

# PSI-MOS-PROFIB/FO 850 E

Order No.: 2708274



<http://eshop.phoenixcontact.co.uk/phoenix/treeViewClick.do?UID=2708274>

FO converter with integrated optical diagnosis, alarm contact, for PROFIBUS up to 12 Mbps, terminal equipment with an FO interface (BFOC), 850 nm, for fiber glass cable



## Commercial data

EAN	4017918973971
Pack	1
Customs tariff	85175090
Weight/Piece	184.98 g
Country of Origin	DE
Catalog page information	Page 505 (IF-2009)

## Product notes

WEEE/RoHS-compliant since:  
04/07/2007



Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation at <http://www.download.phoenixcontact.com>. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

### Serial interface

Interface 1	PROFIBUS acc. to IEC 61158, RS-485 2-wire, half-duplex, automatic control
Operating mode	Semi-duplex
File format/coding	UART (11 Bit, NRZ)

Data direction switching	Automatic control
Transmission length	max. 1200 m (With shielded, twisted-pair data line depending on the data rate )
Type of connection	D-SUB-9 female connector
Serial transmission speed	9.6/19.2/45.45/93.75/187.5/500/1500/3000/6000/12000 kbps, automatic detection, optional setting using a DIP switch

#### Optical interface FO

Transmit capacity, minimum	-4.2 dBm (200/230 $\mu$ m)
	-17.8 dBm (50/125 $\mu$ m)
	-14.6 dBm (62,5/125 $\mu$ m)
Minimum receiver sensitivity	-30.00 dBm (50/125 $\mu$ m)
Maximum receiver sensitivity	-3 dBm (200/230 $\mu$ m)
Wave length	850 nm
Transmission length incl. 3 dB system reserve	800 m (With F-K 200/230 10 dB/km with quick mounting connector)
	2600 m (with F-G 50/125 2.5 dB/km)
	3300 m (with F-G 62,5/125 3.0 dB/km)
Transmission protocol	Protocol-transparent to the RS-485 interface
Type of connection	B-FOC

#### Fault warning output

Maximum switching voltage	60 V DC
	42 V AC
Limiting continuous current	1 A

#### Power supply

Nominal supply voltage	24 V DC $\pm$ 25%
Range of supply voltages	18 V DC ... 32 V DC
Typical current consumption	100 mA (24 V DC)
Type of connection	Pluggable COMBICON screw terminal block

#### General data

Bit delay	$\leq$ 1 Bit
Bit distortion, input	$\pm$ 35 % (permitted)
Bit distortion output	$<$ 6.25 %
Width	35 mm
Height	105 mm

Depth	99 mm
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (operation)	-20 °C ... 60 °C
Electrical isolation	RS-485 // supply
Electromagnetic compatibility	Conformance with EMC directive 89/336/EEC
Emitted interference	EN 55011
Immunity to interference	EN 61000-6-2:2005
Degree of protection	IP20
Housing material	PA V0, color green
Color	green
MTBF	453000 h in accordance with the Telcordia standard (ambient temperature 25°C)
	236000 h in accordance with the Telcordia standard (ambient temperature 40°C)
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



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

#### Accessories

Item	Designation	Description
<b>Cable/conductor</b>		
2744652	PSM-CABLE-PROFIB/FC	PROFIBUS cable, Fast Connect type, up to 12 Mbps (02YSY (ST)CY 1x2x22 AWG)
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
2744937	PSM-LWL/HCS-RUGGED	HCS cable, duplex 200/230 µm, by the meter, with connector, for indoor installation

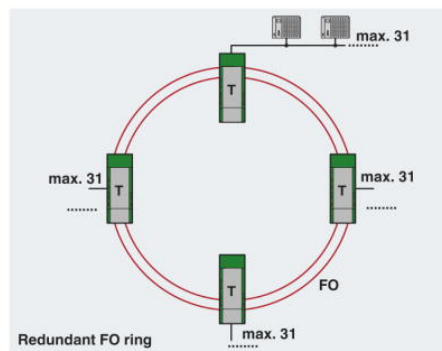
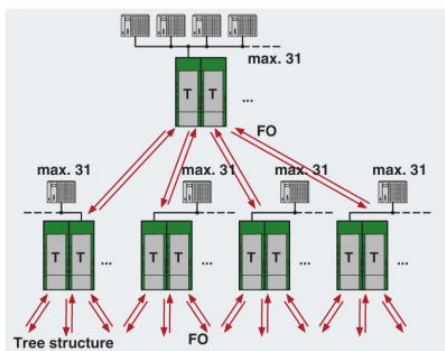
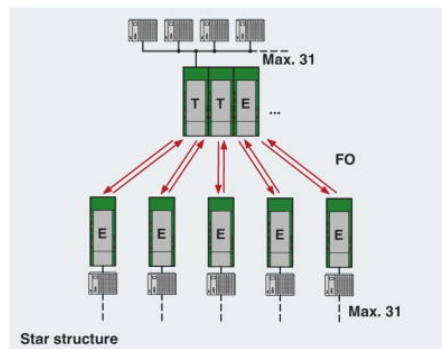
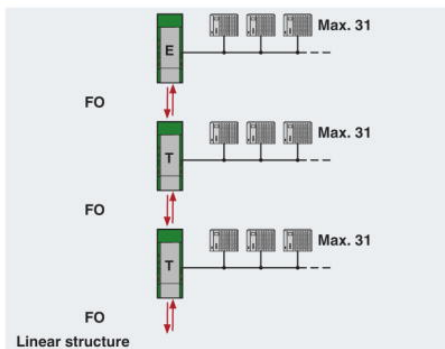
2744940	PSM-LWL/HCSO	HCS cable, duplex 200/230 µm, by the meter, with connector, for outdoor installation
<b>General</b>		
2709561	ME 17,5 TBUS 1,5/ 5-ST-3,81 GN	DIN rail connector for DIN rail power supply unit, gold-plated contacts, for DIN rail mounting, 5-pos.
2890014	ME 17,5 TBUS 1,5/PP000-3,81 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
2708863	PSI-REP-PROFIBUS/12MB	Modular repeater for electrical isolation and range increase for PROFIBUS up to 12 Mbps, 4-way isolation, rail-mountable, supply 24 V DC
2760623	PSM PTK	Passive RS-485 T-distributor, fitted with one 9-pin SUB-D pin strip and two 9-pin SUB-D socket strips
2799364	PSM PTK-4	Passive RS-485 T-distributor, fitted with one 9-pin SUB-D pin strip and five 9-pin SUB-D socket strips
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
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
2744429	PSM-ME-RS485/RS485-P	Repeater, for potential separation and range increase in RS-485 2-wire bus systems, 3-way isolation, rail-mountable
<b>Plug/Adapter</b>		
2799429	PSM-SET-BFOC-LINK/2	Coupling; set consisting of 2 couplings for connecting B-FOC plugs
2799487	PSM-SET-FSMA/4-HCS	F-SMA plug set for HCS fiber, for self assembly consisting of 4 quick mounting connectors with bend protection sleeve
2744380	SUBCON-PLUS-PROFIB/AX/SC	D-SUB connector, 9-pos., male connector, axial version with two cable entries, bus system: PROFIBUS DP up to 12 Mbps, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; screw connection terminal blocks
2708245	SUBCON-PLUS-PROFIB/PG/SC2	D-SUB connector, 9-pos., male connector, cable entry < 35°, bus system: PROFIBUS DP up to 12 Mbps with PG D-SUB female connector for connecting a programming device, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; screw connection terminal blocks
2708232	SUBCON-PLUS-PROFIB/SC2	D-SUB connector, 9-pos., male connector, cable entry < 35°, bus system: PROFIBUS DP up to 12 Mbps, termination resistor can be switched on via slide switch, pin assignment: 3, 5, 6, 8; screw connection terminal blocks

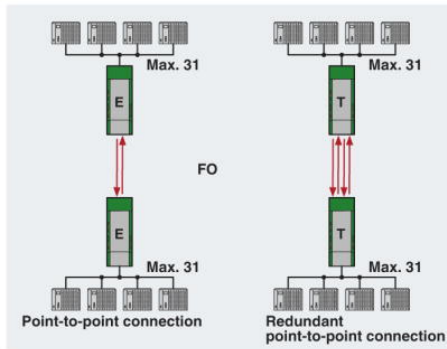
**Tools**

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
2744623	PSM-STRIP-FC/PROFIB	Quick stripping tool for PROFIBUS cable, type Fast Connect
1205037	SZS 0,4X2,5	Screwdriver, bladed, matches all screw terminal blocks up to 1.5 mm <sup>2</sup> connection cross section, blade: 0.4 x 2.5 mm

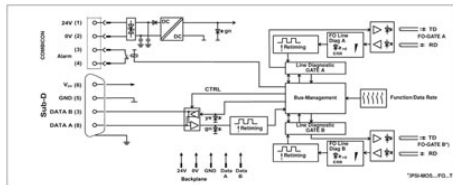
**Drawings**

Application drawing





Block diagram



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

**Address**

PHOENIX CONTACT Ltd  
Halesfield 13  
Telford / Shropshire / TF7 4PG,England  
Phone 01952 681 700  
Fax 01952 681 799  
<http://www.phoenixcontact.co.uk>



Phoenix Contact Ltd.  
Technical modifications reserved;