

# Interface converter - PSM-ME-RS485/RS485-P - 2744429

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Repeater, for potential separation and range increase in RS-485 2-wire bus systems, 3-way isolation, rail-mountable

## Product Features

- Transmission speeds of up to 1.5 Mbps
- Space-saving slim 22.5 mm device
- High-quality 3-way isolation between all interfaces
- Integrated, connectable termination resistors
- All connections can be plugged in using a COMBICON screw terminal block
- Shipbuilding approval according to DNV



## Key commercial data

package_quantity	1
GTIN	4017918171797

## Technical data

Note:

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

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

## Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (no condensation)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20
Noise immunity	EN 61000-6-2:2005

## Serial interface

# Interface converter - PSM-ME-RS485/RS485-P - 2744429

## Technical data

### Serial interface

<b>Interface 1</b>	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
<b>Operating mode</b>	Semi-duplex
<b>Connection method</b>	Pluggable screw connection
<b>File format/coding</b>	UART (11/10 bit switchable; NRZ)
<b>Data direction switching</b>	Automatic control, min. station response time 1 bits
<b>Transmission medium</b>	2-wire twisted pair, shielded
<b>Transmission length</b>	max. 1200 m (depends on transmission speed, bus system and cable type)
<b>Cascadability</b>	9 (4,8 - 93,75 kbps)
<b>Cascadability</b>	7 (115.2 - 136 kbps)
<b>Termination resistor</b>	390 Ω
<b>Termination resistor</b>	220 Ω
<b>Termination resistor</b>	390 Ω (Can be connected)
<b>Conductor cross section stranded min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	24
<b>Conductor cross section AWG/kcmil max</b>	14
<b>Serial transmission speed</b>	4.8/ 9.6/ 19.2/ 38.4/ 57.6/ 75/ 93.75/ 115.2/ 136/ 187.5/ 375/ 500/ 1500 kbps
<b>Interface 2</b>	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
<b>Operating mode</b>	Semi-duplex
<b>File format/coding</b>	UART (11/10 bit switchable; NRZ)
<b>Data direction switching</b>	Automatic control, min. station response time 1 bits
<b>Transmission medium</b>	2-wire twisted pair, shielded
<b>Transmission length</b>	1200 m (depends on transmission speed, bus system and cable type)
<b>Cascadability</b>	9 (4,8 - 93,75 kbps)
<b>Conductor cross section stranded min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	24
<b>Conductor cross section AWG/kcmil max</b>	14
<b>Serial transmission speed</b>	4.8/ 9.6/ 19.2/ 38.4/ 57.6/ 75/ 93.75/ 115.2/ 136/ 187.5/ 375/ 500/ 1500 kbps

### Power supply

<b>Nominal supply voltage</b>	24 V AC/DC ±20 %
<b>Typical current consumption</b>	90 mA (24 V DC)

### General

<b>Transmission channels</b>	2 (1/1), TD, RD, half duplex
<b>Bit delay</b>	< 200 ns
<b>Bit distortion</b>	< 1.5 %

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## Technical data

### General

<b>Bit distortion, input</b>	max. ± 35 %
<b>Bit distortion, output</b>	< 3.6 %
<b>Electrical isolation</b>	(VCC // RS-485 (A) // RS-485 (B))
<b>Test voltage data interfaces</b>	2 kV AC
<b>Test voltage data interface/power supply</b>	2 kV AC
<b>Test voltage data interface/power supply</b>	2 kV
<b>Electromagnetic compatibility</b>	Conformance with EMC Directive 2004/108/EC
<b>Noise emission</b>	EN 50 081-1
<b>Net weight</b>	130 g
<b>Housing material</b>	PA
<b>Color</b>	green
<b>MTBF</b>	1849 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
<b>MTBF</b>	385 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
<b>Conformance</b>	CE-compliant
<b>UL, USA / Canada</b>	508 recognized
<b>UL, USA / Canada</b>	Class I, Div. 2, Groups A, B, C, D

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27250312
<b>eCl@ss 4.1</b>	27250312
<b>eCl@ss 5.0</b>	27242208
<b>eCl@ss 5.1</b>	27242208
<b>eCl@ss 6.0</b>	27242208
<b>eCl@ss 7.0</b>	27242208
<b>eCl@ss 8.0</b>	27242208

### ETIM

<b>ETIM 2.0</b>	EC000698
<b>ETIM 3.0</b>	EC000698
<b>ETIM 4.0</b>	EC000698
<b>ETIM 5.0</b>	EC000698

### UNSPSC

<b>UNSPSC 6.01</b>	30211506
<b>UNSPSC 7.0901</b>	39121008
<b>UNSPSC 11</b>	39121008
<b>UNSPSC 12.01</b>	39121008
<b>UNSPSC 13.2</b>	43201553

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## approvals

cUL Recognized / UL Listed / cUL Listed / cULus Listed / UL Recognized / cUL Recognized / GOST / DNV / cULus Recognized /

### Approval details

cUL Recognized	
Nominal voltage UN	24 V
Nominal current IN	0.09 A
mm <sup>2</sup> /AWG/kcmil	
UL Listed	
cUL Listed	
cULus Listed	
UL Recognized	
GOST	
DNV	
cULus Recognized	

## Interface converter - PSM-ME-RS485/RS485-P - 2744429

accessories

### Mounting material

ME-SAS - 2853899



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### Screwdriver tools

SZF 1-0,6X3,5 - 1204517



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### Terminal resistor

PSI-TERMINATOR-PB - 2313944

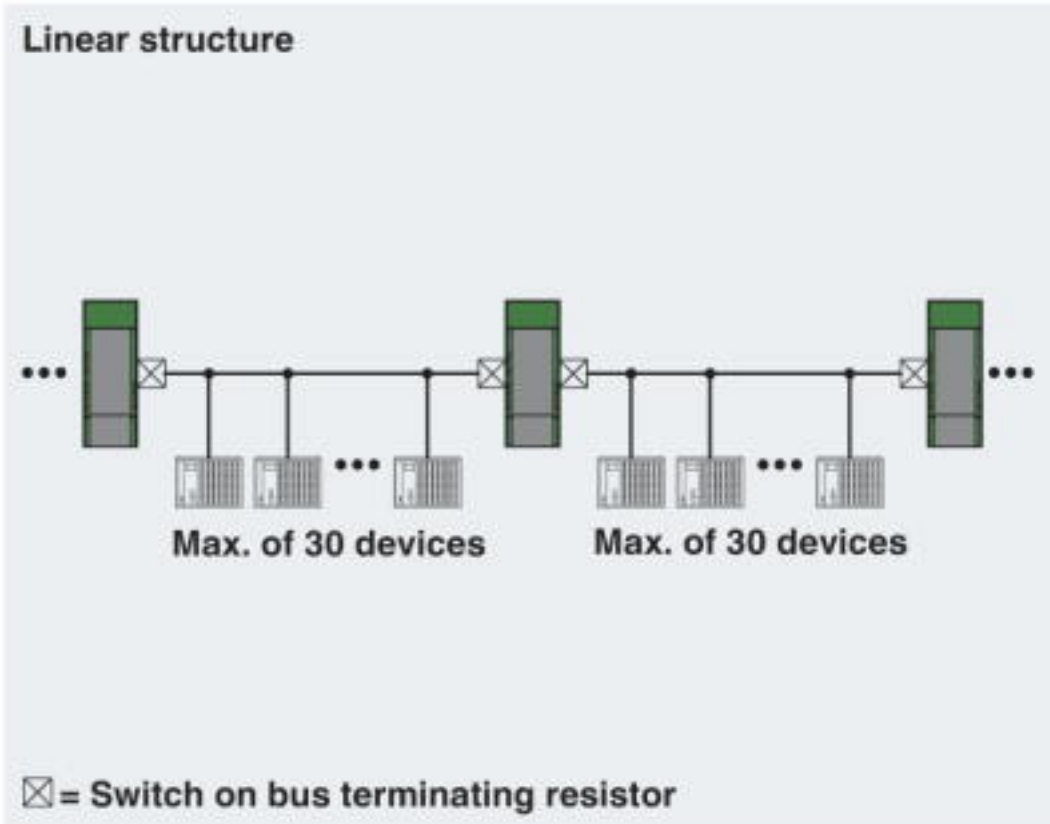


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### Drawings

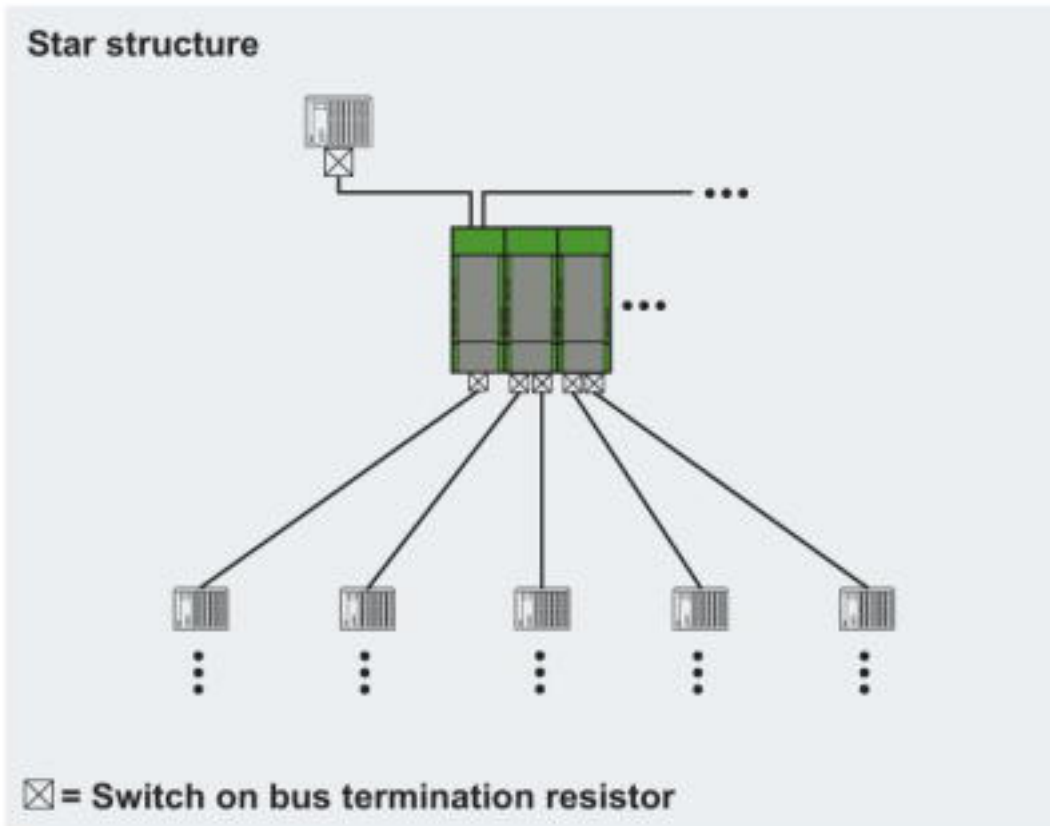
# Interface converter - PSM-ME-RS485/RS485-P - 2744429

Application drawing



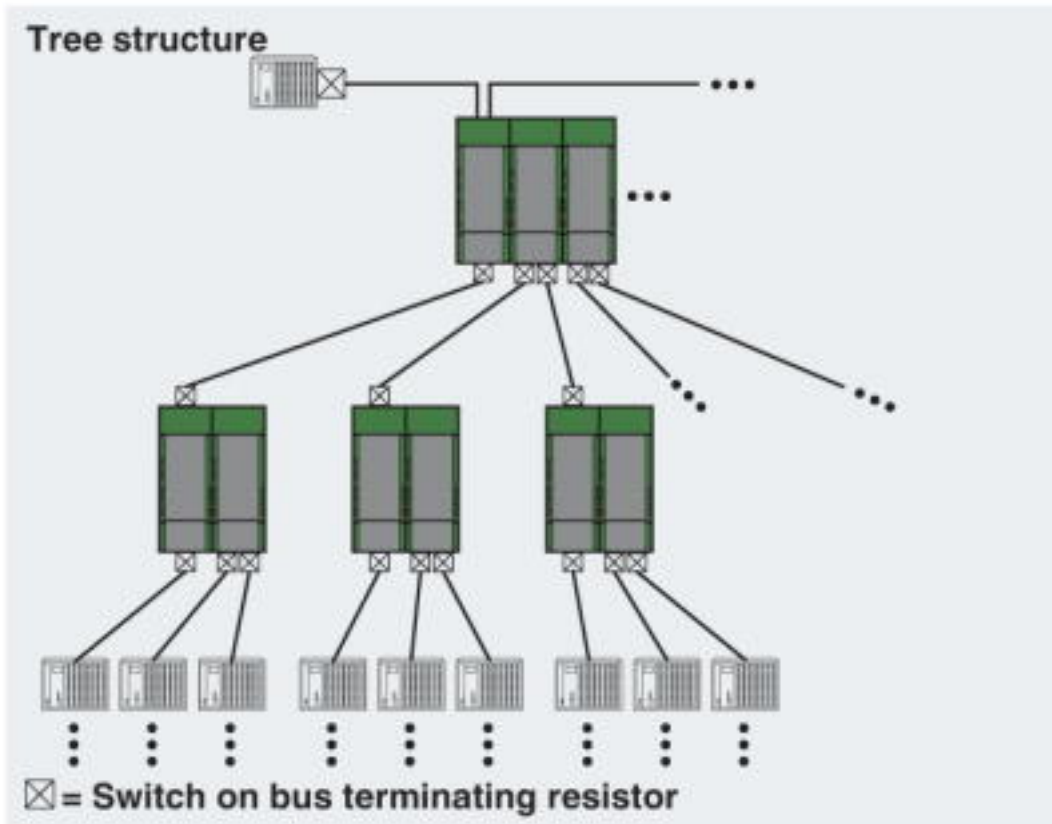
# Interface converter - PSM-ME-RS485/RS485-P - 2744429

Application drawing



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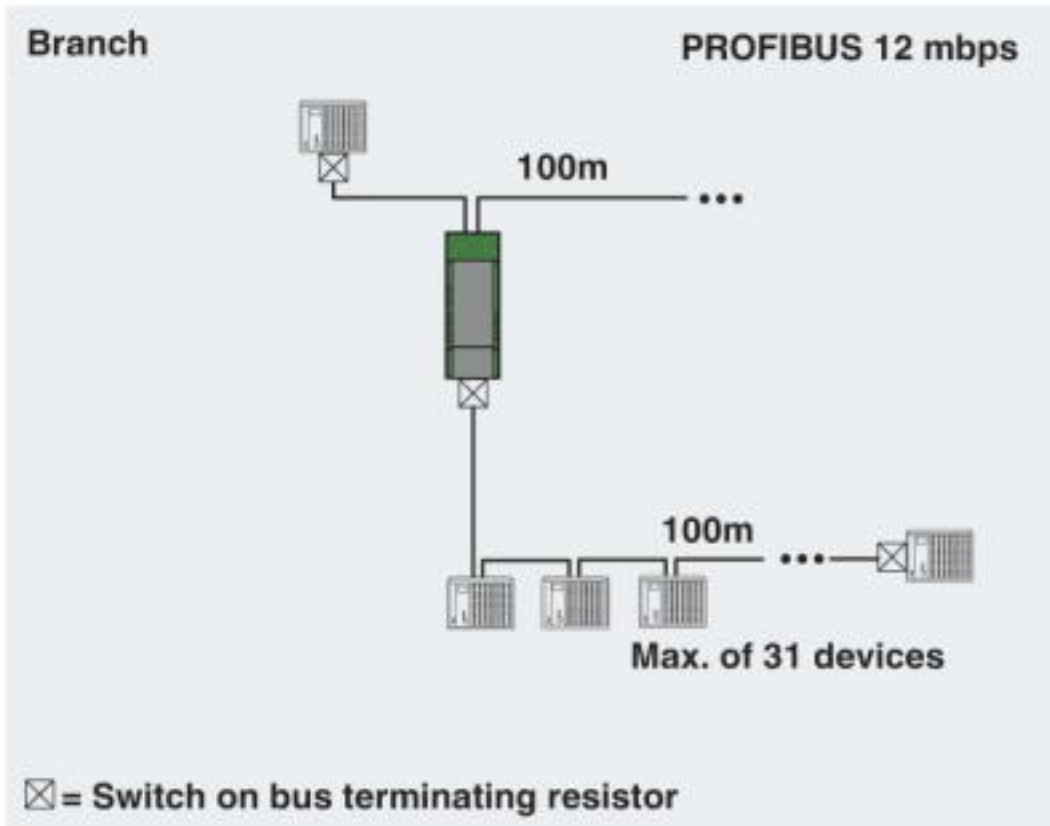
Application drawing





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Application drawing



Circuit diagram

