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► Extract from the online catalog



FO converter with integrated optical diagnosis, alarm contact, for RS-485 2-wire bus systems (SUCONET K, MODBUS ...) up to 500 Kbit/s, NRZ coding, terminal equipment with an FO interface (BFOC), 850 nm, for HCS/fiber glass cable

Order No.	2708339
Ord designation	PSI-MOS-RS485W2/FO 850 E
EAN	4017918974039
Pack	1 Pcs.
Customs tariff	85176200
Weight/Piece	0.2369 KG
Catalog page information	Page 437 (IF-2007)

► Product notes

WEEE/RoHS-compliant since: 06/24/2007



IMPORTANT : This date is valid for Customers in Germany only. Date Format is MM/DD/YYYY. Please contact your local in-country Phoenix Contact location or designated business partner for a Logistics Compliant date in your area. In order to guarantee delivery of RoHS-Compliant product, please purchase Phoenix Contact parts from authorized Phoenix Contact representatives and distributors.

▶ **Technical data**

Serial interface

Interface 1	RS-485 interface, 2-wire
Operating mode	Semi-duplex
File format/coding	UART (11/10 bit switchable; NRZ), slip-tolerant
Data direction switching	Automatic control
Data rate	4,8/ 9,6/ 19,2/ 38,4/ 57,6/ 75/ 93,75/ 115,2/ 136/ 187,5/ 375/ 500
Termination resistor	220 Ω can be connected; pull up/down 390 Ω
Transmission length	Max. 1200 m (depending on the data rate, with shielded, twisted data cable)
Type of connection	Pluggable COMBICON screw terminal block
Serial transmission rate	4,8/ 9,6/ 19,2/ 38,4/ 57,6/ 75/ 93,75/ 115,2/ 136/ 187,5/ 375/ 500

Optical interface FO

Transmit capacity, minimum	-4 dBm (200/230 μm)
Transmit capacity, minimum	-17.6 dBm (50/125 μm)
Transmit capacity, minimum	-14 dBm (62,5/125 μm)
Minimum receiver sensitivity	-32.50 dBm (50/125 μm)
Minimum receiver sensitivity	-32.50 dBm (62,5/125 μm)
Minimum receiver sensitivity	-32.10 dBm (200/230 μm)
Maximum receiver sensitivity	-3 dBm (200/230 μm)
Wave length	850 nm
Transmission length incl. 3 dB system reserve	Min. 2800 m (With F-S 200/230 8 dB/km with quick mounting plug)
Transmission length incl. 3 dB system reserve	Min. 4200 m (with F-G 50/125 2.5 dB/km)
Transmission length incl. 3 dB system reserve	Min. 3300 m (with F-G 62,5/125 3.0 dB/km)
Transmission protocol	Transparent to protocol to the RS-485 interface
Type of connection	B-FOC

Fault warning output

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

Power supply

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

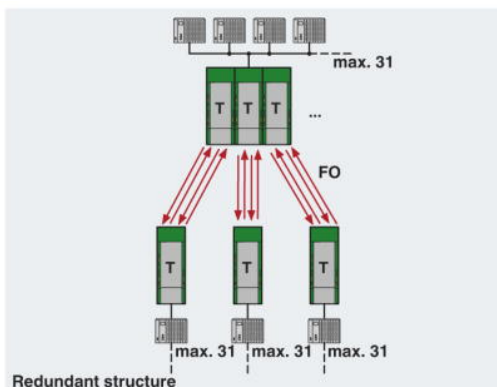
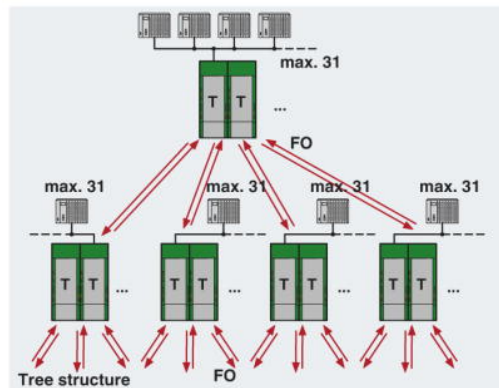
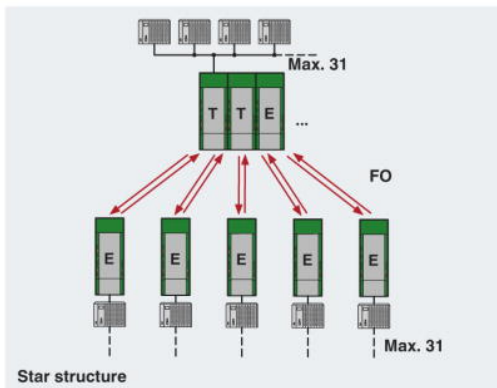
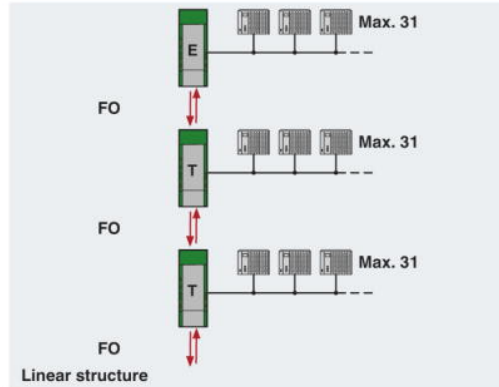
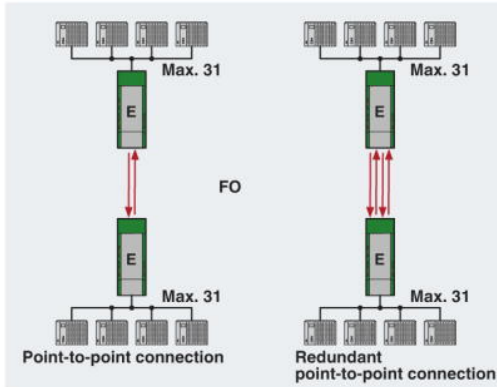
General data

Bit delay	≤ 1 Bit
Bit distortion, input	± 35 % (permitted)
Bit distortion output	< 6.25 %
Length	99 mm
Height	105 mm
Width	35 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
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)
MTBF	236000 h in accordance with the Telcordia standard (ambient temperature 40°C)

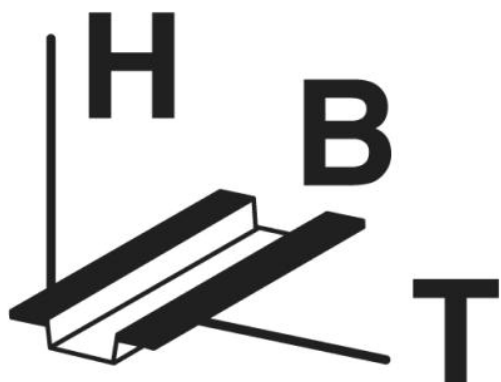
► Drawings

Application drawing



Block diagram

Logo



► Accessories

Item	Designation	Description
Cable/conductor		
2744652	PSM-CABLE-PROFIB/FC	PROFIBUS cable, Fast Connect type, up to 12 Mbit/s (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
General		
2709561	ME 17,5 TBUS 1,5/ 5-ST-3,81 GN	Bus connector, gold-plated contacts, for mounting on DIN rail, 5-pos.
2890014	ME 17,5 TBUS 1,5/PP000-3,81 BK	DIN rail connector (optional) for routing through the supply voltage
2866983	MINI-SYS-PS-100-240AC/24DC/1.5	Power supply unit, primary switched-mode, narrow design, output: 24 V DC / 1.5 A
2313096	PSI-REP-RS485W2	Modular repeater for electrical isolation and range increase in RS-485 2-wire bus systems up to 500 kbps, 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
2708465	PSM-HCS-KONFTOOL/B-FOC	HCS DIY case for B-FOC(ST) quick mounting connector, including four B-FOC(ST) quick mounting connectors, stripping knife, stripping pliers, aramide yarn scissors, fiber stripper, fiber cleaving tool and microscope
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
Plug/Adapter		
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

2744241	SUBCON-PLUS 9/F	D-SUB connector, 9-pin, with two cable entries, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 on each screw terminal block, design: Socket
2744018	SUBCON-PLUS 9/M	D-SUB connector, 9-pin, with two cable entries, universal type for all systems, pin assignment: 1, 2, 3, 4, 5, 6, 7, 8, 9 on each screw terminal block, design: Male
2744267	SUBCON-PLUS F1	D-SUB connector, 9-pin, with two cable entries, bus system: MODBUS, MODBUS-PLUS, BITBUS, ARCNET, MULT/MININET (B&R), SYSTEM 2003 (B&R), P-NET, pin assignment: 1, 2, 3, 5, 6, 8, version: Female
2799490	SUBCON-PLUS F2	D-SUB connector, 9-pin, with two cable entries, bus system: CAN, SUCONET K1, K2 (MOELLER), SBUS (Saia), J-BUS (Merlin Gerin), pin assignment: 2, 3, 4, 5, 7, 9, version: female
2744102	SUBCON-PLUS F5	D-SUB connector, 9-pin, with two cable entries, bus system: MODBUS, CEGELEC, pin assignment: 1, 1, 2, 3, 6, 7, version: female
2761826	SUBCON-PLUS M1	D-SUB connector, 9-pin, with two cable entries, bus system: MODBUS, MODBUS-PLUS, BITBUS, ARCNET, MULT/MININET (B&R), SYSTEM 2003 (B&R), P-NET, pin assignment: 1, 2, 3, 5, 6, 8, version: Male
2761839	SUBCON-PLUS M2	D-SUB connector, 9-pin, with two cable entries, bus system: CAN, SUCONET K1, K2 (MOELLER), SBUS (Saia), J-BUS (Merlin Gerin), pin assignment: 2, 3, 4, 5, 7, 9, version: male

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
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 ² connection cross section, blade: 0.4 x 2.5 mm

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