

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 9-36 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 mm² (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 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
EMC radiated emission: DIN EN 61000-6-4
Mechanical stability: DIN EN 61373

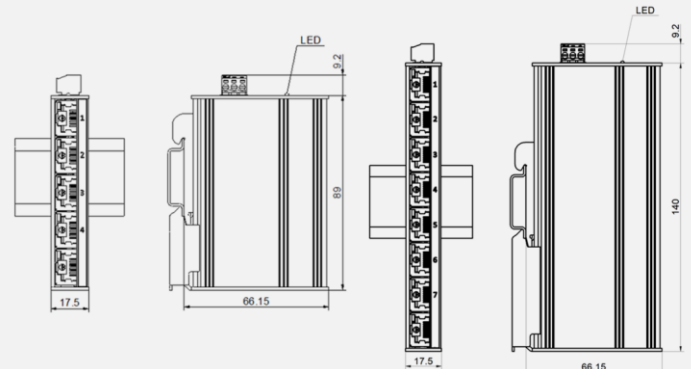
Approvals and certifications

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

