

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



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 (FSMA), 660 nm, for polymer/HCS fiber cable

Product Features

- Connections can be plugged in using a COMBICON screw terminal block
- Supply voltage routed through via DIN rail connectors
- Redundant power supply possible by means of optional system power supply unit
- High-quality electrical isolation between all interfaces (INTERBUS // fiber optic ports // power supply // DIN rail connector)
- Approved for use in zone 2
- Floating switch contact for leading alarm generation in relation to critical fiber optic paths
- Integrated optical diagnostics for continuous monitoring of fiber optic paths
- Intrinsically safe fiber optic interface (Ex op is) for direct connection to devices in zone 1
- Automatic data rate detection for all data rates up to 2 Mbps



Key commercial data

package_quantity	1
GTIN	4017918974046

Technical data

Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	35 mm
Height	99 mm
Depth	103 mm

Ambient conditions

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 (For restrictions see manufacturer's declaration)
Degree of protection	IP20

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Technical data

Ambient conditions

Noise immunity	EN 61000-6-2:2005
-----------------------	-------------------

Serial interface

Interface 1	RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1
Operating mode	Full duplex
Connection method	Pluggable screw connection
Transmission medium	Copper
Transmission length	≤ 1000 m (depending on the data rate, with shielded, twisted data cable)
Termination resistor	220 Ω
Termination resistor	100 Ω
Termination resistor	220 Ω
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	≤ 2 Mbps

Optical interface FO

Transmit capacity, minimum	-4.6 dBm (980/1000 μm)
Transmit capacity, minimum	-16.6 dBm (200/230 μm)
Minimum receiver sensitivity	-31.2 dBm
Wavelength	660 nm
Transmission length incl. 3 dB system reserve	100 m (With F-P 980/1000 230 dB/km with quick mounting connector)
Transmission length incl. 3 dB system reserve	800 m (With F-K 200/230 10 dB/km with quick mounting connector)
Transmission medium	Polymer fiber
Transmission protocol	Transparent to protocol for RS-422 interface
Connection method	F-SMA

Fault warning output

Maximum switching voltage	60 V DC
Maximum switching voltage	42 V AC
Limiting continuous current	0.46 A

Power supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	130 mA
Typical current consumption	100 mA (24 V DC)
Connection method	COMBICON plug-in screw terminal block

General

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Technical data

General

Transmission channels	2 (1/1) RD, TD, full duplex
Bit distortion, input	± 35 % (permitted)
Bit distortion, output	< 6.25 %
Electrical isolation	(VCC // RS-422)
Test voltage data interface/power supply	1.5 kV _{rms} (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 55011
Net weight	190 g
Housing material	PA 6.6-FR
Color	green
MTBF	493 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
MTBF	92 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nAC IIC T4 X
ATEX	# II (2) GD [Ex op is] IIC (PTB 06 ATEX 2042 U)
UL, USA / Canada	Class I, Zone 2, AEx nc IIC T5
UL, USA / Canada	Class I, zone 2, Ex nC nL IIC T5 X
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

classifications

eCl@ss

eCl@ss 4.0	27230207
eCl@ss 4.1	27230207
eCl@ss 5.0	27230207
eCl@ss 5.1	27230207
eCl@ss 6.0	27230207
eCl@ss 7.0	27230207
eCl@ss 8.0	27230207

ETIM

ETIM 2.0	EC001423
ETIM 3.0	EC001423
ETIM 4.0	EC001423
ETIM 5.0	EC001423

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

classifications

UNSPSC

UNSPSC 13.2	43201553
--------------------	----------

approvals

ATEX / UL Listed / cUL Listed / cULus Listed / UL Recognized / cUL Recognized / cULus Recognized /

Approval details

ATEX	
Nominal voltage UN	
Nominal current IN	
mm ² /AWG/kcmil	

UL Listed

cUL Listed

cULus Listed

UL Recognized

cUL Recognized

cULus Recognized

accessories

Connector set

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

accessories

PSM-SET-FSMA/4-KT - 2799720



PSM-SET-FSMA/4-HCS - 2799487



Data cable by the meter

PSM-LWL-KDHEAVY-980/1000 - 2744319



PSM-LWL-RUGGED-980/1000 - 2744322



PSM-LWL-RUGGED-FLEX-980/1000 - 2744335



FO converters - PSI-MOS-RS422/FO 660 E - 2708342

accessories

PSM-LWL-HCS-RUGGED-200/230 - 2799885



PSM-LWL-HCSO-200/230 - 2799445



Power supply

MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



DIN rail connector

ME 17,5 TBUS 1,5/ 5-ST-3,81 GN - 2709561



Assembly tool

PSM-POF-KONFTOOL - 2744131



FO converters - PSI-MOS-RS422/FO 660 E - 2708342

accessories

PSM-HCS-KONFTOOL - 2799526



PSM-SET-FSMA-POLISH - 2799348



Measuring tools

PSM-FO-POWERMETER - 2799539



Adapter

PSM-SET-FSMA-LINK/2 - 2799416



Data plug

SUBCON-PLUS 9/F - 2744241



FO converters - PSI-MOS-RS422/FO 660 E - 2708342

accessories

SUBCON-PLUS 9/M - 2744018



Screwdriver tools

SZS 0,4X2,5 VDE - 1205037



Interface converter

PSM-ME-RS232/RS485-P - 2744416



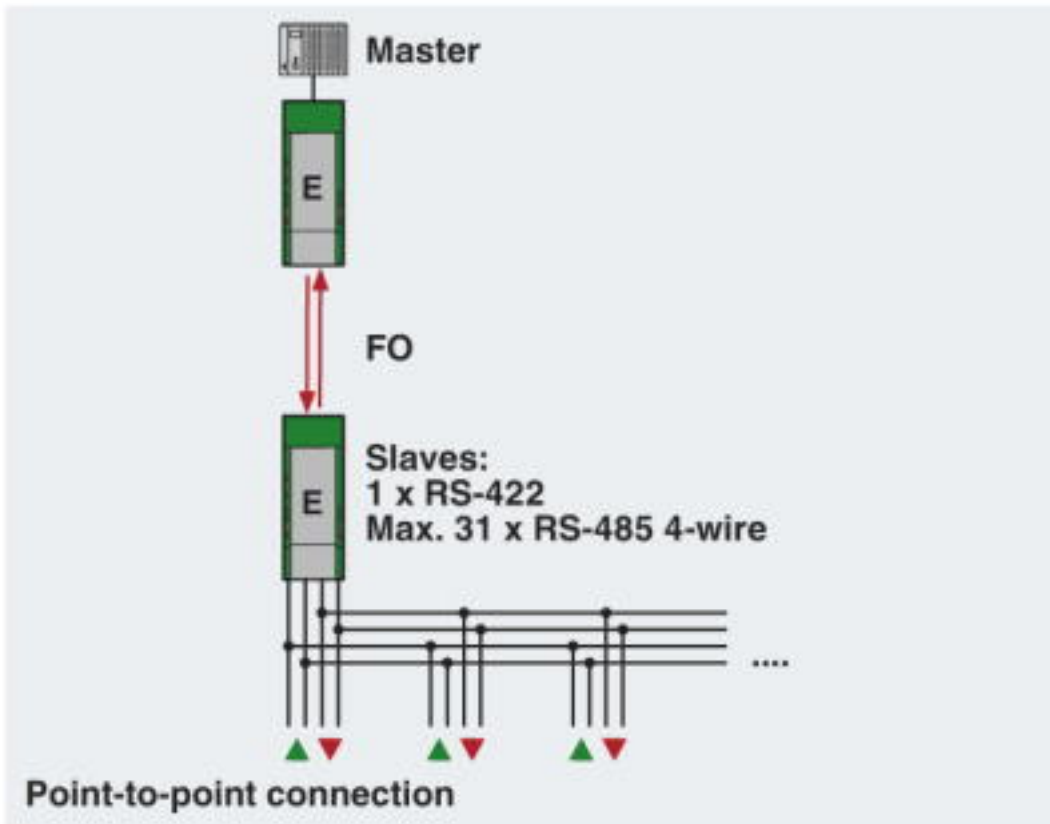
accessories

ME 17,5 TBUS 1,5/PP000-3,81 BK - 2890014

Drawings

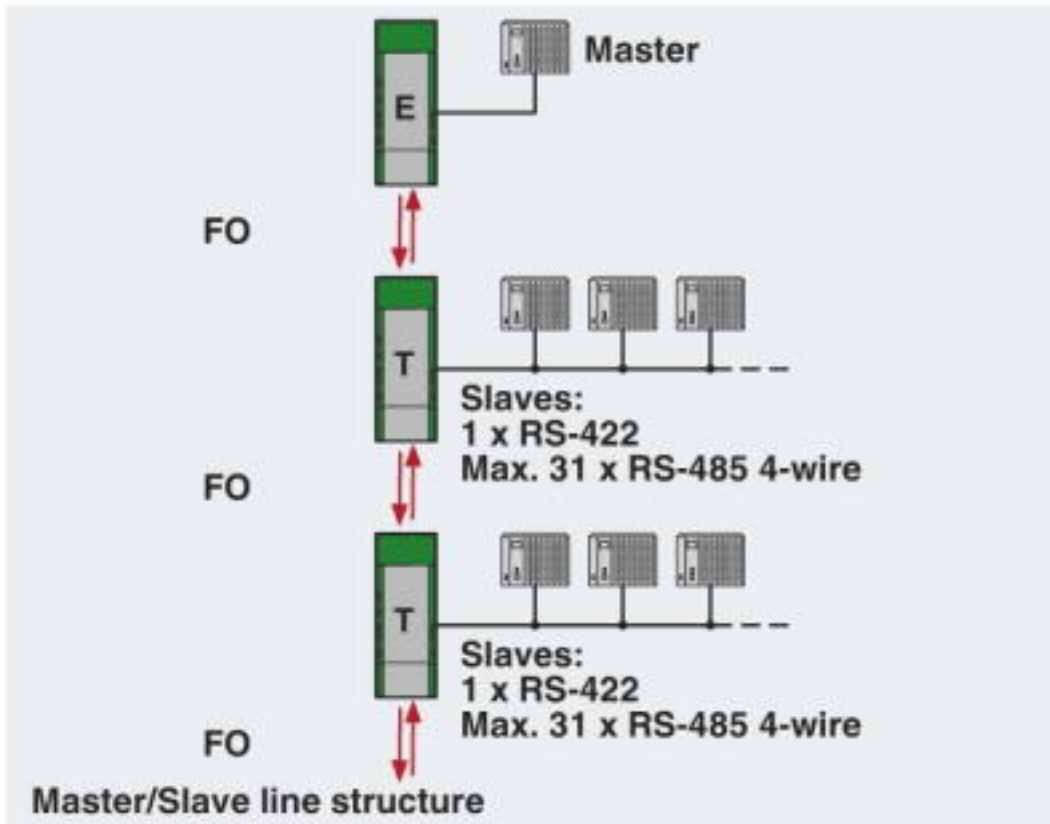
FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Application drawing



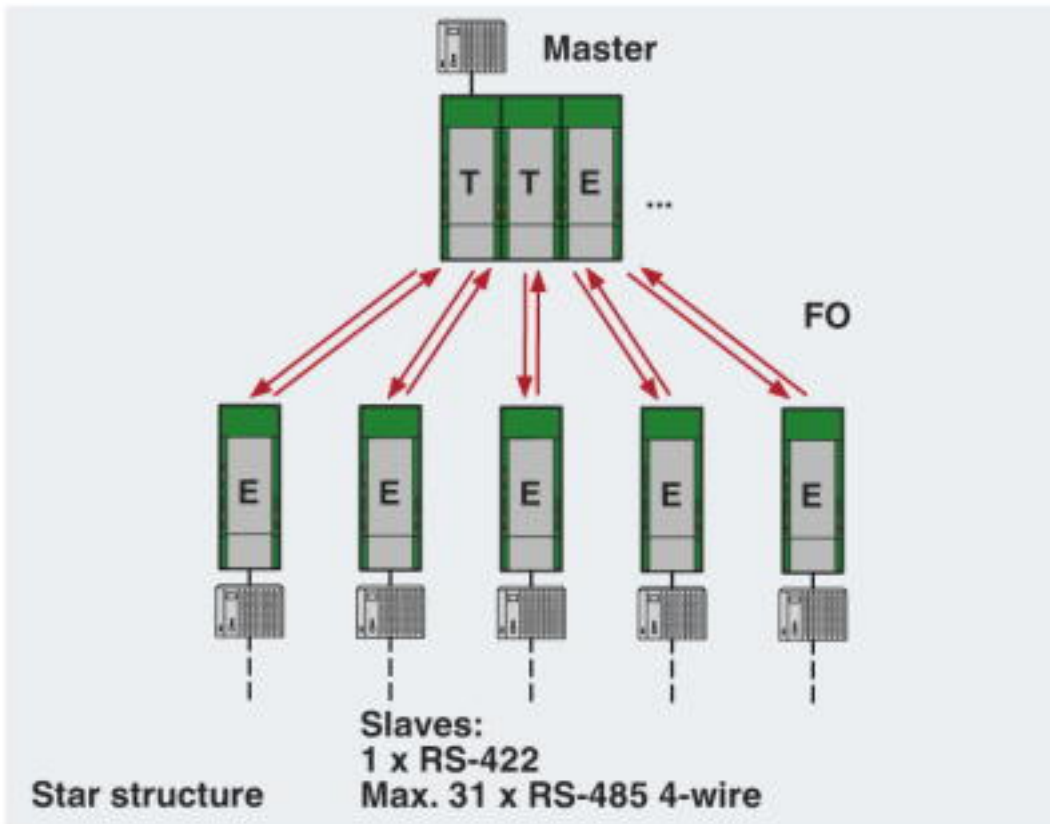
FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Application drawing



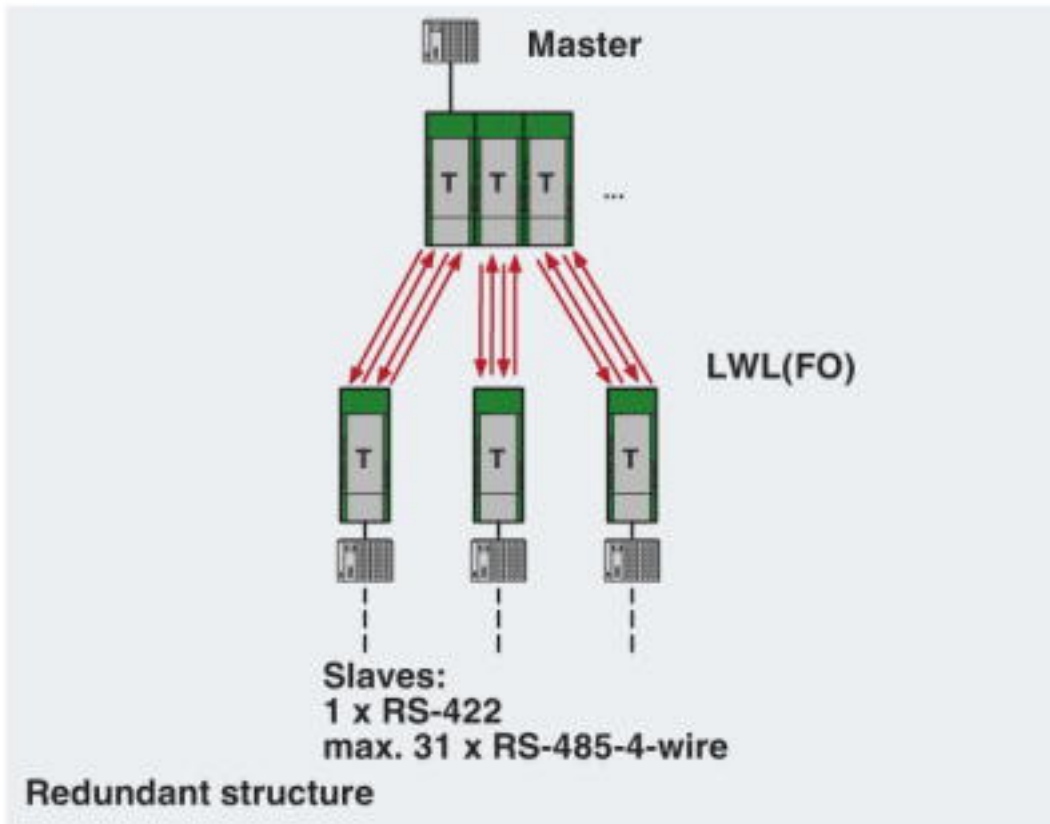
FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Application drawing



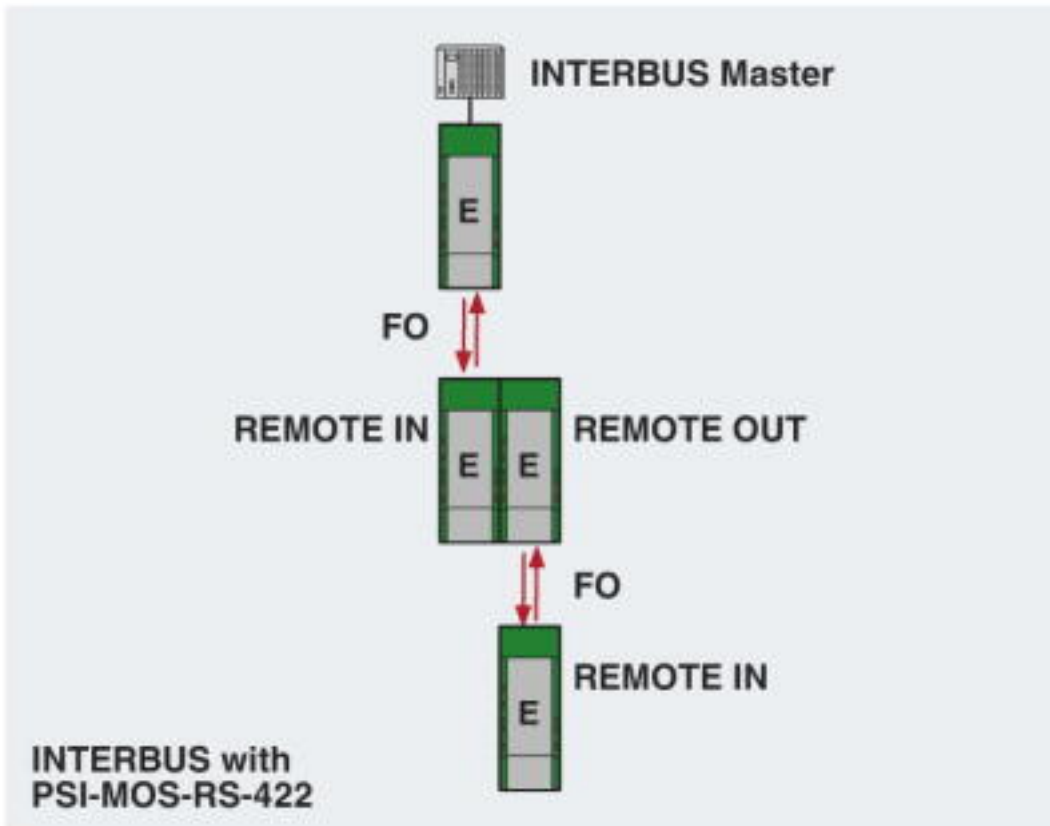
FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Application drawing

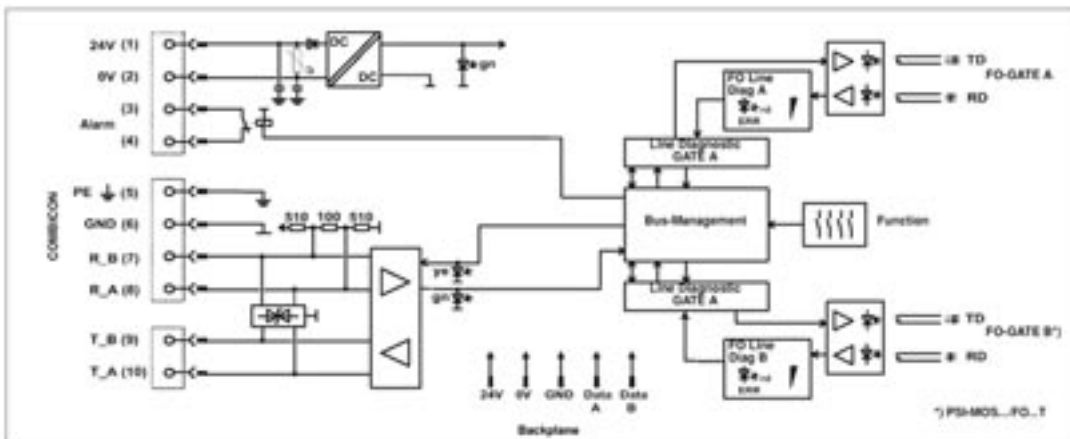


FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Application drawing



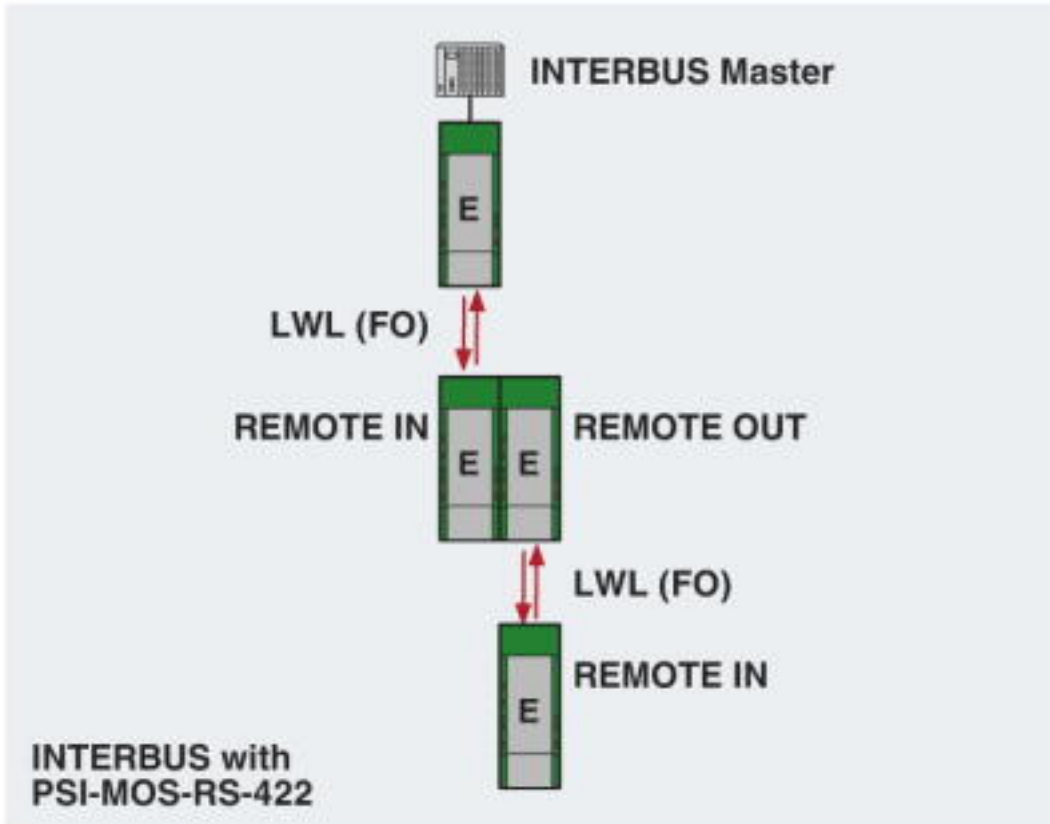
Block diagram



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

FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Functional drawing



FO converters - PSI-MOS-RS422/FO 660 E - 2708342

Functional drawing

