

# A compact sensor calibration study

Synthetic technical paper | September 2026

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## Introduction

Reliable sensor calibration requires repeatable observations. This short technical study checks whether a stable reference can be used to compare three readings from the same instrument.

## Experimental procedure

Keep the instrument at room temperature. Wait ten seconds between readings and record the sensor identifier TS-240. Do not change the measurement units during the experiment.

$$\text{mean} = (24.6 + 24.8 + 25.0) / 3 = 24.8$$

## Discussion

The three readings were 24.6, 24.8 and 25.0 degrees Celsius. A small difference between observations does not by itself establish measurement accuracy. Repeat the procedure if the reference drifts.

## Reference

[1] Sensor study. A fictional technical example, 2026.



Figure 1. Recorded readings for the calibration procedure.