

# Certificate of Validation

Certificate No.	Calibration Date
I21120206	Dec 02,2021

inotronix GmbH certifies that the product(s) mentioned on the following page(s) have been thoroughly tested and validated under the observation of ISO9001:2015 certified quality assurance system and meet performance accuracy specification over the stated ranges.

## Reference Instrumentation

Device	Model	Serial Number(s)
Thermometer Readout	Fluke 1502A	D2603
Thermo Bath	RTS-80A	S2168

## Environment Conditions

Air Temperature	Relative Humidity
25.2 °C	53%RH

All reference instruments used in calibration are periodically calibrated by CNAS(China National Accreditation Service) accredited laboratories, CNAS is full member of the International Laboratory Cooperation([www.ilac.org](http://www.ilac.org)). This provides traceability of measurement to recognized national standards and traceable to National Institute of Standards and Technology(NIST).

## Temp Accuracy -20~+40 °C(+/-0.2 °C) Other +/-0.5 °C

Validation points	Tolerance	Result
+60 °C	+/-0.5 °C	PASS
+40 °C	+/-0.2 °C	PASS
+25 °C	+/-0.2 °C	PASS
0 °C	+/-0.2 °C	PASS
-10 °C	+/-0.2 °C	PASS
-25 °C	+/-0.5 °C	PASS

## Product Information

Model	Serial Number	Production Date	Expiry Date
STC10S01001	S21132168	12/2021	12/2023

This certificate was automatically generated and is valid for 2(two) years without signature.

# Texas Instruments Incorporated

January 2, 2021

Dear Valued Texas Instruments Customer,

Texas Instruments TMP102 thermal sensor products are manufactured using calibrated test equipment in accordance with TI's Quality Assurance Program.

Per TI's ISO 9001:2008 procedures, all calibrated test equipment requires a certificate of calibration traceable to a National Institute of Standards and Testing (NIST) control number. These NIST certificates are kept on file at TI. The calibration procedures ensure the product meets or exceeds the electrical, quality and reliability specifications as stated on the product datasheet or documents.

As an ISO 9001:2008 facility, TI has documented the calibration procedures for the thermal sensor products through internal documents listed below. Calibrated thermal sensor units ('golden' units) are created at the time of a new product release. These golden units are created and verified against a certified NIST traceable Digital Thermometer/Platinum Resistance Probe pair in a liquid bath test fixture. The certified NIST traceable Digital Thermometer/Platinum Resistance Probe pairs are calibrated on a yearly cycle. Calibration Certificates are kept on file at TI. These golden units are then used to verify the production test setup measurement accuracy. Each unit in a lot is trimmed and tested with this correlated production test setup to be within the datasheet specification limits.

As a basis for TI's product warranty (see <http://www.ti.com/sc/docs/stdterms.htm>), one hundred percent (100%) testing is performed to assure each unit meets the data sheet accuracy specifications.  
<http://www.ti.com/lit/ds/symlink/tmp102.pdf>

Sincerely,  
Brent Rhoton  
Customer Quality Engineering