



# Time Electronics

## 1049 PT100 Simulator



- **-200°C to +800°C**
- **± 0.3°C accuracy**
- **Based on ITS 90 EN60751**
- **23 set points**
- **Exceeds class A**
- **Good temperature stability**
- **Passive resistance source**
- **Supplied with carry case**
- **°F version available – 1050**

### DESCRIPTION

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

It follows the PT100 scale from -200°C to +800°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°C range where a performance exceeding Class A (e.g. better than +/- 0.15°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. The pocket sized design (112 x 61 x 55mm) makes it easily portable and ideal for lab or field use. The instrument is supplied as standard with a carry case.

### 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.

Range	-200 to -100°C	-50 to +60°C	+80 to +200°C	+250 to +500°C	+600 to +800°C
Accuracy	± 0.3°C	± 0.15°C	± 0.3°C	± 0.5°C	± 0.65°C

Temperature Coefficient ..... Less than 30ppm/°C  
 Maximum Current ..... 50mA  
 Dimensions ..... H112 x W61 x D55mm  
 Weight ..... 0.17kg

### ORDERING INFORMATION

**1049** ..... **PT100 Simulator (°C)**  
**1050** ..... PT100 Simulator (°F version, see separate datasheet for details)  
**C161** ..... Factory Calibration Certificate (NPL)  
**C114** ..... UKAS Calibration Certificate (ISO 17025)

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



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