## ▶ Extract from the online catalog



FO converter with integrated optical diagnostics, alarm contact, for PROFIBUS up to 12 Mbps, termination device with an FO interface (FSMA), 660 nm, for polymer/HCS fiber cable

| | |
|---|---|
| Order No. | 2708290 |
| Ord designation | PSI-MOS-PROFIB/FO 660 E |

| | |
|---|---|
| EAN | 4017918973995 |
| Pack | 1 Pcs. |
| Customs tariff | 85176200 |
| Weight/Piece | 0.225 KG |
| Catalog page information | Page 435 (IF-2007) |

## ▶ Technical data

### Serial interface

| | |
|---|---|
| Interface 1 | PROFIBUS acc. to IEC 61158, RS-485 2-wire, half-duplex, automatic ontrol |
| Operating mode | Semi-duplex |
| File format/coding | UART (11 Bit, NRZ) |
| Data direction switching | Automatic control |
| Data rate | 9,6/19,2/45,45/93,75/187,5/500/1500/3000/6000/12000 kBit/s, automatische Erkennung, optional Einstellung über DIP-Schalter |
| 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 rate | 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 | -3 dBm (980/1000 µm) |
| Transmit capacity, minimum | -15.4 dBm (200/230 µm) |
| Minimum receiver sensitivity | -30.00 dBm |
| Maximum receiver sensitivity | -3 dBm (980/1000 µm) |
| Wave length | 660 nm |
| Transmission length incl. 3 dB system reserve | Min. 70 m (With F-K 980/1000 230 dB/km with a quick mounting connector) |
| Transmission length incl. 3 dB system reserve | Min. 400 m (with F-S 200/230 10 dB/km with quick mounting plug) |
| Transmission protocol | Transparent to protocol to the RS-485 interface |
| Type of connection | F-SMA |

## Fault warning output

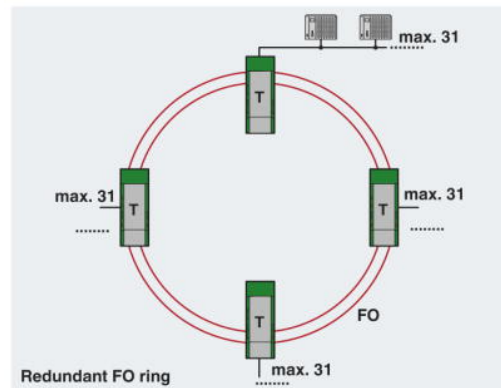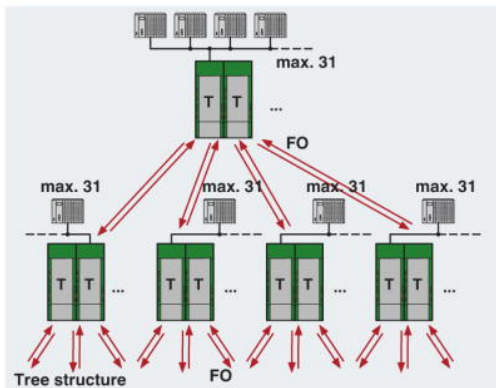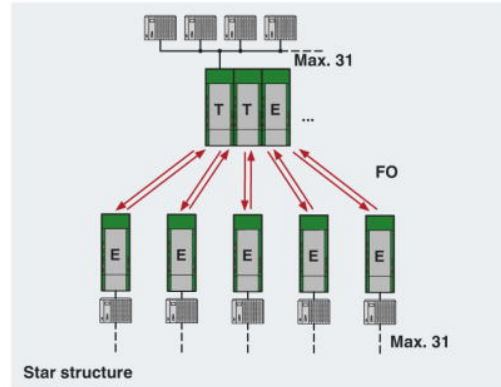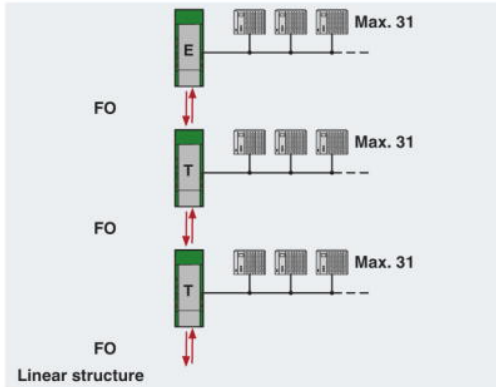| | |
|---|---|
| Maximum switching voltage | 60 V DC |
| Maximum switching voltage | 42 V AC |
| Limiting continuous current | 1 A |

## Power supply

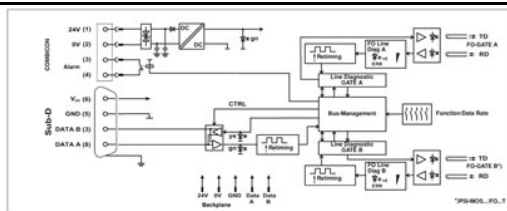| | |
|---|---|
| Nominal supply voltage | 24 V DC ± 25% |
| Range of supply voltages | 18 V DC ... 32 V DC |
| Typical current consumption | 85 mA |
| Type of connection | Pluggable COMBICON screw terminal block |

## General data

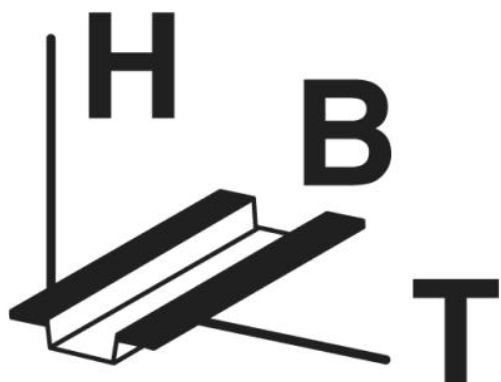| | |
|---|---|
| Bit delay | $\leq$ 1 Bit |
| Bit distortion, input | ± 35 % (permitted) |
| Bit distortion output | < 6.25 % |
| Length | 99 mm |
| Height | 105 mm |
| Width | 35 mm |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Ambient temperature (operation) | -20 °C ... 60 °C |
| 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 |
| Weight | 175 g |
| 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



Linear structure



Star structure



Tree structure



Redundant FO ring



Point-to-point connection

Redundant point-to-point connection
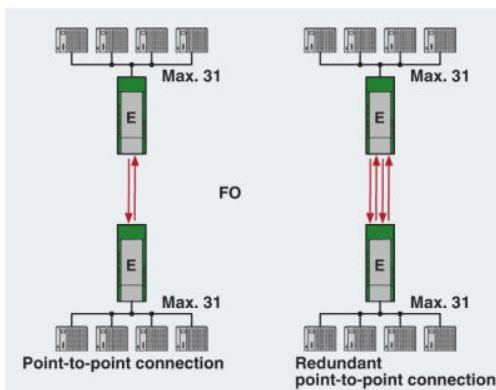
## Block diagram

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

**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 |
| 2744319 | PSM-LWL-KDHEAVY-980/1000 | Polymer fiber cable, duplex 980/1000 µm, medium-weight version for permanent indoor installation, by the meter, without connector |
| 2744322 | PSM-LWL-RUGGED-980/1000 | Polymer fiber cable, duplex 980/1000 µm, heavy-weight version for permanent indoor installation, by the meter, without connector |
| 2744982 | PSM-LWL-RUGGED-FLEX | Polymer fiber cable, duplex 980/1000 µm, heavy-weight, highly flexible version for flexible conduit applications, by the meter, with connector |
| 2744335 | PSM-LWL-RUGGED-FLEX-980/1000 | Polymer fiber cable, duplex 980/1000 µm, heavy-weight, highly flexible version for flexible conduit applications, by the meter, without connector |
| 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 |
| 2744966 | PSM-LWL/KDHEAVY | Polymer fiber cable, duplex 980/1000 µm, medium-weight version for permanent indoor installation, by the meter, with connector |
| 2744979 | PSM-LWL/RUGGED | Polymer fiber cable, duplex 980/1000 µm, heavy-weight version for permanent indoor installation, by the meter, with connector |
| **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 |
| 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 |
| 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** | | |

| 2799416 | PSM-SET-FSMA-LINK/2 | Coupling; set consisting of 2 couplings for connecting F-SMA 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 |
| 2799720 | PSM-SET-FSMA/4-KT | F-SMA plug set for polymer fiber, for self assembly consisting of 4 quick mounting connectors with bend protection sleeve |
| 2744380 | SUBCON-PLUS-PROFIB/AX/SC | PROFIBUS connector up to 12 Mbit/s, axial version, integrated terminating resistor that can be connected externally, connection system: Screw connection |
| 2708245 | SUBCON-PLUS-PROFIB/PG/SC2 | Small, angled Profibus connector with screw connection and additional Pg connection |
| 2708232 | SUBCON-PLUS-PROFIB/SC2 | Small, angled Profibus connector with screw connection |

## Tools

| | | |
|---|---|---|
| 1206146 | KAMES LWL | Cable knife for polymer fiber, for external sheath |
| 2799539 | PSM-FO-POWERMETER | Fiber optic measuring case, consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers and operating instructions |
| 2744199 | PSM-FO-STRIP | Stripping pliers for polymer fiber, for individual elements |
| 2799526 | PSM-HCS-KONFTOOL | HCS DIY case for F-SMA quick mounting connector, including four F-SMA quick mounting connectors, stripping knife, stripping pliers, Aramid yarn scissors, fiber stripper, fiber cleaving tool and microscope |
| 2744131 | PSM-POF-KONFTOOL | Polymer fiber DIY case, consisting of: Stripping knife, stripping pliers, polishing wheels for F-SMA and SCRJ quick mounting connectors, polishing pad and emery paper |
| 2799348 | PSM-SET-FSMA-POLISH | Polymer fiber polishing set, for F-SMA quick mounting connectors |
| 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 mm² connection cross section, blade: 0.4 x 2.5 mm |

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