

NITE-TX1XS

Unmanaged Industrial Ethernet Switches M12 IP65/67
Fast Ethernet, Single Pair Ethernet & Gigabit Ethernet



Cross-Technology: Cabinet-free networking with Standard- and Single Pair Ethernet

- ▶ Flexible use with 24 VDC
- ▶ Ultra-compact, ruggedized design
- ▶ Temperature range -40 to +70°C
- ▶ Polarity protection
- ▶ IEEE 802.3bw (100Base-T1)
- ▶ 8x D-coded T1|TX Auto-Detection
- ▶ DIN EN 50155 rail compliant
- ▶ Gigabit Uplink Ports

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The NITE-TX1XS82 is a Cross-Technology Switch that combines two Ethernet technologies on eight D-coded M12 ports: Standard Ethernet and Single Pair Ethernet. These T1|TX Data-Hybrid ports allow for the flexible networking of all Ethernet participants. Through the T1|TX Auto-Detection mode, Standard Ethernet and Single Pair Ethernet devices can be connected, regardless of whether they are MASTER or SLAVE devices. The switch features two X-coded M12 Gigabit ports through which data is forwarded with high bandwidth. One of the two uplink ports provides a bandwidth of 2.5 Gbit/s according to the IEEE 2.5GBase-T standard. The Plug&Play switches enable reliable Ethernet communication directly in the application, thus saving space in the control cabinet and reducing wiring effort.

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
Energy Efficient Ethernet: No
Flow Control: Yes
PROFINET suitable: Yes

Port count (X-cod. + D-cod.)	2+8
MTBF (SN 29500, Mio. h)	2.223

Frame Forwarding (Art.-No.)	xxxxx0
LLDP, PTCP Delay 01:80:C2:00:00:0E	Forwarding
RSTP BPDU 01:80:C2:00:00:00	Forwarding

Power supply / electronics

Nominal voltage: Vin 24 VDC
Permitted voltage range: 9 to 36 VDC
Connection type: Vin M12 A-cod. (Pin1,2+|Pin3,4-) | M4 (FE)
Supply circuit: SELV DIN 60950 (circuit breaker 10 A)
Redundant power supply: No
Inrush current limiter: No
Input fuse: Yes, Interrupting rating 50 A @ 125 VAC/VDC
Polarity protection: Yes
Power failure bridging: 5 ms
PCB Conformal Coating: Yes
Protection category: III
Isolation: 1.5 kVDC Vin ↔ Ethernet Ports | 2 kVDC Vin ↔ housing

Port count (X-cod. + D-cod.)	2+8
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Power consumption (W)	
Idle full load	0,72 2,9

Input current (mA)	
Idle full load	30 120

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)	2+8
Width (mm)	65
Height (mm)	180
Depth (mm)	29,8
Weight (g)	470

Ethernet interface 1 (T1|TX Auto-Detection)

IEEE Standards: 802.3 10BaseT, 100BaseT(x)
Isolation: 1 kVDC Eth. Port ↔ housing | 2 kVDC Port ↔ Port
Connection type: M12 D-coded
Port count | Speed: 8 | 10/100 Mbit/s TX & 100 Mbit/s T1
Cable length: TX 100 m (Twisted Pair, 0,14 mm² - 0,22 mm², Cat 5)
 T1 15+ m (Twisted Pair)

Ethernet Interfaces 2

IEEE Standards: 802.3 100BaseT(X), 1000BaseT, 2.5BaseT
Isolation: 1 kVDC Eth. Port ↔ housing | 2 kVDC Port ↔ Port
Connection type: M12 X-coded
Ports | Speed: 1 | 100/1000 Mbit/s + 1 | 100/1000/2500 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 - 50121-3-2, 61000-6-2, 55024
EMC radiated emission: DIN EN - 50121-3-2, 61000-6-4, 55032
Mechanical stability: DIN EN 61373
Fire protection: DIN EN 45545

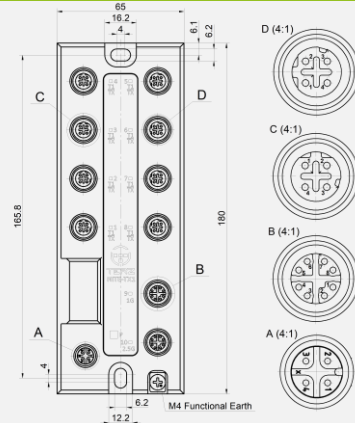
Approvals and certifications

CE, DIN EN 50155, DIN EN 60950-1, ITxPT

Status and diagnostic indicators

LED: Power | Link/Activity/Speed per Port

Drawing



Products

Article	Art.-No.	Specification
NITE-TX1XS82-3100	4314200	8xM12 FE+2xM12 GE

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