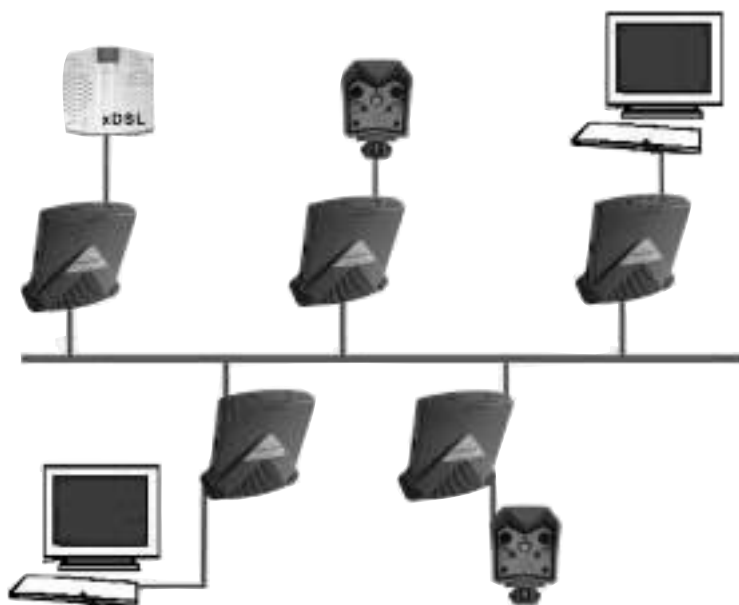




# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### PowerLAN



#### Key Features

- ▶ Online from every power socket
- ▶ No new wiring
- ▶ High data transmission speed
- ▶ Own Home – Network
- ▶ High safety from interception
- ▶ No software installation

The PowerLAN is a product to transmit data through the normal 230 V house installation instead of using special communication cable (powerline communication, plc). One important advantage is the easy installation (plug and play) and the flexible usage of network components in every room of the house. The product consists of at least two appliances, the so-called Ethernet Modem. One Ethernet Modem is connected to a network component and the nearest power socket. This first component is coding the data from the internet side to the PC and modulates the information on the house internal power grid. The second

Ethernet Modem receives these data of the electrical grid and passes them through to the connected computer. PowerLAN enables you, to connect network components in every arbitrary room and story of a house to a free eligible power socket. The PowerLAN uses intelligently the already installed electric cables for data transmission with a speed of up to 14 Mbps.

#### Application

BLACK BOX has developed this product for users, who want to build up a network or would like to extend an existing xDSL connection, without new

wiring through the whole building. Normally houses and apartments are not prepared for a networking system with PCs and other network components (e.g. DSL modem). Therefore - to avoid the effort of additional wiring and break through walls - use the PowerLAN modem, so you get your network connection through the socket. On top you are always flexible to use your PC at any room of the house with a simple "plug and play" at the next socket. The PowerLAN obtains a reach up to 200 meters. Special developed encoding algorithms ensure highest data security.

#### Specifications

**Power supply** — 100 - 250 V ~

**Number of Units** — 16

**Security** — 56 bit DES

**Transmission rate** — 14Mbps, max.

**Mains frequency** — 50 - 60 Hz

**Carrier frequencies** — 4,3 – 20,9 MHz

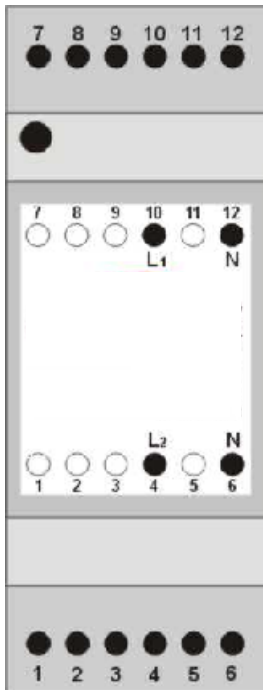
**Standardizing conformity** — EN 55022, EN 55024, CE

**Power consumption (active)** —  
5 W port Ethernet 10Base-T, IEEE 802.3  
TCP/IP

**Modulation** — OFDM – 84 Carrier

**Temperature range** — 5 - 40° C

## Signalkoppler — PLS161SK



Zubehör für das PowerLAN deren Kommunikation auf PLC Technologie basiert, z.B. PLS160AE Für den Schalt- /Sicherungs- /Zählerschrankinbau mit Profilschiene 35mm (Hutschiene). Überall dort erforderlich wo eine ungünstige Netzumgebung, vorhandene Geräte (z.B. Stromzähler, Trägerfrequenzsperre...), den Durchgang von PLC Signalen dämpfen. Bildet mittels kapazitiver Kopplung und induktiver Übertragung einen hochfrequenten Bypass mit Bandpass Charakteristik zu vorhandenen Dämpfungsgliedern.

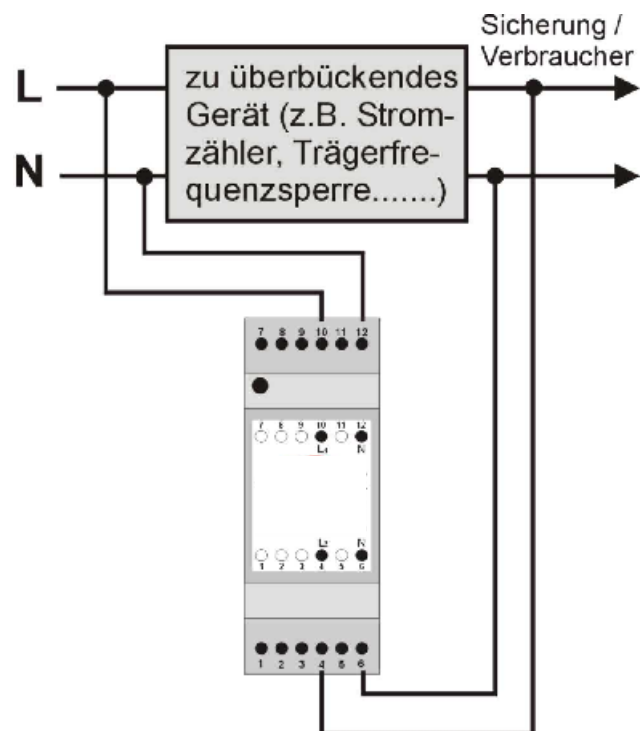
### Specifications

**Nennspannung** — 400V~ 50-60Hz

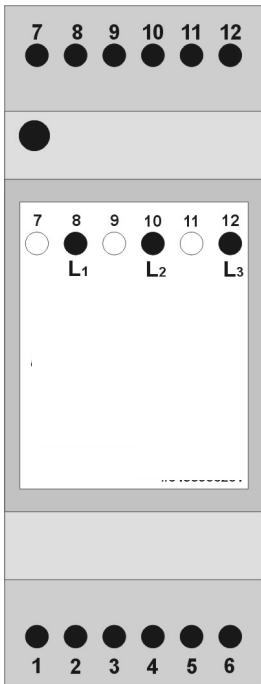
**Leiterquerschnitt** — max. 2,5mm<sup>2</sup>

**Kapazität** — 3x 10nF

**Frequenzbereich** — 0,5-50 MHz



## Phasenkoppler — PLS161PK



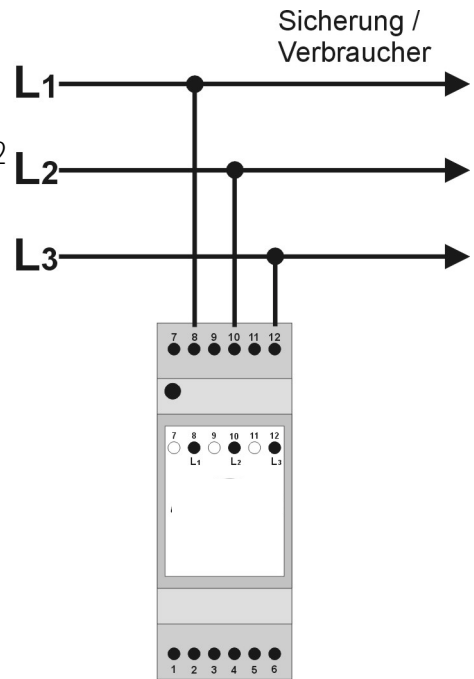
Zubehör für das PowerLAN deren Kommunikation auf PLC Technologie basiert, z.B. PLS160AE, Für den Schalt- /Sicherungs- /Zählerschrankinbau mit Profilschiene 35mm (Hutschiene).

Überall dort erforderlich wo eine ungünstige Netzumgebung den Phasenwechsel des PLC Signals behindert.

Überträgt mittels kapazitiver Kopplung ein PLC Signal auf die jeweils anderen Phasen. Nur ein Gerät für alle drei Phasen erforderlich.

### Specifications

- Nennspannung** — 400V~ 50-60Hz
- Leiterquerschnitt** — max. 2,5mm<sup>2</sup>
- Kapazität** — 3x 10nF
- Frequenzbereich** — 0,5-50 MHz



### Ordering information

ITEM	CODE
PowerLAN .....	PLS160AE
Signalkoppler .....	PLS161SK
Phasenkoppler .....	PLS161PK

## Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

**On the Phone** — no charge, answer calls in less than 20 seconds, find the right product with our technical experts.

**On-site** — superior design and engineering, Certified installations, end-to-end service.

**On-line** — receive technical knowledge on-line, including technology overviews, BLACK BOX Explains and the Knowledge Box.

**Most comprehensive TECHNICAL SUPPORT** — our best Product! Free hotline TECH SUPPORT!

**The world's best customer service** — Custom design services and products, the best warranties, money-saving discount programs.

**BLACK BOX exclusives** — Certification Plus. Guaranteed-for-life products and services.