

T1-XS SPE

Unmanaged Industrial Ethernet Switches M12 IP65/67
Single Pair Ethernet



Data transfer via a Twisted single-pair cable with SPE

- ▶ 24 VDC Power Supply
- ▶ Ultra-compact, ruggedized design
- ▶ Temperature range -40 to +70°C
- ▶ IP65/67 metal housing
- ▶ IEEE 802.3bw (100Base-T1)
- ▶ 4x D-coded Master Ports
- ▶ 1x X-coded Gigabit Uplink Port
- ▶ Polarity protection

The T1-XS41 is an ultra-compact SPE switch for installation directly in the field. By using contacts 1 and 3 of the standard D-coded connector, you can quickly and easily save costs and space in cabling. An unshielded twisted single-pair cable is sufficient for data transmission up to a length of 15m. Larger cable lengths and protection against EMC interference can be achieved with shielded cables. The data collected from the SPE ports is transmitted with gigabit speed via an X-coded M12 standard Ethernet port.

General

Switch: IEEE802.3 Store and Forward

Port count (X-cod. + D-cod.) **4+1**

MTBF (SN 29500, Mio. h) tbd

Power supply / electronics

Nominal voltage (VDC): Vin 24

Voltage range (VDC): 9 bis 60

Connect. type: Vin M12 A-cod. (Pin1+|Pin3-) | M4 screw (FE)

Supply circuit: SELV DIN 60950 (circuit breaker 10 A)

Inrush current limiter: No

Input fuse: Yes, Interrupting rating 50 A @ 125 VAC/VDC

Polarity protection: Yes

PCB Conformal Coating: Yes

Protection category: III

Port count (X-cod. + D-cod.) **4+1**

Power consumption (W)

Idle | full load 1,7 | 2,1

Input current (mA)

Idle | full load 75 | 85

Inrush current (A) tbd

Mechanical properties

Housing material: Nickel-plated aluminium, stainless steel

Mounting: M6 hole for wall mounting, round head screw

IP Protection class (operation): IP65/67

Port count (M12) **4+1**

Width (mm) 65

Height (mm) 135

Depth (mm) 29,8

Weight (g) 370

Ethernet interface 1

IEEE Standards: 802.3 10BaseT, 100BaseT(X), 1000BaseT

Connection type: M12 X-coded

Port count | Speed: 1 | 10/100/1000 Mbit/s

Cable length: 100 m (Twisted Pair, 0,14 mm² - 0,22 mm², Cat 5)

Ethernet interface 2

IEEE Standards: IEEE 802.3bw 100Base-T1

Connection type: M12 D-coded

Port count | Speed: 4 | 100 Mbit/s

Pin assignment: TRX+ = PIN 1; TRX- = PIN 3

T1 Port Mode: Master

Cable length: 15 m (Twisted Pair)

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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

EMC radiated emission: DIN EN - 50121-3-2, 61000-6-4

Mechanical stability: DIN EN 61373

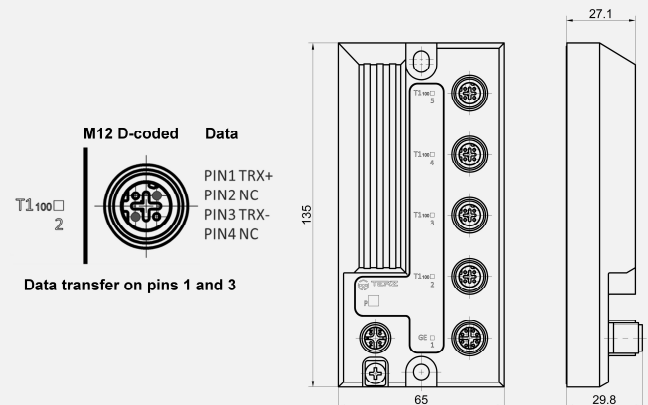
Approvals and certifications

CE

Status and diagnostic indicators

LED: Power | Link/Activity per Port

Drawing



Products

Article	Art.-No.	Specification
T1-XS41-9100	4914100	4+1, M12, SPE Master, 24 V

Application example

