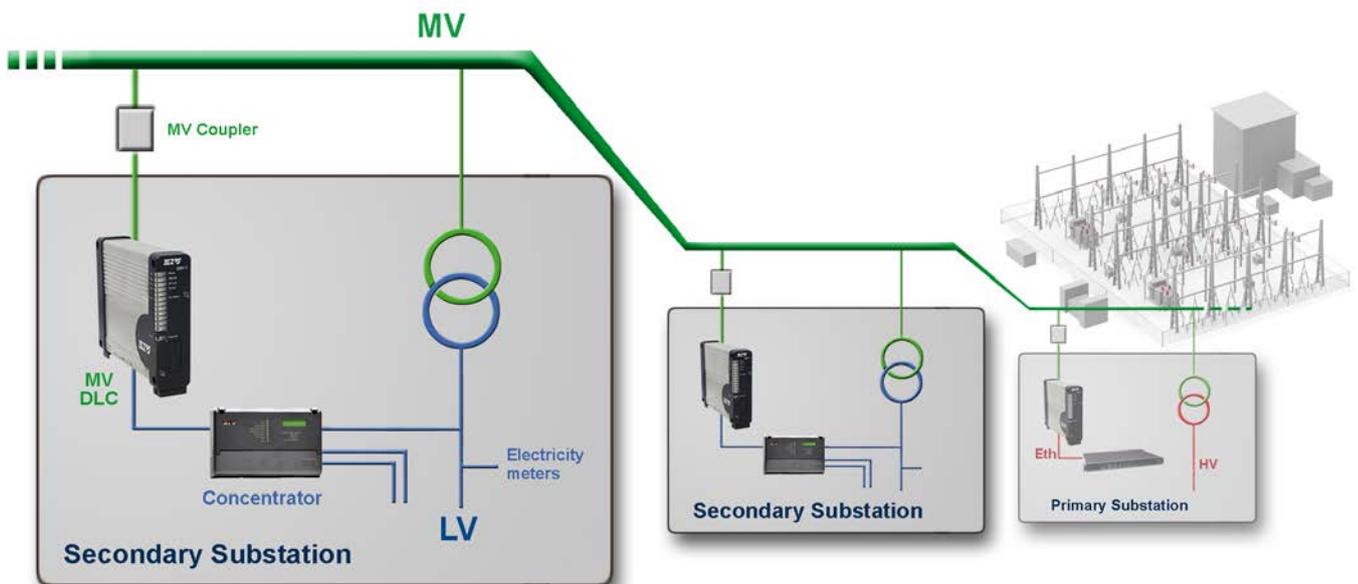




ZBP-1

MV PLC Equipment



Equipment for urban environment.

The main purpose of the ZBP-1 is data transport for services in Medium Voltage Secondary Substations to a Primary Substation.

The ZBP-1 is a good option for transmitting data at high speed between Distribution Transformer Centers, using the existing infrastructure (medium-voltage power lines).

ZBP-1 technology

- The ZBP-1 allows transmission of data at high speed over short medium-voltage power lines. To achieve this goal, the system makes use of an Orthogonal frequency-division multiplexing (OFDM) modulation.
- The channel is constantly evaluated in such a way that the carriers that are affected by noise or interferences can automatically reduce its base modulation or even not be used at all.

Main applications

- Data transmission in mid-distance levels (urban environment).
- Connectivity between Distribution Transformer Centers (DTC).

Product overview

- The ZBP-1 is made up of a mechanical chassis, which houses the power supply and digital modem unit.

Equipment interfaces

- 1 Fast Ethernet 10/100Base-Tx port (female RJ-45 connector) for DTC data connection. It is also used for equipment configuration.
- 1 BNC connector for MV line connection.
- 1 port (9-pin female SUB-D connector) for factory use.
- LEDs for status indication.

Management system

- Local and remote management through a console or built-in web server (HTTP/HTTPS), SSH and Telnet server.

Technical Information

Frequency range	Selectable by the user from 2 MHz to 14 MHz
Main characteristics	<ul style="list-style-type: none"> ➢ OFDM modulation with 380 useful carriers. ➢ QPSK/QAM modulation applied to each carrier. ➢ Turbo code by Forward Error Correction (FEC).
Transmission rate	Up to 28.8 Mbit/s
Distance	Up to 5 km
Mounting	<ul style="list-style-type: none"> ➢ Wall mount (4mm Ø hole). ➢ Dimensions: Height: 150 mm; Width: 40 mm; Depth: 177 mm. ➢ Weight: 500 g
Power supply	<ul style="list-style-type: none"> ➢ 19-72 V_{DC} (isolated). ➢ Max. power consumption: 15 W
Temperature range	From -25° C to +70°C
Material	Varnishing (RAL 9006) aluminium 6060 T5 alloy and fireproof (UL 94 V0) plastic (RAL 7024)

