

# PSI-MOS-RS422/FO 850 E

Order No.: 2708355




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2708355>

FO converter with integrated optical diagnosis, alarm contact, for RS-422/RS-485 4-wire/ INTERBUS to 2 Mbps, terminal equipment with an FO interface (BFOC), 850 nm, for HCS/fiber glass cable



## Commercial data

GTIN (EAN)	 4 017918 974053
sales group	H622
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 509 (IF-2011)

## Product notes

WEEE/RoHS-compliant since:  
07/18/2007



<http://www.download.phoenixcontact.com>  
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## Technical data

### Serial interface

Interface 1	RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1
Operating mode	Full duplex

Transmission length	max. 1000 m (depending on the data rate, with shielded, twisted data cable)
Connection method	Pluggable screw connection
Serial transmission speed	Maximum 2 Mbps
<b>Optical interface FO</b>	
Transmit capacity, minimum	-4.6 dBm (200/230 µm)
	-17.6 dBm (50/125 µm)
	-13.6 dBm (62.5/125 µm)
Minimum receiver sensitivity	-33.20 dBm
Wavelength	850 nm
Transmission length incl. 3 dB system reserve	2800 m (with F-K 200/230 8 dB/km with quick mounting connector)
	4200 m (with F-G 50/125 2.5 dB/km)
	4800 m (with F-G 62,5/125 3.0 dB/km)
Connection method	B-FOC (ST®)
<b>Fault warning output</b>	
Maximum switching voltage	60 V DC
	42 V AC
Limiting continuous current	1 A
<b>Power supply</b>	
Nominal supply voltage	24 V DC ± 25%
Supply voltage range	18 V DC ... 32 V DC
Typical current consumption	130 mA (24 V DC)
Connection method	COMBICON plug-in screw terminal block
<b>General data</b>	
Transmission channels	2 (1/1) RD, TD, full duplex
Bit distortion, input	± 35 % (permitted)
Bit distortion, output	< 6.25 %
Width	35 mm
Height	99 mm
Depth	105 mm
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	30 % ... 95 % (no condensation)

Electrical isolation	(VCC // RS-422)
Test voltage data interface/power supply	1.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 55011
Noise immunity	EN 61000-6-2:2005
Degree of protection	IP20
Housing material	PA V0, color green
Color	green
MTBF	320 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	48 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
ATEX	Ex II 3 G Ex nAC IIC T4 X
	Ex II (2) GD [Ex op is] IIC (PTB 06 ATEX 2042 U)
UL, USA / Canada	Class I, zone 2, AEx nc IIC

#### Certificates / Approvals



Certification	CUL, UL
Certification Ex:	CUL-EX LIS, PTB, UL-EX LIS

#### Accessories

Item	Designation	Description
<b>Cable/conductor</b>		
2989174	FL MM PATCH 1,0 LC-ST	Assembled fiber optic cable, break-out cable, glass fiber multi-mode 50/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2901809	FL MM PATCH 1,0 SC-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: SC Duplex / B-FOC, protection type: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2901820	FL MM PATCH 1,0 ST-SCRJ	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: SC Duplex / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 1 meter

2901815	FL MM PATCH 1,0 ST-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2989271	FL MM PATCH 2,0 LC-ST	Assembled fiber optic cable, break-out cable, glass fiber multi-mode 50/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 2 meters
2901821	FL MM PATCH 2,0 ST-SCRJ	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: B-FOC (ST) / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 2 meters
2901816	FL MM PATCH 2,0 ST-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 meters
2901801	FL MM PATCH 5,0 LC-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, plug: LC / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2901811	FL MM PATCH 5,0 SC-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2901822	FL MM PATCH 5,0 ST-SCRJ	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: B-FOC (ST) / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2901817	FL MM PATCH 5,0 ST-ST	Assembled FO cable, break out cable, multi-mode glass fiber 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2989242	FL SM PATCH 1,0 LC-ST	Assembled fiber optic cable, break-out cable, glass fiber single mode 9/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2901832	FL SM PATCH 1,0 SC-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2901836	FL SM PATCH 1,0 ST-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 meter
2989349	FL SM PATCH 2,0 LC-ST	Assembled fiber optic cable, break-out cable, glass fiber single mode 9/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 2 meters
2901833	FL SM PATCH 2,0 SC-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 meters

2901837	FL SM PATCH 2,0 ST-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 meters
2901828	FL SM PATCH 5,0 LC-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: LC / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2901834	FL SM PATCH 5,0 SC-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2901838	FL SM PATCH 5,0 ST-ST	Assembled FO cable, break out cable, single-mode glass fiber 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 meters
2799322	PSM-LWL-GDM-RUGGED-50/125	Glass fiber cable, duplex 50/125 µm, by the meter, without connector, for indoor installation
2799432	PSM-LWL-GDO- 50/125	Glass fiber cable, duplex 50/125 µm, by the meter, without connector, for outdoor installation
2799885	PSM-LWL-HCS-RUGGED-200/230	HCS cable, duplex 200/230 µm, by the meter, without connector, for indoor installation
2799445	PSM-LWL-HCSO-200/230	HCS cable, duplex 200/230 µm, by the meter, without connector, for outdoor installation
2744911	PSM-LWL/GDM-RUGGED	Glass fiber cable, duplex 50/125 µm, by the meter, with connector, for indoor installation
2744924	PSM-LWL/GDO	Glass fiber cable, duplex 50/125 µm, by the meter, with connector, for outdoor installation
2744937	PSM-LWL/HCS-RUGGED	HCS cable, duplex 200/230 µm, by the meter, with connector, for indoor installation
2744940	PSM-LWL/HCSO	HCS cable, duplex 200/230 µm, by the meter, with connector, for outdoor installation

**General**

2709561	ME 17,5 TBUS 1,5/ 5-ST-3,81 GN	DIN rail connector for DIN rail power supply unit, gold-plated contacts, for DIN rail mounting, 5-pos.
2890014	ME 17,5 TBUS 1,5/PP000-3,81 BK	Plug component
2866983	MINI-SYS-PS-100-240AC/24DC/1.5	DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A
2744416	PSM-ME-RS232/RS485-P	Interface converter, for converting RS-232 (V.24) to RS-422 (V.11) and RS-485, with electrical isolation, 2 channels, rail-mountable

**Plug/Adapter**

2708481	PSM-SET-B-FOC/4-HCS	B-FOC (ST) connector set for HCS fiber, for self assembly consisting of 4 quick mounting connectors with bend protection sleeve
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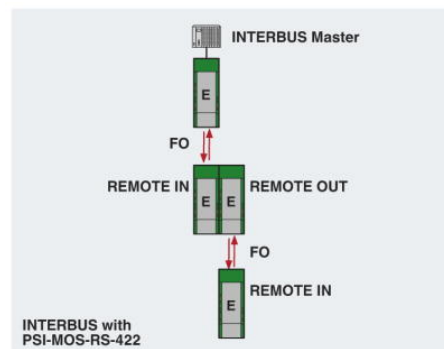
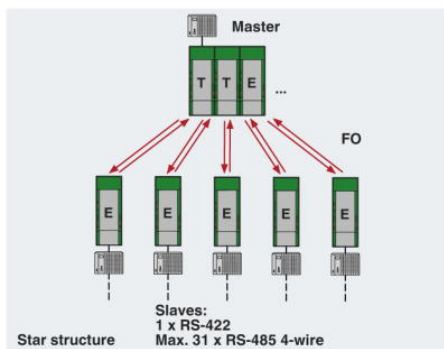
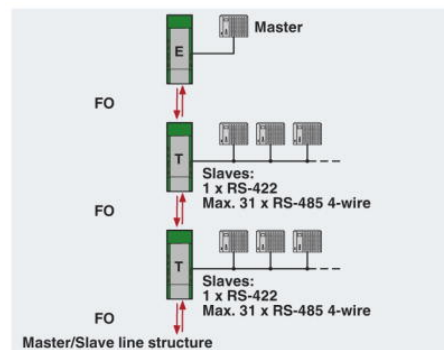
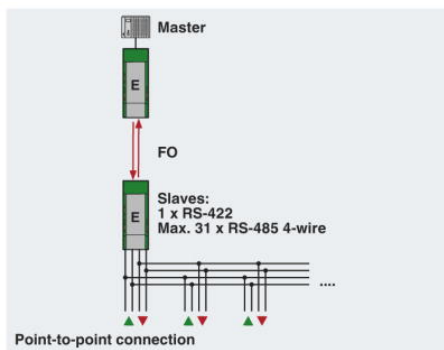
2799429	PSM-SET-BFOC-LINK/2	Coupling; set consisting of 2 couplings for connecting B-FOC plugs
2744241	SUBCON-PLUS 9/F	D-SUB connector, 9-pos. female connector, two cable entries < 35°, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to one screw connection terminal block
2744018	SUBCON-PLUS 9/M	D-SUB connector, 9-pos., male connector, two cable entries < 35°, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 to one screw connection terminal block

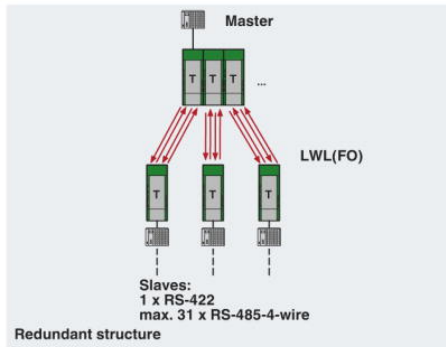
**Tools**

2799539	PSM-FO-POWERMETER	Fiber optic measuring case, consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers and operating instructions
2708465	PSM-HCS-KONFTOOL/B-FOC	HCS assembly kit for B-FOC (ST) quick mounting connectors, including stripping blade, stripping pliers, aramide yarn scissors, fiber stripper, microscope, fiber cleaving tool for standard HCS and HCS GI fibers, and documentation
1205037	SZS 0,4X2,5 VDE	Screwdriver, bladed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

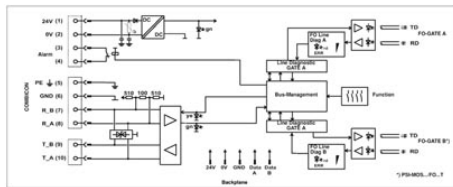
**Diagrams/Drawings**

Application drawing





Block diagram



\*) only with PSI-MOS.../FO...T

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