

# ZERO-R5

**Unmanaged Industrial Ethernet Switch RJ45**  
Fast Ethernet



**Reliable, space-saving networking in the control cabinet with only 17.5 installation width**

- ▶ Flexible use with 6-36 VDC
- ▶ Minimal installation width 17.5 mm
- ▶ Temperature range -40 to +70°C
- ▶ Polarity protection
- ▶ IP30 metal housing
- ▶ Low power consumption
- ▶ Stable mounting on 35 mm DIN rail
- ▶ PROFINET suitable

# Unmanaged Industrial Ethernet Switch RJ45

## Fast Ethernet



The ZERO-RS switches are highly optimized and cost-effective unmanaged Industrial Ethernet Switches, specifically designed for harsh industrial environments. With 5x and 8x RJ45 ports supporting Fast Ethernet (10/100 Mbit/s), they provide reliable network connectivity. Thanks to a rated voltage of 24 VDC (reverse polarity protected) and a voltage range of 6-36 VDC, they are extremely versatile. Their temperature range of -40 to 70°C and IP30 protection rating make them highly resilient. The housing, made of anodized aluminum/stainless steel, allows for space-saving and reliable mounting with a minimal installation width of only 17.5 mm. With features such as Auto-Negotiation, Auto-MDI-X, Auto-Polarity, and PROFINET compatibility, these switches are the ideal solution for demanding industrial network 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:** Yes  
**PROFINET suitable:** Yes (LLDP, PTP Delay 01:80:C2:00:00:0E Blocking)

Port count (RJ45)	5	8
MTBF (SN 29500, Mio. h)	tbd	tbd

### Power supply / electronics

**Nominal voltage:** Vin 24 VDC  
**Permitted voltage range:** 6 to 36 VDC  
**Connection type:** 3-pole pluggable, screw connector (+ - FE)  
**Wire cross-section:** 0.2 to 1.5 mm<sup>2</sup> (AWG 24 to 16)  
**Supply circuit:** SELV DIN 60950 (circuit breaker 10 A)  
**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
Power usage (W)	@24VDC	0.5   1.0	0.5   1.4
	Min   Max		
Input current (mA) Min   Max	@24VDC	20   45	20   60
	@6VDC	85   165	85   240

### Mechanical properties

**Housing material:** Anodised aluminium, stainless steel  
**Mounting:** 35mm DIN rail  
**IP Protection class (operation):** IP30

Port count (RJ45)	5	8
Width (mm)	17.5	17.5
Height (mm)	89	140
Depth (mm)	66	66
Weight (g)	145	210

### 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 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 61000-6-2  
**EMC radiated emission:** DIN EN 61000-6-4  
**Mechanical stability:** DIN EN 61373

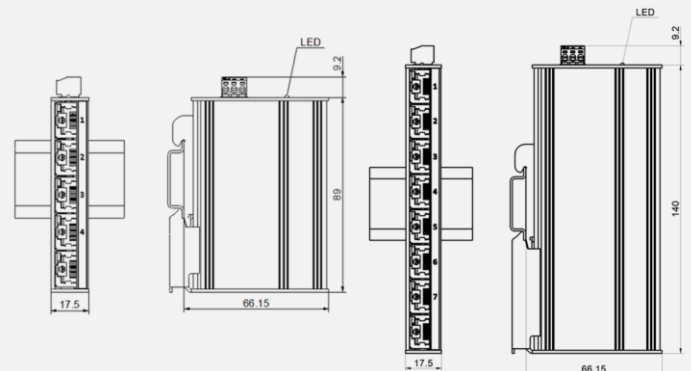
### Approvals and certifications

CE, Listed UL 61010 (US/CA)

### Status and diagnostic indicators

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

### Drawing



### Products

Article	Art.-No.	Specification
ZERO-RS5-1401	214401	5xRJ45, IP30, FE
ZERO-RS8-1401	214601	8xRJ45, IP30, FE

