

### **→ COMPANY PROFILE**



### 0100011001100011000001 010001100 About Us

ModemTec is reliable producer and supplier of comprehensive solutions in the field of medium and low voltage lines diagnostics and power line communication. The company is based in Třinec, near Ostrava, the third largest city in the Czech Republic. The R&D teams are located in Brno and Prague.

Development activities are realized by experienced team of engineers in the unique Center for Intelligent Energy. This facility is used for the development of devices that meet the current and future needs of the energy sector, including high-voltage electrical engineering. The company closely cooperates with the prestigious universities, including the UWB Pilsen, CTU Prague, BUT Brno and VSB-TUO Ostrava for development.

ModemTec currently employs almost 50 employees. It has own production capabilities, competence for assembly and recovery, and provides premium service for its customers, including post-warranty service.

### **25 YEARS**

of experiences

### **PATENTED**

solutions

### **40 COUNTRIES**

use our products

Team of honoured

**SPECIALISTS** 

- Research & Development
- SW Applications
- Expert Diagnostics
- System Integration
- Production and Assembly
- Tailored Solutions
- ☑ HW Installations

■ Long-Term Warranty

Professional servicing

Here at ModemTec we build long term partnerships and bring benefits to our clients.

You can rely on us.





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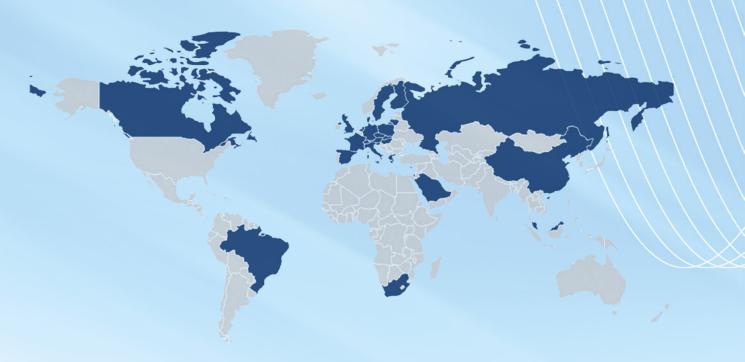
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### ModemTec in the World



Our products and solutions are currently used in more than 40 countries around the world.

WE INNOVATE TODAY AND SOLVE THE NEEDS OF TOMORROW.

### Our Partners



































# PARTIAL DISCHARGES ONLINE MONITORING SYSTEM – PD DOCTOR

PD Doctor solution allows online monitoring of electrical equipment condition, including subsequent precise and reliable analysis. It is unique system for increase of power supply reliability and power grids and electrical machines damage detection.

- Online detection and diagnostics of partial discharges
- Patented solution
- Monitoring and protection of devices in wide range 230 V 400 kV
- **Easy** integration into every system through standardized interface
- Suitable for cable joints, generators, electric motors, transformers, cable and overhead lines, switchboards, switchgears, etc.





# LOW VOLTAGE PLC COMUNICATION

PLC (Power Line Carrier) Communication technology uses existing power distribution lines and wires for data transmission. Our PLC Communication is stable, reliable, and operates successfully also in disturbed environment.

- Operates on any power lines 0 to 1,000 V
- Communication distance up to 5,000 m
- Single-phase and three-phase variants
- Optimized communication standard
- □ Plug-and-play setup configuration

# MEDIUM VOLTAGE PLC COMMUNICATION

Data transmissions over medium voltage power lines allow remote control of transformer stations, command switching elements in a system, or serve as a general transmission channel for customer needs.

- Operates on power lines up to 22 kV (35kV)
- Extraordinary communication distance 10-50 km
- Reliable, robust and encrypted communication
- Line parameters adjustment
- Suitable for both, indoor and outdoor installation





# CLEAN UP PROGRAMME FOR SMART METERS

Smart Meter Clean Up system is a unique diagnostic tool designed to increase communication reliability readings between smart meters in both, high- and low-density areas.

- Identifies "bottlenecks" that decrease the reliability of PLC Communication
- □ Suitable for any PLC standards used (PRIME, G3-PLC, OSGP, etc.)
- Suggests best solutions for improvements in communication
- No needs for smart meters uninstallations
- GDPR friendly solution

# PHOTOVOLTAIC POWER-PLANTS DIAGNOSTICS

System SolarDiag is developed for diagnostics of PV Panels, in order to maintain their safe and reliable operation. It helps to detect any irregularities and defects that could lead up to unsafe panels operations or fire.

- Measurement of current, voltage and output of each string
- Protection of every single string and wireless data transmission of its condition and performance
- Fire protection from a faulty component of the PV plant
- Recommended for roof panel installation, and for PV power plants
- Monitoring and evaluation of partial discharges in the entire photovoltaic power plant





### MEASURING DEVICES

Sampling wattmeter is a key part of a diagnostic system for electrical machines. It measures all important network parameters and sends warning alert in case of unusual machine conditions. It enables to measure machine's efficiency and predicts possible failures.

- Measuring of effective values of voltage and current, acttive, reactive and appartent power
- Machine utilization monitoring
- Power profile analysis
- Energy losses detection
- Instant informations