

Calibration of UMG Measuring Instruments

Dear Sir or Madam,

We regularly receive questions regarding the necessity of recalibration and the recommended intervals for this process in connection with the calibration of measuring instruments. We are pleased to provide you with a concise and practical guide on this topic.

As the manufacturer and supplier of UMG measuring instruments, we confirm that our products are developed, manufactured, and tested in accordance with international EN and IEC standards. Through the use of high-quality components and extensive test cycles, we ensure a high level of long-term stability and reliability.

Whether recalibration is required—and at what intervals—depends largely on the specific application and your individual requirements. If fixed calibration intervals are defined in your quality management system, those intervals take precedence.

In general, electronic components are subject to minor changes over time (known as drift), which depend on operating conditions such as temperature, voltage fluctuations, or power quality. These can lead to slight measurement deviations.

Our recommendation:

- For most applications, a calibration interval of eight years—as defined by the European MID certification—is sufficient.
- For applications with higher accuracy requirements or in regulated environments (e.g., audits), shorter calibration intervals may be advisable at your discretion.

Unless there are binding requirements, regular recalibration is often unnecessary. Relevant deviations are frequently detectable during operation. Furthermore, experience shows that potential drift deviations are often below the measurement errors of the current transformers used.

A simple and proven method is to compare current measurement values with those from the previous year. This allows noticeable changes to be detected early and investigated in a targeted manner.

We gladly support you in assessing your individual requirements and advise you on selecting a suitable calibration concept.

Kind regards,



Thomas Hilbig
Vice President Product Management