

# Certified Calibration DIN EN ISO/IEC 17025

## with accredited Partner

Supported by an extern partner company WEIDMANN offers a accredited calibration method of fiber optical temperature measurement devices for DIN EN ISO/IEC 17025.

There are three alternative variants for calibrating a device:

1. **Factory Calibration's** method and parameters are defined and executed by the manufacturer. In our case this happens through educated personel, a written and good understandable execution description and highly accurate block calibrators with DANAK certificate.
2. **Factory Calibration following DIN EN ISO/IEC 17025** will be executed by a manufacturer independent instance. This instance works as the DIN describes and will be audited regularly to get their competences acknowledged.
3. **DakKS Calibration** is the highest possible accredited instance in the country Germany. By EU law each country needs a highest Certification instance defining methods and parameters for seveal measurements and accuracy.

With our partner „LDH-Kalibrierservice GmbH“ we can offer our customers the chance to calibrate their fiberoptical measurement devices and sensors in an agitated water bath in the listed ranges of Table 1 following DAkkS-DKD-R 5-1:2010 and leading to the accuracies in Table 2.

Measurement ranges	Smallest notable measurement uncertainty ( $k=2$ )
-45 °C to 10 °C	0.25 K
>10 °C to 90 °C	0.30 K
>90°C to 160°C	0.50 K

Table 1: calibration ranges of agitated water bath

Measurement ranges	Maximum Standarddeviation (68% of all calibration points)	Maximum Deviation (98% of all calibration points)
-200 °C bis 300 °C	1 K	± 3 K
-40 °C bis 200 °C	0.2 K	± 0.4 K
> 200 °C bis 300°C	0.3 K	± 1 K

Table 2: Factory calibration