



Description

The 7001 is a precision simulator module 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 that ensure a good temperature coefficient and long term stability.

The specification is in accordance with DIN EN 60751 (ITS 90). The module offers high accuracy across the full operating range of Pt100 devices and exceeds the performance of class A and B. The 7001 is particularly suitable for users operating in the -50 to +60 °C range and requiring performance exceeding class A (better than ± 0.15 °C at 0 °C).

Since the 7001 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.

Features

- -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
- °F version available: Model 7001-F

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 30 ppm/°C.

Maximum current 50 mA.

Module width 95 mm (primary or secondary console fitting)

Ordering Information

7001..... Pt100 Simulator Module (°C)

7001-F Pt100 Simulator Module (°F version, see separate datasheet for details)

C161..... Traceable calibration certificate (Factory)

C114..... Accredited calibration certificate (ISO 17025)

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