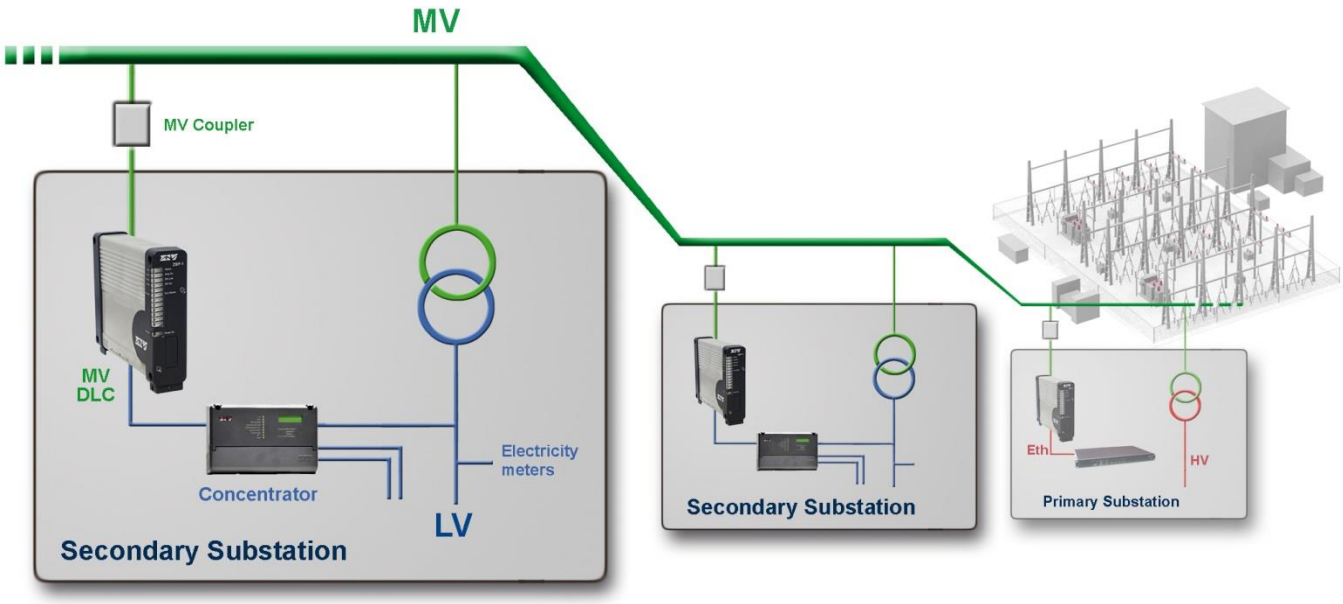
ZBP-1

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

	4ZBP010000000100	**4ZBP010001000100**
Frequency range	Selectable from 2 MHz and 14 MHz	Selectable from 2 MHz and 12 MHz
Main characteristics	OFDM modulation with 380 useful carriers	OFDM modulation with 296 useful carriers
	QPSK/QAM modulation applied to each carrier	
	Turbo code by Forward Error Correction (FEC)	
Transmission rate	Up to 36 Mbit/s	Up to 28 Mbit/s
Distance	Up to 5 km	
Mounting	Wall mount (4mm Ø holes)	
	Dimensions: Height: 150 mm; Width: 40 mm; Depth.: 177 mm	
	Weight: 500 g	
Power supply	19-72 Vdc (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)	

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