Continuous monitoring of power quality
Let’s connect.

Energy management with added value — We support you with our coordinated range of services:

**Implementation** of an energy management according to ISO 50001 and energy audits according to EN 16247-1.

**Energy law-compact** for advising on legal obligations and possible government benefits.

**Energy efficiency analysis** to identify and evaluate potential savings.

**Energy concept Starter** to show the approaches for optimizations in your energy generation.

**Load-profile analysis** for energy data analysis to successfully increase the efficiency of the company with existing data.

**EnPI seminars** to support the fulfilment of standard requirements according to DIN ISO 50006.

**Funding checks** for the presentation of possible subsidies which can be used for appropriate measures.

**EMV Seminars** for standard-compliant application in plant technology and building automation

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Monitoring in accordance with **IEC 61000-2-4** is also recommended, as the standard defines **numerical limits** for industrial and non-public voltage distribution systems at nominal voltages up to 35 kV.

- Takes place at the connection point – at the consumer – for the power quality application
- A guiding standard for many product and engineering standards
- Definition of the immunity levels of voltage distortion, which must withstand machinery and equipment in industrial plants
- Exceeding the level can lead to failures for which the machine or plant supplier is not in warranty

Our Energy Analyser 750 allows the comprehensive monitoring of specific power quality parameters.
The Energy Analyser 750 is particularly suited to the monitoring of the power quality according to common standards, e.g., EN 50160, IEEE519 or IEC 61000-2-4. The Power Quality Analyser records and analyses all power quality parameters, e.g., flicker, short-term interruptions with fault recorder function, transients, harmonics up to 63st, and inrush currents. Extensive communication possibilities, e.g., Ethernet (TCP/IP) with Multiport access, BACnet, Modbus, Profibus, HTTP, FTP, SMTP, SNMP and DNS increase flexibility. This permits a cost-effective and fast integration into existing communication architectures. The device’s own homepage is accessible via browser. The software ecoExplorer go enables you to create comprehensive evaluations and reports for common PQ standards.

- User-friendly, coloured graphic display
- Ethernet communication architecture
- Residual current monitoring (RCM)
- Measuring instrument homepage
- BACnet protocol for building communication
- Modbus gateway function
- Programming/PLC functionality
- Large 256 MB measuring data memory
- Alarm management
- Peak load display
- Accordance with IEC 61000-4-30

Power Quality - Standards and directives

In Europe the EN 50160 is the standard for the quality description of the public power grids.

The EN 50160 refers to the mains voltage, i.e., the voltage measured at the mains connection point. A voltage distortion in the public grid leads to a voltage distortion in the industrial grid and should therefore be continuously monitored.