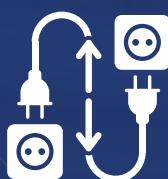


10,000+ Installations  
25 Years of Experience  
G3-Alliance Member

ModemTec



## 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



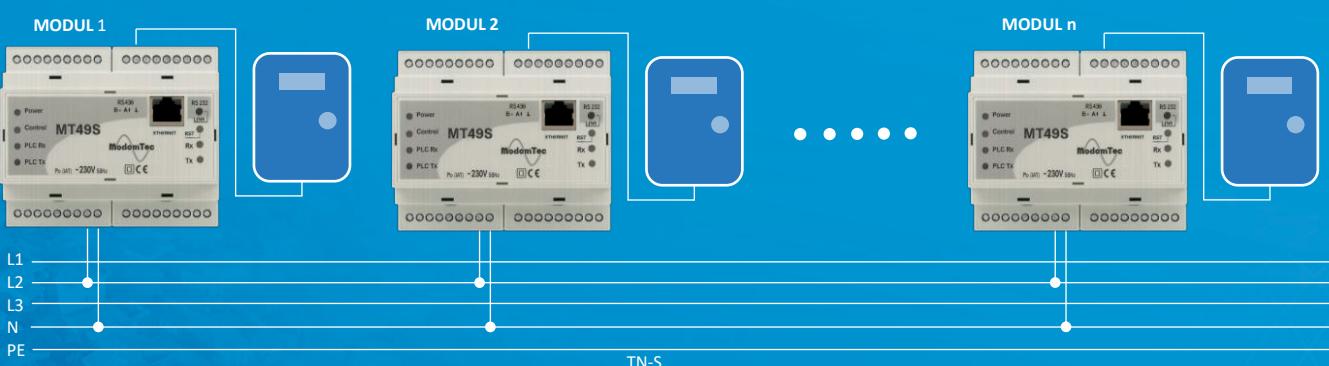
### LV MODEM FAMILY

- **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

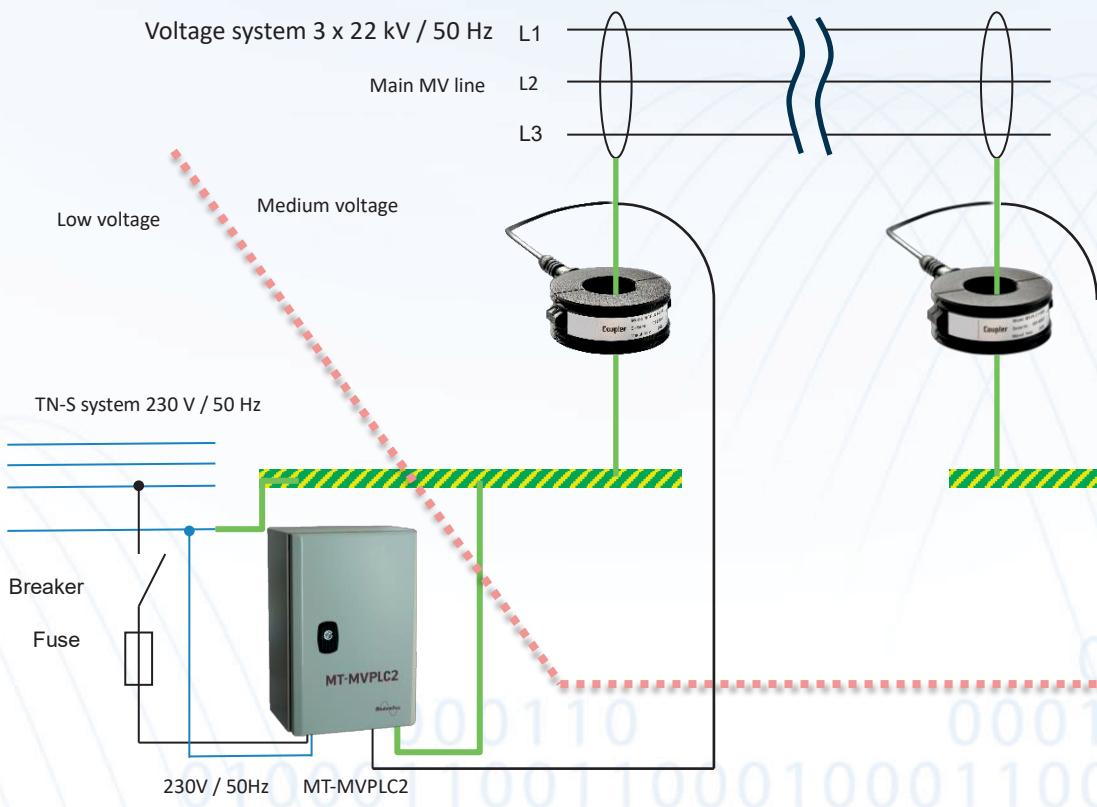
- Data rate up to 280 kbps, fully AES-128 encrypted
- Communication distance up to 50 km
- Equipped with inductive or capacitive couplers
- Surge withstand capability up to 125 kV impulse voltage
- EMC and safety compliant, tested per IEC 60060-1
- Mounting: wall, pole, lattice structure



### 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

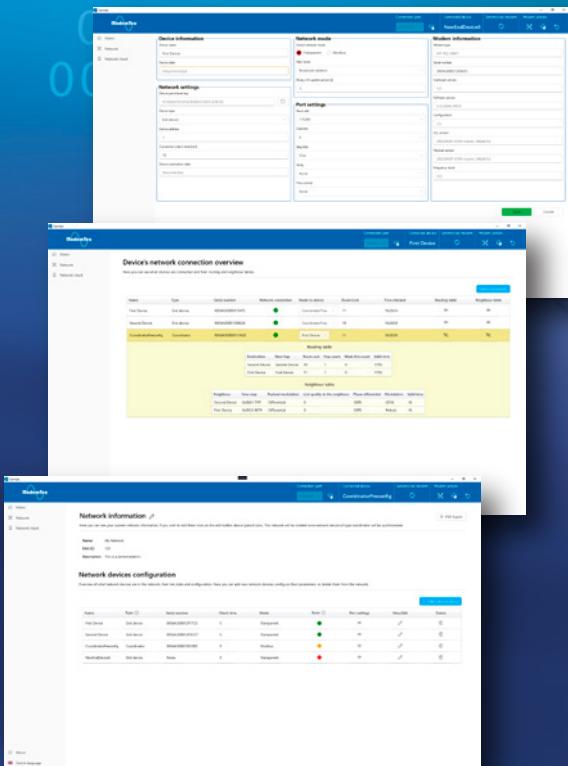
### INSTALLATION EXAMPLE



## 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](http://plc.modemtec.com)



[info@modemtec.com](mailto:info@modemtec.com)

