

# **European Measuring Instruments Directive (MID)**

With the MID-certified 7KM PAC2200 MID and 7KT PAC1600 MID measuring devices from the SENTRON portfolio for power monitoring, power data can be easily, reliably, and cost-efficiently measured and energy consumption forwarded to third parties according to the European Measuring Instruments Directive (MID).

# What is the MID certification?

The MID certification is based on the third-party billing of active energy. Active current and active power are calibrated – thus also the load profile. The Measuring Instruments Directive is a European directive and applies to all member states of the European Union and Switzerland. The MID seeks to harmonize the calibration systems in Europe and thus facilitate their application. Through the MID, initial calibration is regulated uniformly among countries. The measuring devices are designated accordingly. Testing and testing costs are reduced through the MID.

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### Requirements of measuring devices

In the MID, the following requirements of measuring devices are uniformly regulated:

- Technical requirements (according to DIN EN 50470-1/-3)
- Conformity assessment process
- · Placing the measuring instruments on the market
- Identification of measuring devices
- Market control

The following are subject to the respective national law:

- · Recalibration of measuring devices
- Period of validity of calibration
- Fee schedule

# **Consequences in Germany**

In Germany, calibration is valid for eight years. Following the expiry of the period, a device exchange is recommended.

In Germany, every energy meter used for billing energy consumption must have a calibration mark in accordance with the German weights and measures act. Electric meters used in the commercial sector are subject in Germany to an obligation of calibration. The calibration is performed by state-approved test centers.

Many network operators and manufacturers have their own test centers.

## When am I required to use a calibrated or MID-approved measuring device?

Since October 30, 2006, the European Measuring Instruments Directive has regulated the introduction of different new measuring devices for end users in Europe, among them the active current counter. It does not regulate the obligation of verification and the requirements to be met after placing the measuring devices on the market and taking them into operation. This is still governed by national law. MID-compliant measuring devices do not need to be calibrated before they are taken into operation for the first time.

According to § 25 of the German weights and measures act, only meters calibrated according to the German weights and measures act are allowed to be used.

MID-certified energy meters require no subsequent calibration with a calibration mark. Rather, they comply with calibrated meters through MID testing and the manufacturer's EC declarations of conformity.