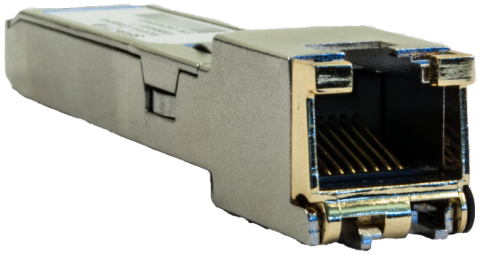
PD-VDSL-SFP

VDSL-SFP for Ethernet extension

- Extenderport VDSL2, RJ45
- Transmits Ethernet over existing telephone cables
- SFP
- Suitable for switches and media converters with SFP rack



SFP PD-VDSL modems are SFP gateway modems integrated into SFP boxes. These SFPs can be inserted into Ethernet switches, media converters and other network devices. This allows to establish Ethernet connections over already existing cable pairs, such as telephone cables, over distances up to 2 km. Thus, no expensive new wiring is needed. The SFP modem uses Telco-quality noise suppression techniques such as Interleave and therefore has a high SNR profile. This allows data to be transmitted securely also in harsh environments. Due to the wide operating temperature range, SFPs can also be used outdoors.

More information

System notes	● Operating several VDSL lines over the same cable can lead to transmission problems due to crosstalk between the different signals in the cable. Ideally, each device connection should therefore be implemented using separate cables. ● When using several VDSL SFPs in one switch, problems with ground loops may occur, depending on the switch. ● When using PD-VDSL SFPs in our RY-LGSO25-xy optical switches, a maximum of 14 PD-VDSL SFPs can be used per switch. ● If several cables have to be strung together on a connection route, it is important to make these transitions as technically sound as possible. This means that ideally, professionally assembled RJ45 connectors are used for the transitions. If this is not possible, e.g. when using telephone cables, it is important to ensure that the stranding of the wire pairs is carried out as little as possible. The contact between the cores of the cables to be connected must be as good as possible galvanically. ● Shielded cables can cause problems due to potential equalization currents. ● In installations, especially in outdoor areas, it is recommended to protect the devices on the line side with an overvoltage protection. We recommend the products of DEHN + SÖHNE GmbH + Co.KG for this purpose. ● These SFPs cannot be used in combination with the PC-MC101-E, PC-MC101-GE and PC-PMC101-GME series media converters.

Technical data

General properties

supply voltage	Power is supplied via the SFP slot of the switch or media converter.
power consumption	3W
MTBF	
operating temperature	-20°C .... 75°C
dimensions	SFP box, 80mm x 14mm x 17mm (LxWxH)
weight	25g

interfaces

copper ports	SFP-Port: The SFP port used must be permanently set to 1GBit/s.
extender ports	1 x VDSL2, RJ45
transmission cable	Copper cables per pair, e. g. Cat3 telephone cable
Transmission distance	The potential distance depends on the quality of the cable used. Older or damaged cables can cause a reduction in distances. Larger wire cross-sections are advantageous, smaller ones are disadvantageous. The values indicated are indicative values without guarantee, measured on a Cat3 telephone cable. The values mean: Distance[m] / Downstream data rate[MBit/s] / Upstream data rate[MBit/s] 100 / 95 / 95 250 / 80 / 60 350 / 55 / 45 600 / 25 / 20 850 / 15 / 10 1200 / 10 / 5 2000 / 5 / 2

Product variants

	PD-VDSL-SFP-OT	SFP with VDSL interface Must be used in combination with a PD-VDSL-SFP-RT or a PD-VDSL-MI1G. In combination with the PD-VDSL-MI1G, its DIP switch 1 must be set to RT.
	PD-VDSL-SFP-RT	SFP with VDSL interface Must be used in combination with a PD-VDSL-SFP-OT or a PD-VDSL-MI1G. In combination with the PD-VDSL-MI1G, its DIP switch 1 must be set to OT.

Version 20.10.2022, Changes without notice