



1049 Class A °C PT100 Simulator

Time Electronics

Calibration, Test & Measurement

- -200°C to + 800°C
- $\pm 0.3^{\circ}\text{C}$ accuracy
- Based on ITS 90 EN60751
- 23 set points
- Exceeds Class A
- Good temperature stability
- Passive resistance source



The **1049** is a portable precision simulator for PT100 0.3850 platinum resistance elements used for accurate temperature measurement.

It follows the PT100 scale from -200°C to $+800^{\circ}\text{C}$ with 23 set points. High performance metal film resistors are used throughout which ensures a good temperature coefficient and long term stability.

The specification is in accordance with DIN EN 60751 (ITS 90). Offering high accuracy across the full operating range of PT100 devices it exceeds the performance of Class A & B. The 1049 will be of particular interest to those operating in the -60 to $+60^{\circ}\text{C}$ range where a performance exceeding Class A (e.g. better than $\pm 0.15^{\circ}\text{C}$ at 0°C), is required.

Since the 1049's output is a purely passive resistance it will operate with all types of PT100 measuring equipment including the live systems using pulsed, or interrupted excitation current.

1049 Technical Specifications	
Set points °C:	-200, -100, -50, -20, -10, 0, 10, 20, 30, 40, 50, 60, 80, 100, 150, 200, 250, 300, 400, 500, 600, 700, 800.
Accuracy:	-200 to -100°C $\pm 0.3^{\circ}\text{C}$ -50 to +60°C $\pm 0.15^{\circ}\text{C}$ +80 to +200°C $\pm 0.3^{\circ}\text{C}$ +250 to +500°C $\pm 0.5^{\circ}\text{C}$ +600 to +800°C $\pm 0.65^{\circ}\text{C}$
Temp Coefficient:	Less than 30 ppm per °C
Maximum Current:	50 mA
General Specification	
Dimensions:	61 x 112 x 55 mm (2.4 x 5 x 2.2 ")
Weight:	170 gm (6oz)
Optional Extras:	Calibration Certificates – traceable to NPL and UKAS
Ordering Information	
Code	Description
1049	Handheld PT100 °C Simulator (supplied with leatherette carry case)
9161	Factory (NPL Traceable) Calibration Certificate
9114	UKAS Calibration Certificate (ISO 17025)

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.

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