

T1E0C10A

Temperature Measurement Module

Properties

- Module integrated in the cable
- For PT100 sensors
- Low linearity error

Application

- General test and measurement
- Fatigue
- Vehicle crash

Measurement principles

- For resistance temperature sensors

Options

- ID-Module integrated in measurement module
- Sensor is fixed or plugged in with module

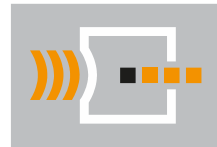


Technical description

Temperature measurement module completely constructed using semiconductor technology. Optimized for direct connection to the measuring systems used in the crash area. The module provides an output signal that is directly proportional to the temperature. The power supply required for resistance thermometers is integrated in the measuring module. Available for PT100 sensors. Depending on the sensor element used, a very fast response is given. Can be used with any PT100 measuring probe.

Dimensions

Module: W x H x D: 52 x 18 x 18 mm



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Technical specification

	Unit	Vale	Comment
Measuring range	°C	-50 to +500	Depending on the thermocouple
Sensitivity ¹⁾	mV/°C	10	
Thermocouple type	–	PT100	Specify when ordering
Zero signal ¹⁾	mV	230 ±15	At 23°C
Amplitude non-linearity ²⁾	%	≤ 0.1	
Current consumption	mA	< 2.0	
Supply voltage	V	6–15	
Insulation resistance	MΩ	> 100	
Temperature range	°C	-20...+75	Temperature of the module
Weight (approximate)	g	5.0	

All values measured at 10 V sensor supply voltage and at 23 °C.

¹⁾ Typical value

²⁾ At nominal load

Standard calibration range: 10 °C to 30 °C in 10 °C steps.

The PT100 sensor element is not supplied.