

PSI-MOS-PROFIB/FO 850 T-SO

Order No.: 2708614




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FO converter with integrated optical diagnosis, alarm contact, for PROFIBUS up to 12 Mbps, T-coupler with two FO interfaces (BFOC), 850 nm, for fiber glass cable



Commercial data

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|----------------|--|
| GTIN (EAN) |  4 017918 974176 |
| sales group | H622 |
| Pack | 1 pcs. |
| Customs tariff | 85176200 |

Product notes

WEEE/RoHS-compliant since:
04/18/2007



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Technical data

Serial interface

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| 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) |

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| Data direction switching | Automatic control |
| Transmission length | ≤ 1200 m (depending on the data rate, with shielded, twisted pair data cable) |
| Connection method | D-SUB-9 female connector |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 14 |
| Serial transmission speed | ≤ 12 Mbps |

Optical interface FO

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| Transmit capacity, minimum | -4.2 dBm (200/230 μm) |
| | -17.8 dBm (50/125 μm) |
| | -14.6 dBm (62,5/125 μm) |
| Minimum receiver sensitivity | -30.00 dBm (50/125 μm) |
| Maximum receiver sensitivity | -3 dBm (200/230 μm) |
| Wavelength | 850 nm |
| Transmission length incl. 3 dB system reserve | 2600 m (with F-G 50/125 2.5 dB/km) |
| | 3300 m (with F-G 62,5/125 3.0 dB/km) |
| | 800 m (With F-K 200/230 10 dB/km with quick mounting connector) |
| Connection method | B-FOC (ST®) |

Fault warning output

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| Maximum switching voltage | 65 V DC |
| | 150 V AC |
| Limiting continuous current | 0.46 A |

Power supply

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|-----------------------------|---------------------------------------|
| Supply voltage range | 18 V DC ... 30 V DC |
| Max. current consumption | 130 mA |
| Typical current consumption | 120 mA (24 V DC) |
| Connection method | COMBICON plug-in screw terminal block |

General data

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| Bit delay | ≤ 1 Bit |
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| 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) |
| Altitude | 5000 m () |
| Electrical isolation | (VCC // RS-485) |
| Test voltage data interface/power supply | 1.5 kV _{rms} (50 Hz, 1 min.) |
| Degree of protection | IP20 |
| Net weight | 205 g |
| Housing material | PA 6.6-FR |
| Color | green |
| MTBF | 149 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day)) |
| | 24 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day)) |
| Conformance | CE-compliant |
| 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 T5 |
| | Class I, Div. 2, Groups A, B, C, D |

Certificates / Approvals



Certification

CUL, UL

Certification Ex:

CUL-EX LIS, PTB, UL-EX LIS

Accessories

| Item | Designation | Description |
|------------------------|-------------------------|---|
| Cable/conductor | | |
| 2989174 | FL MM PATCH 1,0 LC-ST | Assembled fiber optic cable, break-out cable, fiberglass multi-mode 50/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2901809 | FL MM PATCH 1,0 SC-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: SC Duplex / B-FOC, protection type: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2901820 | FL MM PATCH 1,0 ST-SCRJ | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: SC Duplex / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2901815 | FL MM PATCH 1,0 ST-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2989271 | FL MM PATCH 2,0 LC-ST | Assembled fiber optic cable, break-out cable, fiberglass multi-mode 50/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901821 | FL MM PATCH 2,0 ST-SCRJ | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: B-FOC (ST) / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901816 | FL MM PATCH 2,0 ST-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901801 | FL MM PATCH 5,0 LC-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, plug: LC / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2901811 | FL MM PATCH 5,0 SC-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2901822 | FL MM PATCH 5,0 ST-SCRJ | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: B-FOC (ST) / SCRJ, protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2901817 | FL MM PATCH 5,0 ST-ST | Assembled FO cable, break out cable, multi-mode fiberglass 50/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2989242 | FL SM PATCH 1,0 LC-ST | Assembled fiber optic cable, break-out cable, fiberglass single mode 9/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2901832 | FL SM PATCH 1,0 SC-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 m |

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| 2901836 | FL SM PATCH 1,0 ST-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 1 m |
| 2989349 | FL SM PATCH 2,0 LC-ST | Assembled fiber optic cable, break-out cable, fiberglass single mode 9/125 µm, connector: LC/B-FOC (ST), degree of protection: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901833 | FL SM PATCH 2,0 SC-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901837 | FL SM PATCH 2,0 ST-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 2 m |
| 2901828 | FL SM PATCH 5,0 LC-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: LC / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2901834 | FL SM PATCH 5,0 SC-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: SC Duplex / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2901838 | FL SM PATCH 5,0 ST-ST | Assembled FO cable, break out cable, single-mode fiberglass 9/125 µm, connector: B-FOC (ST) / B-FOC (ST), protection type: IP20, for installation in cable ducts or control cabinets, length: 5 m |
| 2744652 | PSM-CABLE-PROFIB/FC | PROFIBUS cable, Fast Connect type, up to 12 Mbps (02YSY (ST)CY 1x2x22 AWG) |
| 2744652 | PSM-CABLE-PROFIB/FC | PROFIBUS cable, Fast Connect type, up to 12 Mbps (02YSY (ST)CY 1x2x22 AWG) |
| 2799322 | PSM-LWL-GDM-RUGGED-50/125 | Fiberglass cable, duplex 50/125 µm, by the meter, without connector, for indoor installation |
| 2799432 | PSM-LWL-GDO- 50/125 | Fiberglass 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 | Fiberglass cable, duplex 50/125 µm, by the meter, with connector, for indoor installation |
| 2744924 | PSM-LWL/GDO | Fiberglass 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. |

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| 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 |
| 2313944 | PSI-TERMINATOR-PB | Active termination resistor with redundant voltage supply for PROFIBUS and RS-485 bus systems. Compact design. Electrical isolation between supply and data interface. Bus termination can be switched. Integrated programming interface. |
| 2760623 | PSM PTK | Passive RS-485 T-distributor, fitted with one 9-pin D-SUB pin strip and two 9-pin D-SUB socket strips |
| 2799364 | PSM PTK-4 | Passive RS-485 T-distributor, fitted with one 9-pin D-SUB pin strip and five 9-pin D-SUB socket strips |
| 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

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|---------|---------------------------|--|
| 2799429 | PSM-SET-BFOC-LINK/2 | Coupling; set consisting of 2 couplings for connecting B-FOC plugs |
| 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

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| 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 VDE | Screwdriver, bladed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip |

Address

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