

# PD-VDSL-MI1G en

### VDSL bridge for UTP cable

- Copper port 10/100/1000TX, RJ45
- > Extender port VDSL2, RJ45
- Robust metal housing
- Easy operation
- Power supply 12-24VDC, power supply included



The PD-VDSL-MI1G is an Ethernet extender designed for wide-range Ethernet applications. It is equipped with an Ethernet port and a VDSL2 port (RJ-45 connector) in a metal housing for easy installation in harsh environments. It is a bridge modem. The VDSL2 technology used allows Ethernet signals to be transmitted over distances of up to 2km via a twisted pair cable. The PD-VDSL-MI1G supports both symmetrical and asymmetrical transmissions and can transmit at a data rate of up to approx. 100 Mbps. The extender can be mounted as a tabletop model or on a DIN rail with the optional PD-DIN-kit. With the 19" subrack PD-R2, up to 17 individual PD-VDSL-MI1G can be accommodated on 2U.

### Video network special features

#### Differences VDSL2 to VDSL

These devices support VDSL2. Compared to VDSL1/VDSL, VDSL2 is more robust in transmission and also significantly faster. When using signal cables that have already been laid, the poorer VDSL transmission technology leads to problems more quickly, especially with video transmission, whereas the use of VDSL2 devices results in more stable and more powerful results.

#### More information

The simultaneous transmission of several VDSL lines via the same cable can lead to transmission problems due to crosstalk of the different signals in the cable. Ideally, therefore, each device connection is realised via separate cables.

If several cables have to be lined up on a connection route, it is important that these transitions are technically as good as possible. I.e. ideally, professionally assembled RJ45 plugs are used for the transitions. If this is not possible, e.g. when using telephone cables, care should be taken to ensure that the stranding of the wire pairs is kept to a minimum. The contact between the cores of the cables to be connected must be galvanically as good as possible.

Shielded cables can cause problems due to potential equalisation currents. For installations, especially outdoors, it is recommended to protect the devices on the line side with a surge protector. We recommend the products of DEHN + SÖHNE GmbH + Co.KG for this purpose.

System notes



# **Technical data**

## **General properties**

supply voltage	12-24VDC, hollow plug 2.1 / 5.5 Incl. adapter for screw terminal
power consumption	4,5W
MTBF	
operating temperature	-20°C 65°C
dissipation loss	15BTU/h
dimensions	92mm x 74mm x 23mm, (LxWxH)
weight	0,23kg

### interfaces

copper ports	1 x 10/100/1000TX, RJ45	
extender ports	1 x VDSL2, RJ45	
transmission cable	Copper cable with twisted pairs, e.g. telephone cable Cat3	
Transmission distance	The values listed are approximate 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-MI1G	
RJ45 to screw terminal adapter	Included accessories
Adapter hollow plug to screw terminal	Included accessories
PD-DIN-kit-VDSL	Mounting plate for DIN rail  Must be ordered separately
PD-R2	19", 2U subrack for max. 17 units, must be ordered separately Power supply 230VAC

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