PHŒNIX CONTACT

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

PoE+ Ethernet switch, 8 Ethernet ports in M12 format, automatic detection of the data transmission speed of 10/100/1000 Mbps, jumbo frames up to 9600 bytes, coupling of network segments with different transmission speeds, autocrossing function, degree of protection IP67

Product Description

The Gigabit Power over Ethernet switch, which is suitable for industrial applications, enables both energy and data to be transmitted via an Ethernet cable according to IEEE 802.3at/802.3af. Up to 30 W feed power per port is possible. The device is a compact switch in robust IP67 metal housing. It has eight 8-pos. M12 Ethernet connectors, which enable PoE/PoE+ devices to be supplied and operation with speeds of 10/100/1000 Mbps. As it supports jumbo frames up to 9720 bytes, the switch is ideal for networking cameras. A total power of 200 W is available for supplying up to eight PoE/PoE+ devices. The switch generates the required 54 V DC for Power over Ethernet according to IEEE 802.3at/802.3af from the 24 V module supply for the connected termination devices.

Your advantages

☑ Robust IP67 housing

☑ Easy panel mounting

☑ PoE + supply to 8 ports

☑ Gigabit support

☑ Jumbo frames with up to 9720 bytes

☑ Metal housing

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 004181
GTIN	4055626004181

Technical data

Dimensions

Width	176 mm
Height	112 mm
Depth	100 mm

Ambient conditions

PHŒNIX
CONTACT

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Technical data

Ambient conditions

Degree of protection	IP65
	IP66
	IP67
Ambient temperature (operation)	-40 °C ... 70 °C (non-condensing)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 %
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	86 kPa ... 108 kPa (2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)

Interfaces

Interface	Ethernet (PoE)
No. of ports	8 (RJ45 POE ports)
Connection method	M12 connector, 8-pos.
Note on the connection method	X-coded
Transmission physics	Copper
Transmission speed	10/100/1000 Mbps
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
Interface	Signal contact
Connection method	M12 connector, (A-coded)

Function

Basic functions	Store-and-forward switch, 10/100/1000 Mbps, auto negotiation, complies with standard IEEE 802.3, 4 priority classes according to IEEE 802.1p, PoE according to IEEE 802.3at/802.3af, jumbo frames up to 9720 bytes
Additional functions	Autonegotiation
PROFINET conformance class	Conformance-Class A
Status and diagnostic indicators	LEDs: US1, US2 (power supply), Fail (alarm contact), 3 LEDs per Ethernet port (Link, Activity, and PoE Status), and PoE performance
Signal contact control voltage	24 V DC (typical)
Signal contact control current	100 mA (24 V DC)

Network expansion parameters

Cascading depth	Network, linear, and star structure: any
Maximum conductor length (twisted pair)	100 m

Supply voltage

Supply voltage	24 V DC (M12 connector)
Residual ripple	3.6 V_{PP}
Supply voltage range	18.7 V DC ... 30.5 V DC
Typical current consumption	300 mA (at U_S = 24 V DC)
Max. current consumption	12 A (Maximum, nominal load)

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Technical data

General

Mounting type	Wall mounting
Type AX	Stand-alone
Net weight	2300 g
Housing material	Zinc die-cast, surface bronzed and nickel-plated
Note	NOTE: Meet noise immunity requirements Connect FE using a mounting screw when mounting on a conductive surface. When mounting on a non-conductive surface, FE is connected using the mounting screw via a cable lug.
MTTF	208.85 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	93.43 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	9.98 Years (SN 29500 standard, temperature 70°C, operating cycle 100%)

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	10g, 16 ms, 1000 shocks, in all space directions
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	30g, half-sine shock pulse
Noise emission	EN 55022 / Class B
Noise immunity	EN 61000-4-2
Free from substances that could impair the application of coating	Yes

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Classifications

eCl@ss

eCl@ss 10.0.1	19170401
eCl@ss 11.0	19170401
eCl@ss 5.0	19030100
eCl@ss 5.1	19030100
eCl@ss 6.0	19170100
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Classifications

ETIM

ETIM 4.0	EC000734
ETIM 5.0	EC000734
ETIM 6.0	EC000734
ETIM 7.0	EC000734

UNSPSC

UNSPSC 13.2	43222612
UNSPSC 18.0	43222612
UNSPSC 19.0	43222612
UNSPSC 20.0	43222612
UNSPSC 21.0	43222612

Accessories

Accessories

Circular connector (cable-side)

Data connector - VS-08-M12MS-10G-P SCO - 1417430

Data connector, Ethernet CAT6$_A$ (10 Gbps), 8-position, shielded, Plug straight M12 SPEEDCON, Coding: X, Piercecon®, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Power connectors - SACC-M12FST-3PECON-PG11-M - 1404644

Power connectors, Power, 4-position, unshielded, Socket straight M12, Coding: T, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm ... 10 mm, For direct current up to 12 A/63 V

Data cable preassembled

Network cable - NBC-M12MSX/ 1,0-94F/M12MSX - 1407483

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight M12 / IP67, coding: X, cable length: 1 m

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Accessories

Network cable - NBC-M12MSX/ 2,0-94F/M12MSX - 1407484

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight M12 / IP67, coding: X, cable length: 2 m

Network cable - NBC-M12MSX/ 5,0-94F/M12MSX - 1407485

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight M12 / IP67, coding: X, cable length: 5 m

Network cable - NBC-M12MSX-M12MSX-10G/.../... - 1408644

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, Variable cable type, shielded, Plug straight M12 SPEEDCON / IP67, coding: X, on Plug straight M12 SPEEDCON / IP67, coding: X, cable length: Free input (0.2 ... 40.0 m)

Network cable - NBC-M12MSX/ 1,0-94F/R4AC - 1407471

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight RJ45 / IP20, coding: X, cable length: 1 m

Network cable - NBC-M12MSX/ 2,0-94F/R4AC - 1407472

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight RJ45 / IP20, cable length: 2 m

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Accessories

Network cable - NBC-M12MSX/ 5,0-94F/R4AC - 1407473

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on Plug straight RJ45 / IP20, cable length: 5 m

Network cable - NBC-M12MSX-R4AC-10G/.../... - 1408647

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, Variable cable type, shielded, Plug straight M12 SPEEDCON / IP67, coding: X, on Plug straight RJ45 / IP20, cable length: Free input (0.2 ... 40.0 m)

Network cable - NBC-M12MSX/ 1,0-94F - 1407467

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on free cable end, coding: X, cable length: 1 m

Network cable - NBC-M12MSX/ 2,0-94F - 1407468

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on free cable end, coding: X, cable length: 2 m

Network cable - NBC-M12MSX/ 5,0-94F - 1407469

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight M12 / IP67, coding: X, on free cable end, coding: X, cable length: 5 m

Industrial Ethernet Switch - FL SWITCH 1708 M12 POE - 2701883

Accessories

Network cable - NBC-M12MSX-10G/.../... - 1408648

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, Variable cable type, shielded, Plug straight M12 SPEEDCON / IP67, coding: X, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Network cable - NBC-M12MSX-R4RC-10G/.../... - 1408646

Network cable, Ethernet CAT6$_A$ (10 Gbps), CC-Link IE CAT6$_A$ (10 Gbps), 8-position, Variable cable type, shielded, Plug straight M12 SPEEDCON / IP67, coding: X, on Plug straight RJ45 Push Pull / IP67, cable length: Free input (0.2 ... 40.0 m)

Plug for cable screw gland

Screw plug - PROT-M12 - 1680539

An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

Protective cap

Sealing cap - PROT-M12 FS - 1560251

M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field