

Modem - PSI-MODEM-SHDSL/ETH - 2313643

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://phoenixcontact.com/download>)




First generation: Unmanaged Ethernet extender for point-to-point connections, line and ring structures, data rates up to 30 Mbps, distances of up to 20 km on in-house copper cables, diagnostics via USB and LEDs, 2 SHDSL ports, 1 LAN port

Why buy this product

- Distances up to 20 km
- Up to 15.3 Mbps in 2-wire operation
- Up to 30 Mbps in 4-wire operation
- Robust modulation method (SHDSL)
- PROFINET
- Automatic SHDSL data rate detection
- Network transparent (no IP configuration required)
- Protocol transparent
- Automatic detection of network cable type (auto MDI(X))
- Automatic network data rate detection (10/100 Mbps)
- Easy startup, plug and play
- Future proof (IPv4 and IPv6-compatible)
- Two digital outputs for alerting external controllers



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 509206
GTIN	4046356509206

Technical data

Note

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

Dimensions

Modem - PSI-MODEM-SHDSL/ETH - 2313643

Technical data

Dimensions

Width	35 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (Freestanding (40 mm spacing to the right and left), no supply of other modules via the device)
	-20 °C ... 55 °C (Mounted in rows with zero spacing and low power dissipation of aligned modules)
	-20 °C ... 50 °C (Mounted in rows with zero spacing)
	-20 °C ... 45 °C (Mounted in rows with zero spacing and supply of other modules via the device)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20

General

Electrical isolation	DIN EN 50178 (VCC // Ethernet // DSL (A) // DSL (B) // FE)
Test voltage data interface/power supply	1.5 kV _{rms} (50 Hz, 1 min.)
Standards/regulations	EN 50121-4
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Net weight	258.7 g
Housing material	PA 6.6-FR
Color	green
MTBF	1017 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	205 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
MTTF	711 Years (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))
	308 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	125 Years (SN 29500 standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X (Please follow the special installation instructions in the documentation!)
UL, USA/Canada	cULus listed UL 508

Power supply

Nominal supply voltage	24 V DC ±5 % (as an alternative or redundant, via backplane bus contact and system current supply)
	5 V DC (configuration only, via mini-USB type B)
Supply voltage range	18 V DC ... 30 V DC

Modem - PSI-MODEM-SHDSL/ETH - 2313643

Technical data

Power supply

Typical current consumption	< 180 mA (24 V DC)
Connection method	COMBICON plug-in screw terminal block

Serial interface

Interface 1	Ethernet interface, 10/100Base-T(X) in acc. with IEEE 802.3u
Interface	Ethernet
No. of ports	1
Connection method	RJ45 socket, shielded
Transmission length	< 100 m (shielded twisted pair)
Protocols supported	Transparent protocol for IPv4 and IPv6
Serial transmission speed	10/100 Mbps, auto negotiation
Interface 2	SHDSL interface according to ITU-T G.991.2.bis
Connection method	2 x 2-pos. COMBICON plug-in screw terminal blocks
Transmission length	< 20 km (Depending on data rate and cable cross section)
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Serial transmission speed	4-wire operation: 64 kbps ... 30 Mbps
	2-wire operation: 32 kbps ... 15.3 Mbps
Interface 3	USB 2.0
Connection method	Mini-USB type B, 5-pos.
Transmission length	< 5 m (only for configuration and diagnostics)

Function

Management	Plug and play, user-friendly software: Diagnostic functions, log book, individual configuration
Status and diagnostic indicators	LEDs: VCC (supply voltage), ACT/LINK (Ethernet data traffic), ERR (errors) 2 x LINK / 2 x STAT (DSL data traffic port A and port B), DIAG (diagnostic messages)

Digital outputs

Output name	Digital output
Number of outputs	2
Voltage output signal	depending on the operating voltage
Current output signal	≤ 150 mA (Short-circuit-proof)
Behavior of the outputs	Deactivated for device supply via DIN rail connector

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Standards/regulations	EN 50121-4

Modem - PSI-MODEM-SHDSL/ETH - 2313643

Technical data

Standards and Regulations

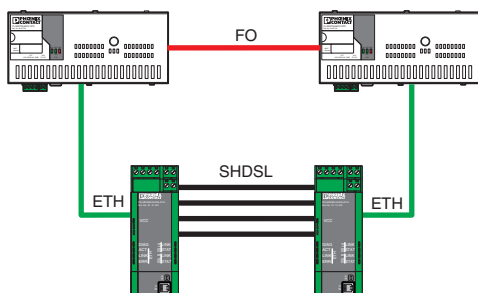
Shock	15g in all directions in acc. with IEC 60068-2-27
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA/Canada	cULus listed UL 508
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A

Environmental Product Compliance

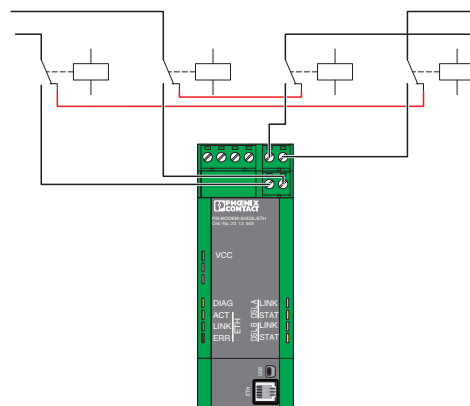
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Application drawing



Functional drawing

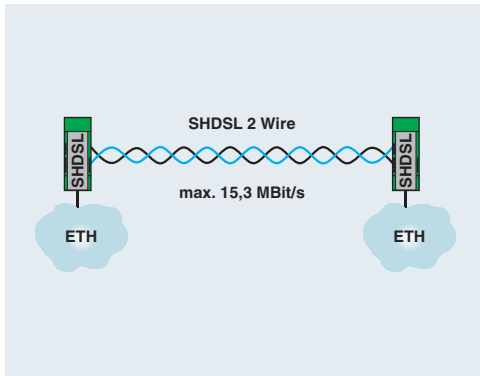


Example application: redundant system via SHDSL and manageable switch

Jumpering with relay

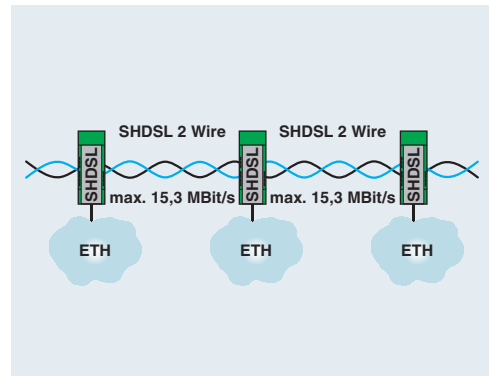
Modem - PSI-MODEM-SHDSL/ETH - 2313643

Application drawing



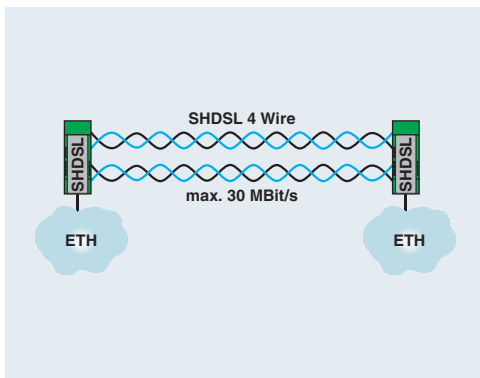
Point-to-point connection (2-wire)

Application drawing



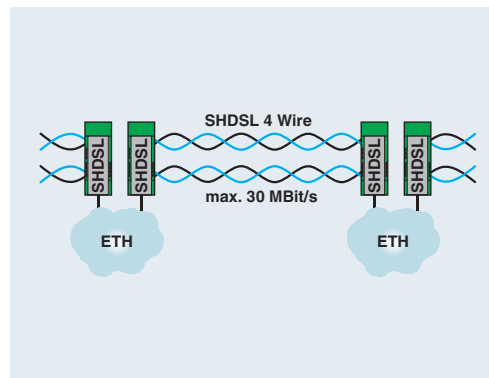
Linear structure (2-wire)

Application drawing



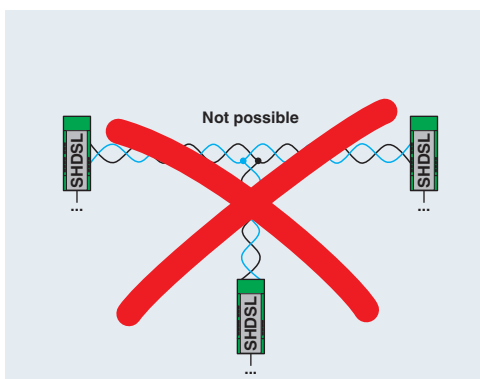
Point-to-point connection (4-wire)

Application drawing



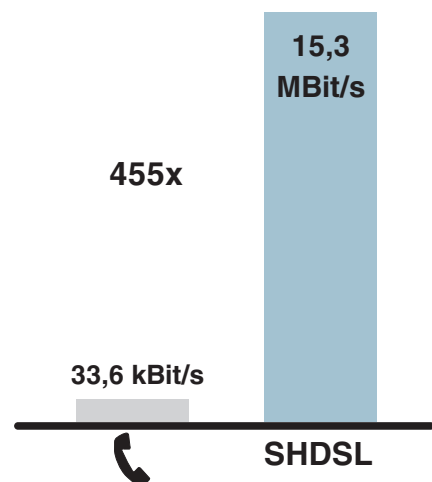
Linear structure (4-wire)

Application drawing



Multipoint communication via SHDSL not supported

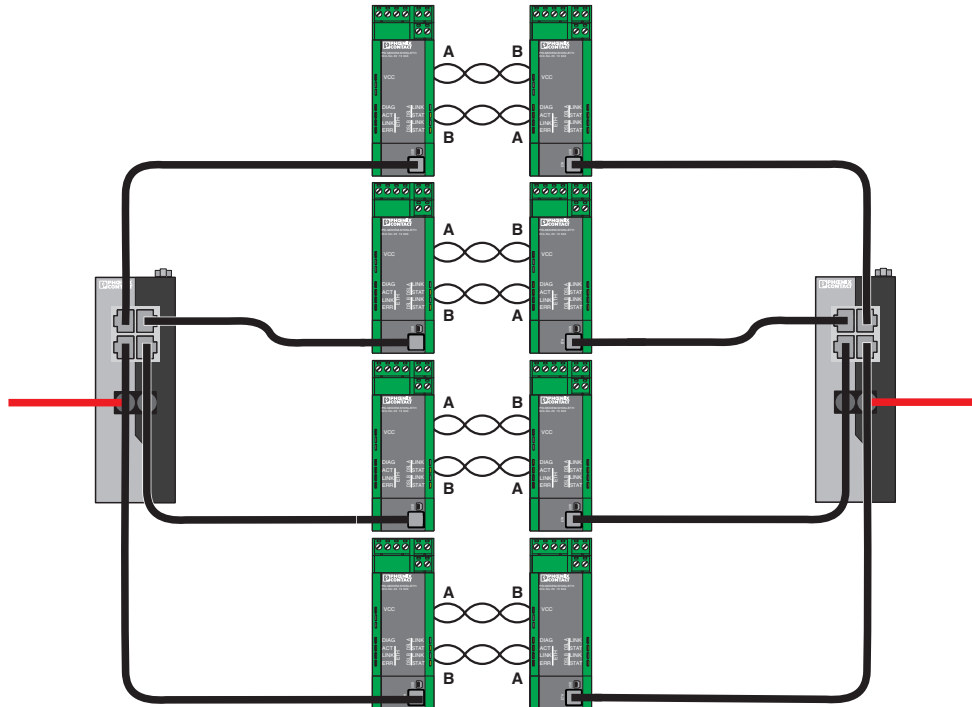
Diagram



Speed comparison between the analog and SHDSL connection

Modem - PSI-MODEM-SHDSL/ETH - 2313643

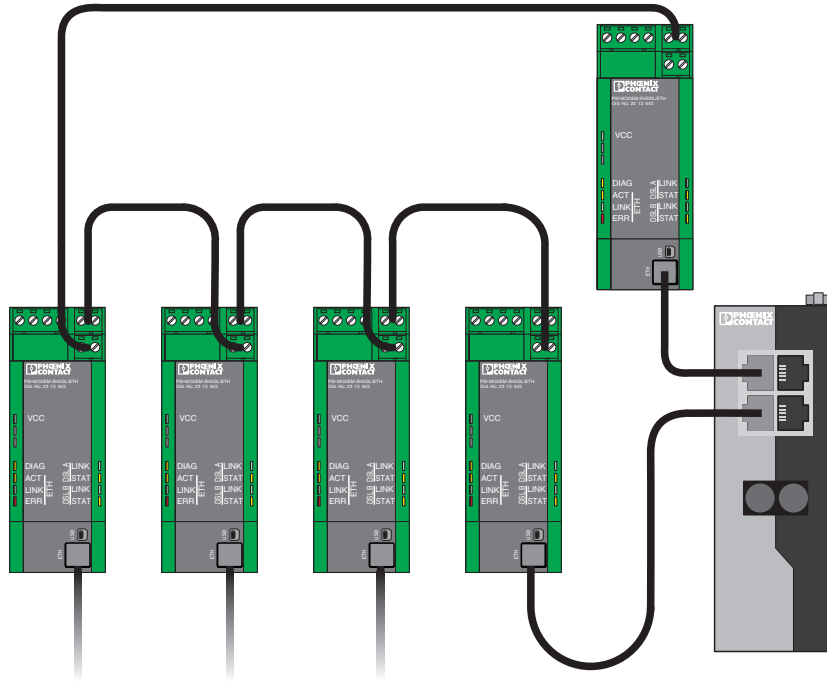
Functional drawing



Link aggregation

Modem - PSI-MODEM-SHDSL/ETH - 2313643

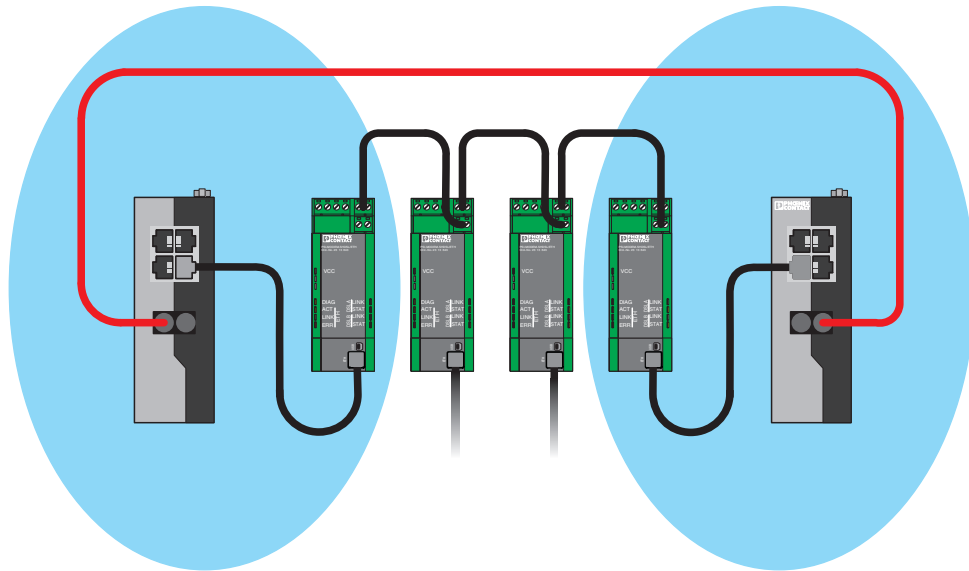
Functional drawing



Redundancy, ring closure via an external switch

Modem - PSI-MODEM-SHDSL/ETH - 2313643

Functional drawing



Redundancy via parallel fiber optic path

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / EAC / cULus Listed

Ex Approvals

ATEX


Approval details


UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
-----------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
------------	--	---	---------------

Modem - PSI-MODEM-SHDSL/ETH - 2313643

Approvals

EAC		EAC-Zulassung
-----	---	---------------

EAC		RU *- DE.A*30.B.01735
-----	---	--------------------------

cULus Listed		
--------------	---	--

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>