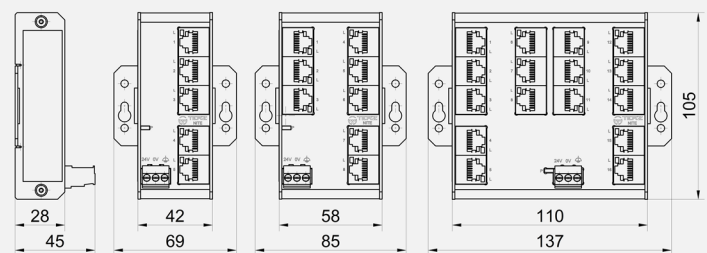**Mechanical stability:** DIN EN 61373

## 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-RW5-1190 | 111490 | 5xRJ45, IP30, FE, 24 V |
| NITE-RW8-1190 | 111690 | 8xRJ45, IP30, FE, 24 V |
| NITE-RW16-1190 | 111890 | 16xRJ45, IP30, FE, 24 V |
| NITE-RW5-1191 | 111491 | 5xRJ45, IP30, FE, 24 V, LLDP Blocking |
| NITE-RW8-1191 | 111691 | 8xRJ45, IP30, FE, 24 V, LLDP Blocking |
| NITE-RW16-1191 | 111891 | 16xRJ45, IP30, FE, 24 V, LLDP Blocking |