



CALIBRATION CERTIFICATE

# Digital Temperature Measuring System

NTC Thermistor handheld thermometer

## 1. Identification

Report number	STC-0001-T
Date of issue	2026-03-02
Date of calibration	2026-02-10
Recommended recalibration	2027-02-10 (12-month interval, recommended only)
Calibration laboratory and place of issue	SuperTest Calibration Laboratory 14 Motorway Circuit, Ormeau QLD 4208, Australia
Calibration procedure	STIN018 & STCH018_1 — Liquid-bath comparison calibration

## 2. Customer

Customer	Customer
Contact	Contact
Address	Address
Customer reference	Customer reference

## 3. Item Calibrated

Item type	Manufacturer	Model	Serial number	Asset ID
Indicator + probe	EBRO	TLC 700	74069782	782

**Description:** Handheld digital thermometer with integral NTC thermistor probe, probe length 62 mm. Read-out displays temperature in degrees Celsius to one decimal place.

**Condition received:** Good, no visible damage. Full calibration performed.



#### 4. Environmental and Test Conditions

Ambient temperature	23 °C ± 5 °C
Calibration medium	Stirred liquid bath; probe immersion depth 40 mm
Stabilisation time	≥ 5 minutes at each set point prior to recording

#### 5. Metrological Traceability

Measurement results for temperature are traceable to the International System of Units (SI) via the International Temperature Scale of 1990 (ITS-90). Reference equipment used in this calibration has been calibrated by Australia's National Measurement Institute (NMI) or by laboratories accredited by the National Association of Testing Authorities (NATA) or an ILAC-MRA signatory.

#### 6. Measurement Uncertainty

The expanded uncertainty stated in this report has been evaluated in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM) and corresponds to a level of confidence of approximately 95 %, obtained by multiplying the combined standard uncertainty by a coverage factor of  $k = 2$ .

#### 7. Reference Standards Used

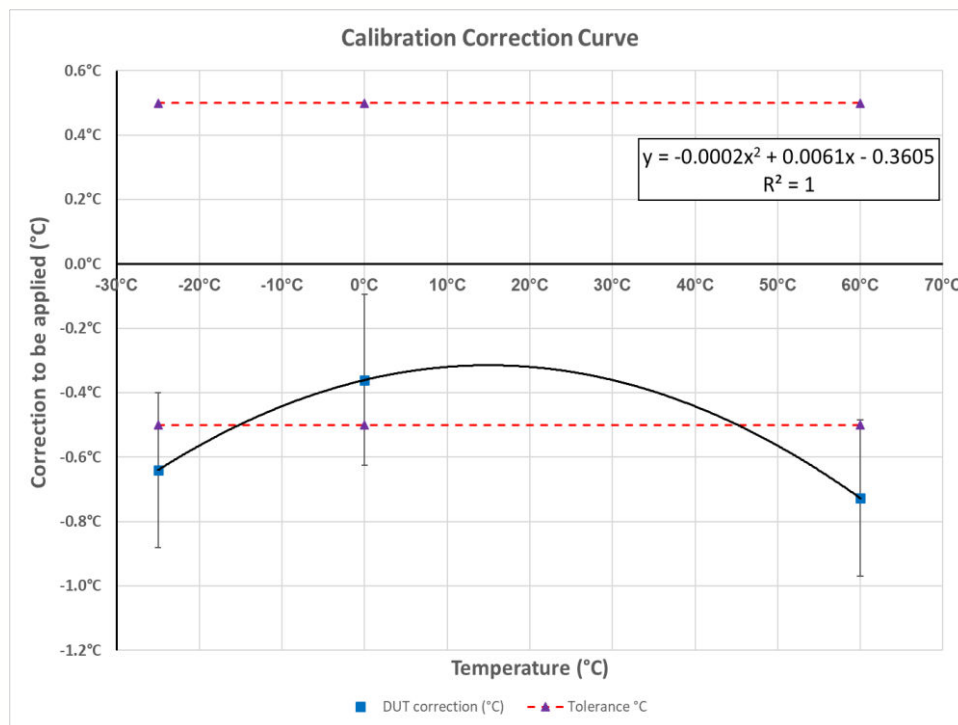
Reference equipment	Serial number	Calibration due
Julabo FK30-SL liquid bath	10284469 / 00439200	2026-05-15
VEVOR DC-0506 calibration bath	240813 3270 3 0054	2026-05-07
Ahlborn ALMEMO 1030-2 reference indicator	H18080051	2026-12-19

## 8. Calibration Results

Reference temperature (°C)	Device Under Test (DUT) reading (°C)	Correction (°C)	Uncertainty ± (°C) k = 2	Tolerance ± (°C)	Conformance
-25.0	-24.4	-0.6	0.2	0.5	Fail*
0.0	0.4	-0.4	0.3	0.5	Pass*
60.0	60.7	-0.7	0.2	0.5	Fail*

**Decision rule:** A result is reported as **Pass** when the measured deviation lies within the stated tolerance, or as **Fail** when it lies outside, in both cases without subtracting measurement uncertainty. Where the expanded uncertainty (k = 2) crosses the tolerance limit, the result is marked with an asterisk (\*) to indicate that a conformance decision cannot be made with the customary 95 % confidence; the binary Pass / Fail label is retained, and the customer is advised to consider the uncertainty alongside the deviation when deciding whether the instrument is fit for their intended use.

## 9. Calibration Correction Curve



## 10. Application of Calibration Corrections

To obtain a corrected reading, apply the correction from the table above (Section 8) using equation 1 or, for any temperature within the calibrated range, apply the fitted polynomial (equation 2):

$$\text{corrected reading} = \text{reading} + \text{correction} \quad (\text{eq. 1})$$

$$\text{correction (}^\circ\text{C)} = -0.0002 \cdot x^2 + 0.0061 \cdot x - 0.3605 \quad (x \text{ in } ^\circ\text{C}) \quad (\text{eq. 2})$$



## 11. Notes

- Calibration was performed in accordance with internal method STIN018, using test instruction STCH018\_1.
- The DUT was stabilised at each set point for at least 5 minutes prior to recording.
- The DUT has not been adjusted as a result of this calibration. Application of the corrections in equations 1 and 2 is at the discretion of the customer.
- Hysteresis is included in the uncertainty budget; repeat excursions to 0 °C were taken before and after each set point.
- Conduction error was evaluated by an immersion sensitivity test, comparing the reading at 40 mm immersion with the reading at 20 mm immersion.
- Interpolation error between calibrated set points is included in the uncertainty budget.
- The reported expanded uncertainties are valid only at the time of calibration and do not account for subsequent drift, ageing, or other time-dependent effects.

## 12. Statement of Scope

The results reported in this certificate relate only to the item identified above and to its condition at the time of calibration. This certificate shall not be reproduced, except in full, without the written approval of the issuing laboratory.

## 13. Authorisation

Calibration performed by

*Baladeva Dewhirst*

Baladeva Dewhirst  
Date: 2026-03-02

Approved and authorised by

*MRC*

Marc van Beest  
Date: 2026-03-02

— End of Certificate —

