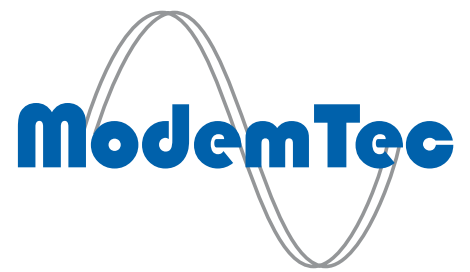


10,000+ Installations
25 Years of Experience
G3-Alliance Member









TRANSFER FAST AND SECURE DATA DIRECTLY VIA POWER LINES

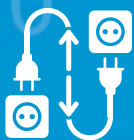
USE EXISTING INFRASTRUCTURE AND SAVE ON BUILDING COMMUNICATION NETWORKS

WHAT IS PLC COMMUNICATION AND HOW CAN IT BENEFIT YOUR NETWORK?

Power Line Communication (PLC) is a technology that enables data transmission over existing power networks. This eliminates the need for additional communication infrastructure – data travels directly through power lines.

KEY BENEFITS OF MODEMTEC'S PLC MODEMS:

-  **COST SAVINGS** – utilize existing infrastructure
-  **SECURITY** – AES-128 encryption, IEC 62351 compliant
-  **RELIABILITY** – adaptive routing, automatic network configuration, low latency (< 55 ms)
-  **WIDE COMPATIBILITY** – transparent integration with leading protocols (Modbus, DLMS/COSEM...)
-  **EASE OF USE** – plug & play installation
-  **HIGH PERFORMANCE** – operating on networks from 0 kV up to 35 kV, speeds up to 280 kbps, range up to 50 km



LOW VOLTAGE COMMUNICATION MT49S (SINGLE-PHASE) AND MT49S3 (THREE-PHASE)

Core PLC modems for reliable communication in LV networks, based on the G3-PLC standard.

- ➔ Data rate up to 280 kbps, fully AES-128 encrypted
- ➔ Operates in AC networks up to 230V, DC networks up to 400V
- ➔ Interfaces: RS485, RS232, optional LAN gateway (WCP)
- ➔ Communication distance up to 8 km
- ➔ Transparent data transfer (incl. Modbus, IEC 62056, DLMS/COSEM...)
- ➔ Automatic and adaptive network formation



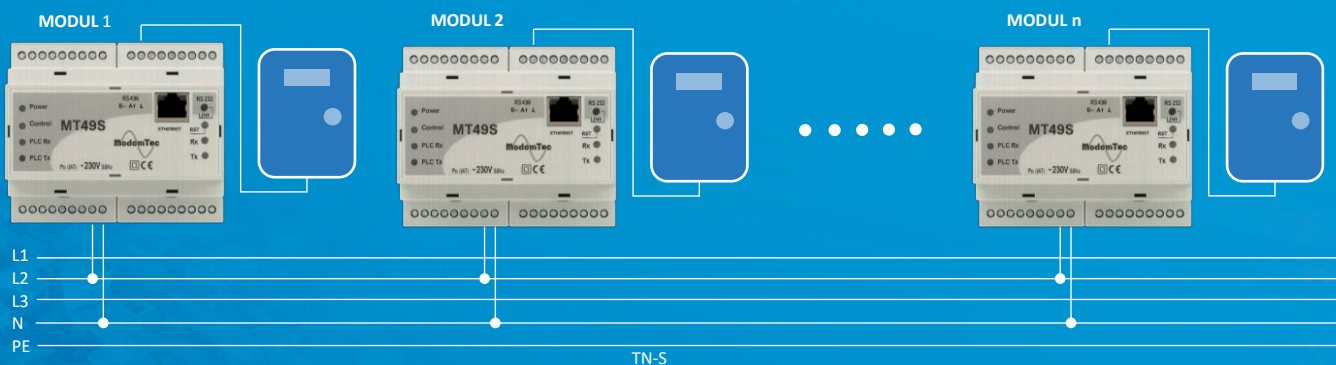
LV MODEM FAMILY

- ➔ **MT49S-B** – 4 binary inputs / outputs (remote control & monitoring)
- ➔ **MT49S-G** – Ethernet LAN module for local network integration
- ➔ **MT49S-C** – external coupling device for line optimization

USE CASES FOR LV MODEMS

- ➔ Smart Metering – reliable data collection for billing and consumption analysis
- ➔ Building Automation – HVAC, lighting, and energy systems control
- ➔ Industrial Automation – remote data acquisition and control
- ➔ SCADA Integration – secure, high-speed links
- ➔ Fault Detection & Monitoring – real-time condition analysis
- ➔ Remote Asset Management – pumps, valves, sensors
- ➔ Energy Management Systems – load balancing and optimization

INSTALLATION EXAMPLE





MEDIUM VOLTAGE COMMUNICATION MT-MVPLC

Robust IP65 solution for data communication in MV networks (1 kV-35 kV), based on G3-PLC standard.

KEY FEATURES

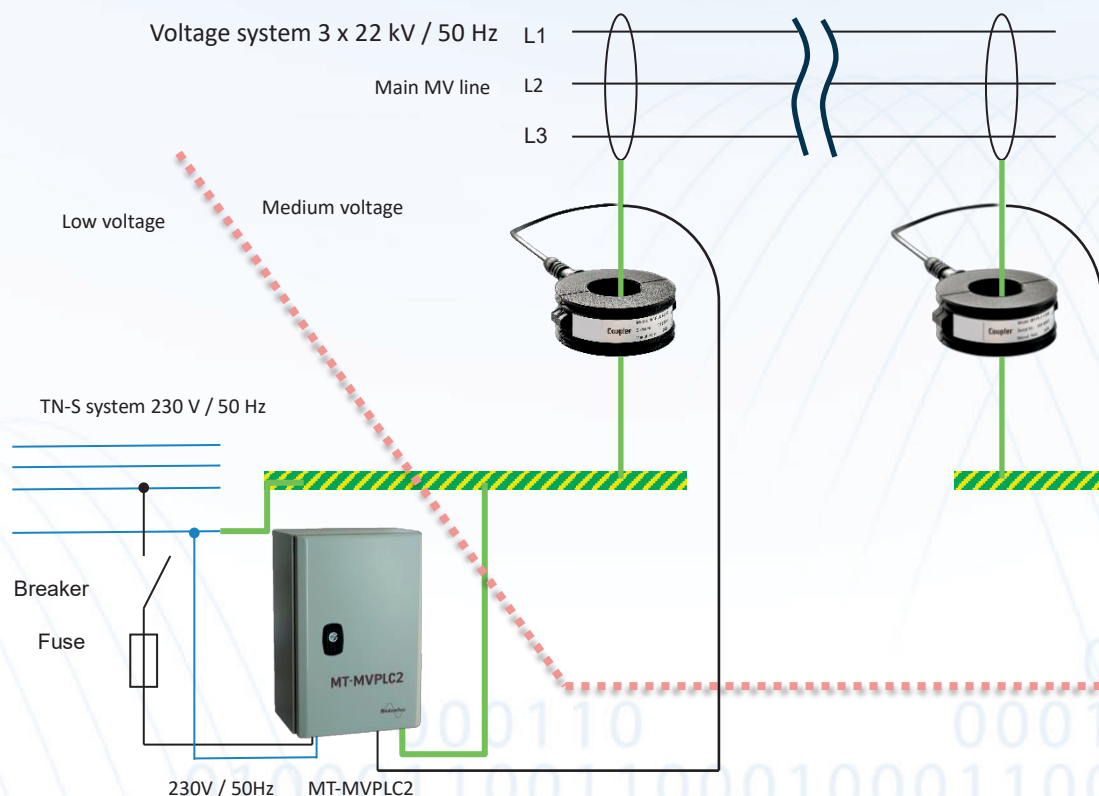
- ➔ Data rate up to 280 kbps, fully AES-128 encrypted
- ➔ Communication distance up to 50 km
- ➔ Equipped with inductive or capacitive couplers
- ➔ Surge withstand capability up to 125 kV impulse voltage
- ➔ EMC and safety compliant, tested per IEC 60060-1
- ➔ Mounting: wall, pole, lattice structure

USE CASES FOR MV MODEMS

- ➔ MV Network Monitoring – transformers, reclosers, switchgear
- ➔ Grid Automation – breakers, switches, protection devices
- ➔ DMS Integration – backbone for advanced grid management
- ➔ Outage Management – fast detection and isolation
- ➔ Power Quality Monitoring – detailed transmission of quality parameters
- ➔ Renewable Energy Integration – wind, solar, distributed generation
- ➔ Outdoor Installations – rugged and weather-resistant design






INSTALLATION EXAMPLE

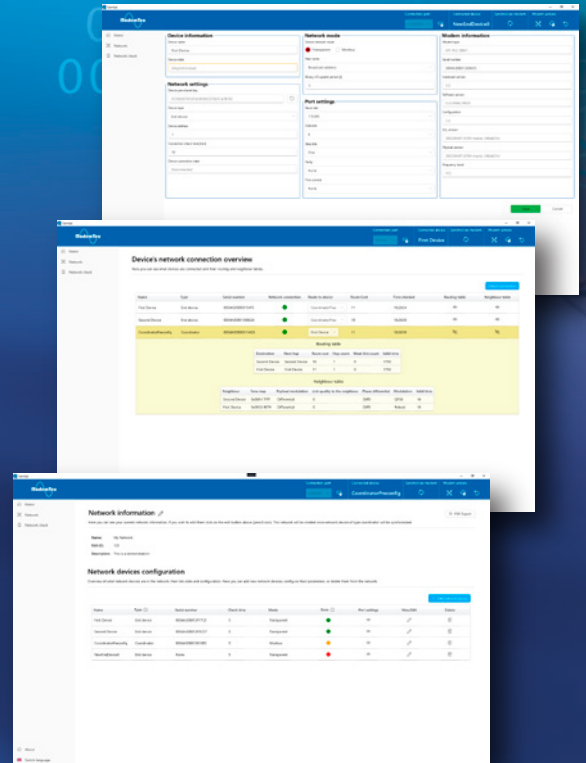


SEMSET SOFTWARE

Every ModemTec modem comes with the intuitive SemSET application for configuration, diagnostics, and management of your PLC network.

-  Supports various interfaces (incl. serial...)
-  Easy setup, monitoring, and maintenance
-  Remote SW updates and technical support

WE INNOVATE TODAY AND SOLVE
THE NEEDS OF TOMORROW.



REFERENCES & GLOBAL PRESENCE

- Proven in **10,000+ installations worldwide.**
- Trusted by partners:
E.ON, Veolia, Škoda, HP, Saudi Aramco.
- Used for remote metering in ČEZ Distribution network
- Solutions deployed across Europe, Asia, and the Middle East.

MODEMTEC IN THE WORLD



OUR PARTNERS



TRY OUR PLC MODEMS IN PRACTICE!

Contact us for a demo or tailored solution:

 plc.modemtec.com  info@modemtec.com

