

SEMPER-XSE

Easy Web Managed Industrial Ethernet Switches M12 IP65/67
 Fast & Gigabit Ethernet & Single Pair Ethernet

DHCP Client
 QoS
 IP Settings
 MAC Address Table
 Configuration
 SAVE/LOAD
 User Management
 Port Settings
 IGMP Snooping + Querier
 Webinterface
 Network
 Bandwidth Control
 Single Pair Ethernet
 Port Statistics
 Port Mirroring
 Firmware Update
 Factory Reset



Cabinet-free networking directly in the field: Easy-Web-Managed with Gigabit-Uplink-Ports

- ▶ Industrial Easy-Web-Managed
- ▶ Flexible use with 24 VDC
- ▶ Ultra-compact, ruggedized design
- ▶ Temperature range -40 to +70°C
- ▶ IP65/67 metal housing
- ▶ M12 Gigabit Ethernet Port
- ▶ DIN EN 50155 rail compliant
- ▶ PROFINET suitable

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 enable the flexible networking of all Ethernet devices. Thanks to the T1|TX auto-detection mode, both standard Ethernet and Single Pair Ethernet devices can be connected, regardless of whether they are MASTER or SLAVE devices. The switch is equipped with two X-coded M12 Gigabit ports that provide high-bandwidth data transmission. One of the two uplink ports offers a bandwidth of 2.5 Gbit/s according to the IEEE 2.5GBase-T standard. The extensive management features include VLAN, QoS, IGMP snooping, as well as diagnostic and statistical functions to optimally manage your network. Excellent EMC performance and fire protection in accordance with DIN EN 45545 make the NITE-XS Ethernet switches fully rail-compliant and meet the requirements of DIN EN 50155.

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 – 8 priority queues
Energy Efficient Ethernet: Yes, configurable
Flow Control: Yes, configurable
PROFINET suitable: Yes, configurable

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

Power supply / electronics

Nominal voltage: Vin 24 VDC
Permitted voltage range: 9 to 36 VDC
Connection type: Vin M12 A-cod. (Pin1+|Pin2-) | 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 DIN 50155
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
Power consumption (W)	0,72 2,9
Idle full load	
Input current (mA)	30 120
Idle full load	0,72 2,9

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

Management features

Configuration via Web-Interface:
 Device Information, IP Settings, DHCP Client, Port Settings, VLAN QoS, IGMP Snooping, Port Mirroring, Bandwidth Control, MAC Address Table, Port Statistics, Configuration SAVE/LOAD, Firmware Update

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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

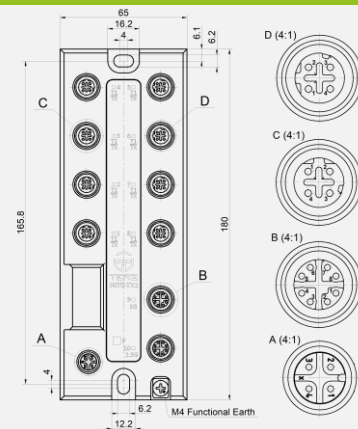
Approvals and certifications

CE, DIN EN 50155, DIN EN 60950-1

Status and diagnostic indicators

LED: Power | Link/Activity/Speed per Port

Drawing



Products

Article	Art.-No.	Specification
SEMPER-TX1XSE82-6100	4616200	4xM12 FE+1xM12 GE, Managed

