

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

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>)



Unmanaged Switch 1000, 8 M12 ports 10/100/1000 Mbps, degree of protection: IP65/IP66/IP67

Your advantages

- ✓ QoS-prioritized (Quality of Service) messages
- ✓ Jumbo frame support (frame size up to 9216 bytes/frame)
- ✓ Local diagnostic indicators with LEDs
- ✓ Enhanced traffic prioritization for automation protocols
- ✓ PROFINET PTCIP filter for reliable communication on PROFINET networks
- ✓ PROFINET Conformance Class A for real-time data exchange
- ✓ Auto negotiation and autocrossing detection simplifies installation and setup

Key Commercial Data

Packing unit	1 pc
GTIN	 4 063151 253684
GTIN	4063151253684
Custom tariff number	85176200
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	60 mm
Height	226 mm
Depth	46 mm

Ambient conditions

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

Technical data

Ambient conditions

Degree of protection	IP65
	IP66
	IP67
Ambient temperature (operation)	-40 °C ... 75 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating)
Air pressure (storage/transport)	79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating)

Interfaces

Interface	Ethernet
No. of ports	8 (M12 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Copper
Transmission speed	10/100/1000 Mbps
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status

Function

Basic functions	Store-and-forward switch, complies with IEEE 802.3
Additional functions	100 BASE-TX/100BASE-FX (IEEE 802.3u)
	Jumbo frames (max. 9,600 bytes)
	Quality of Service (QoS) prioritization (IEEE 802.1p)
	Energy-efficient Ethernet (IEEE 802.3az)
	Gigabit Ethernet 1000BASE-T (IEEE 802.3ab)
	10Base-T (IEEE 802.3)
MAC address table	4k
Status and diagnostic indicators	LEDs: US1, US2 (power supply), 2 LEDs per Ethernet port (Link/Activity and Speed)

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 (redundant)
Residual ripple	3.6 V _{PP} (within the permitted voltage range)
Supply voltage range	9 V DC ... 57 V DC
Typical current consumption	142 mA

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

Technical data

Supply voltage

Max. current consumption	390 mA (9 V DC)
--------------------------	-----------------

General

Mounting type	Wall mounting
Type AX	Stand-alone
Net weight	1400 g
Housing material	Zinc die-cast
MTTF	56.6 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	621 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	460.2 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))

Connection data

Connection method	M12 connector (A-coded)
-------------------	-------------------------

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Interference emission	EN 61000-6-2 EN 61000-6-4 (interference) Class A
Conducted noise emission	EN 61000-6-2 EN 61000-6-4 (conducted interference) Class A
Immunity to surge	EN 61000-6-2 EN 61000-4-5 (surge) Criterion B
Immunity to burst	EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A
Immunity to EF	EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A
Immunity to ESD	EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B
Immunity to conducted interference	EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A
Type of test	Free fall in accordance with EN 61131-2
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Free from substances that could impair the application of coating	Yes
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Shock (operation)	30g (EN 60068-2-27)

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Classifications

eCl@ss

eCl@ss 10.0.1	19170402
---------------	----------

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

Classifications

eCl@ss

eCl@ss 11.0	19170402
eCl@ss 9.0	19170106

ETIM

ETIM 7.0	EC000734
----------	----------

Approvals

Approvals

Approvals

EAC / cULus Listed

Ex Approvals

Approval details

EAC		RU D- DE.GB09.B.00312
-----	--	--------------------------

cULus Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
--------------	--	---	---------------

Accessories

Accessories

Circular connector (cable-side)

Connector - SACC-PO12MS-5CT-CM SH - 1021815



Connector, Universal, 5-position, shielded, Plug straight M12 Push-Pull, Coding: A, Crimp connection, knurl material: PA 6.6, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

Accessories

Connector - SACC-P12FS-5CT-CM SH - 1021817



Connector, Universal, 5-position, shielded, Socket straight M12 Push-Pull, Coding: A, Crimp connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

Connector - SACC-PO12MR-5CT-CM SH - 1021816



Connector, Universal, 5-position, shielded, Plug angled M12 Push-Pull, Coding: A, Crimp connection, knurl material: PA 6.6, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

Connector - SACC-PO12MR-5CT-CL SH - 1177590



Connector, Universal, 5-position, shielded, Plug angled M12 Push-Pull, Coding: A, Crimp connection, knurl material: PA 6.6, external cable diameter 6.5 mm ... 10 mm, without crimp contacts

Connector - SACC-PO12MS-5CT-CL SH - 1177624



Connector, Universal, 5-position, shielded, Plug straight M12 Push-Pull, Coding: A, Crimp connection, knurl material: PA 6.6, external cable diameter 6.5 mm ... 10 mm, without crimp contacts

Data connector - SACC-PO12MRX-8CT-CL SH - 1021784



Data connector, Ethernet CAT6_A (10 Gbps), PROFINET CAT6_A (10 Gbps), 8-position, shielded, Plug angled M12 Push-Pull, Coding: X, Crimp connection, knurl material: PA 6.6, external cable diameter 6.5 mm ... 10 mm, without crimp contacts

Industrial Ethernet Switch - FL SWITCH 1708 - 1196228

Accessories

Data connector - SACC-PO12MSX-8CT-CL SH - 1021783



Data connector, Ethernet CAT6_A (10 Gbps), PROFINET CAT6_A (10 Gbps), 8-position, shielded, Plug straight M12 Push-Pull, Coding: X, Crimp connection, knurl material: PA 6.6, external cable diameter 6.5 mm ... 10 mm, without crimp contacts

Data cable preassembled

Network cable - NBC-M12MSD/ 2,0-93C/M12MSD - 1416200



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PUR, green RAL 6018 (Advanced Shielding Technology), Plug straight M12, on Plug straight M12, cable length: 2 m

Network cable - NBC-MRD-MRD SCO-PN/.../... - 1408624



Network cable, PROFINET CAT5 (100 Mbps), EtherCAT[®] CAT5 (100 Mbps), 4-position, Variable cable type, shielded, Plug angled M12 SPEEDCON / IP67, coding: D, on Plug angled M12 SPEEDCON / IP67, coding: D, cable length: Free input (0.2 ... 40.0 m)