

Sensor Calibration

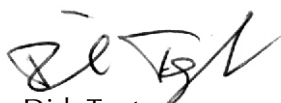
Product:	Temperature Sensor
Types Module Temperature:	Tm-Pt1000, Tm-Pt1000-box Tm-V-4090, Tm-I-4090 Tm-RS485-MT, Tm-RS485-MB
Types Ambient Temperature:	Ta-Pt100, Ta-Pt1000 Ta-V-4090, Ta-I-4090 Ta-ext-V-4090, Ta-ext-I-4090 Ta-ext-RS485-MT, Ta-ext-RS485-MB
Manufacturer:	Ingenieurbüro Mencke & Tegtmeier GmbH Schwarzer Weg 43A 31789 Hameln Germany

Herewith we confirm the stability of the calibration of all our above mentioned Temperature Sensors of three years for sensors that are not in use and stored under the following conditions:

- Ambient temperature: 10...40°C
- Humidity: 40 to 60% rel. Humidity
- No exposition to natural or artificial light
- No connection to any electronic circuit

We recommend a recalibration at least every 3 years.

Hameln, 9th of March 2021



Dirk Tegtmeier
(Director)



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(Director)

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Geschäftsführung

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Sparkasse Hameln-Weserbergland

IBAN: DE33 2545 0001 0000 0522 33
BIC: NOLADE21HMS
WEEE-Reg.-Nr.: DE 76618710

Calibration Certificate Temperature Sensor

Sensor Type: Tm-RS485-MB
Serial No.: 251-21090330
PCB No.: 111284

Sensor Element

Type: Pt1000 Class A, PCS 1.1302.10M
Vendor: JUMO GmbH & Co. KG
TN: 00647798
FA no.: 2533122

Calibrated by: Weber
Date / Time: 28.01.2021 / 14:20:19
Ambient Temperature: 24,5 °C



Test Resistance	Target Temperature	Measured Temperature
Ohm	°C	°C
850	-38,16	-38,17
970	-7,67	-7,70
1090	23,11	23,09
1200	51,57	51,58
1320	82,89	82,90

Calibration Progress

After adjusting gain and offset of the measurement transducer PCB, the measurement transducer calibration is verified. For verification different "Test Resistance" that are representing Pt1000 "Target Temperature" are connected to the Pt1000 connector of the measurement transducer.

"Measured Temperature" is read by RS485 bus communication. The match of "Target Temperature" and "Measured Temperature" verifies the calibration of the measurement transducer.

The Accuracy of each Pt1000 sensor element is verified by the sensor element vendor, traceable by TN and FA no.