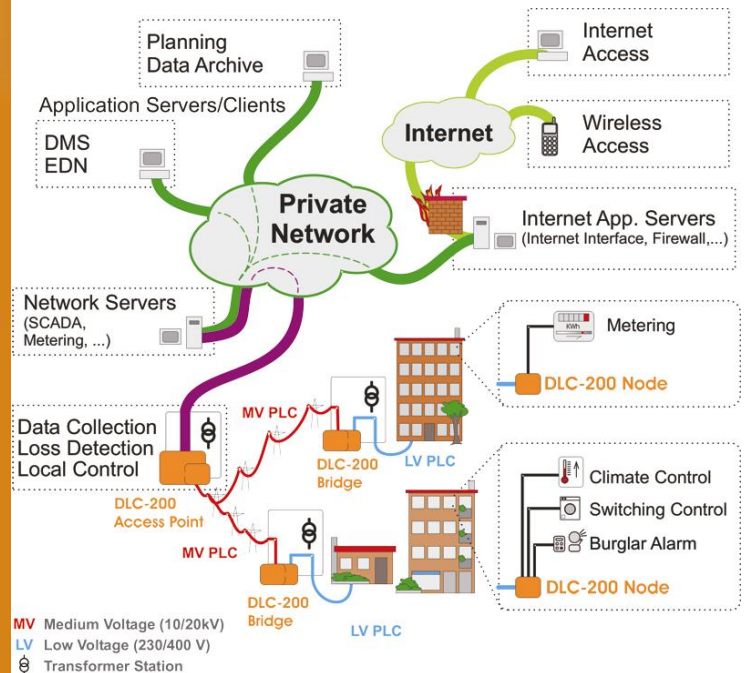


DLC-200 Node

- Field device for DLC-2000 System
- Communication via different media
 - high, medium and low voltage power-lines
 - special distribution lines (e.g. emergency power supply lines)
 - long distance or heavily disturbed 2-wire line
- data rates up to 576 kbps
- regulation compliant communication (CENELEC / FCC)



DLC-200 Node

■ Function

The basis of the DLC-2000 system is a power line communication (PLC) infrastructure that allows to access metering and control equipment remotely. In accordance with the overall project goals, the primary usage of this infrastructure is remote meter reading and remote control. Besides that, the communication platform is open to various kinds of add-on services. The bottom-level of the communication infrastructure is comprised of DLC-200 Nodes, each coupled with a PLC interface (usually a low-voltage PLC device, in certain cases also with medium-voltage PLC interface).

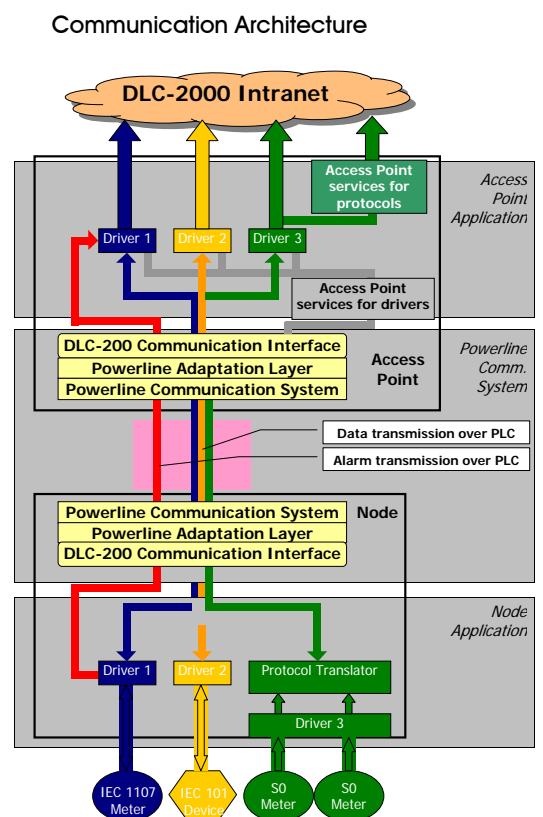
A Node is usually installed at the consumer site, e.g., inside an apartment, and has a number of metering inputs (such as M-Bus). Nodes are also equipped with digital outputs that allow switching off and on electrical/heat/gas/water supply for a particular consumer, upon commands from the utility company.

■ Features DLC Communication

- Frequency Range 9 to 500 kHz
- Bandwidth 4 to 400 kHz freely configurable
- Carrier frequencies freely adjustable
- Bandwidth efficiency 0.5 to 2.9 bit/Hz/s
- Data rates 9.6 to 576 (288 CENELEC) kbps
- Transmission with OFDM and FEC
- synchronous and asynchronous transmission mode
- complies with Standards EN 50065 (CENELEC), IEC 61000-3, FCC part 15 subpart B

• Interfaces

- 1x Ethernet 10BaseT/100BaseTX electrical or 100BaseFX optical variant.
- 2x RS232/RS485, mode selectable by software control
- CAN-Bus, fully compliant with the ISO 11898 standard, high speed and low speed mode
- 3 x EN 62056 (IEC1107) metering interface
- M-Bus Master metering interface
- Smartcard Reader for standard SIM-cards compliant to ISO 7816 standard
- System connector (for connecting e.g. I/O card)



Technical Data

Frequency Range

9 – 500 kHz

Freely configurable Band Width

4 – 400 kHz

Data Rates

9.6 – 576 (288 CENELEC) kbps

Maximum Range without Repeater

500 m – 1 km over low voltage lines
up to 15km over medium voltage lines

Medium Voltage Coupling

capacitive or inductive

Further Features

- carrier frequencies freely configurable
- Transmission with OFDM and FEC
- synchronous and asynchronous transmission
- complies with standards EN 50065 (CENELEC), IEC 61000-3, FCC part 15 Subpart B
- Transmission via high, medium and low voltage or any two-wire line (even heavily disturbed and attenuated lines)
- protection class: IP51