

Process Calibrator PCE-123



Digital, electrical, current, voltage or process calibrator, tester or multimeter for simulation and measurement of standardized electrical signals / control signals as well as frequencies and temperature

The PCE-123 is a network-independent multifunction calibrator used to test and calibrate a variety of parameters of controllers and measuring instruments. Offering a high level of accuracy for an affordable price, this easy-to-use calibrator provides electrical (mA, mV, V and frequency in Hz) and temperature (in °C or °F) output signals, making the calibrator useful in a wide range of applications.

The calibrator also has automatic step and ramp functions as well as the possibility to pre-select the output signal steps (0 ... 100 %) by using the arrow keys and to directly specify an output value (e. g. 13.8 mA). Operation via the keypad is very easy and intuitive. The PCE-123 multifunctional calibrator is an important tool in any electronics workshop as well as in any measuring and control department in trade, industry and automation.

- 4 to 20mA (1kΩ, 24V power)
- 0 to 100.00 mV / 0 to 1,000.0V / 0 to 12,000V
- Type-K, J, E, T temperature thermocouple sensors (°C or °F)
- Frequency range 1 to 62,500Hz
- Basic accuracy 0.025 %
- Easy operation via keypad
- Automatic ramp function
- Selectable between 0 to 20mA/ 0 to 24mA
- Input 0 to 100% (mA, mV, V)
- Alarm beep 'open' (mA) or 'short circuit' (mV, V)

Specifications

Technical specifications

mA DC current

(maximum load at 1k Ω , powered by 24V)

Range	4 to 20mA / 0 to 20mA / 0 to 24mA
Resolution	1 μ A
Accuracy	$\pm 0.025\% \pm 3\mu$ A
Alert	beeps when there is a short circuit or ouput current >1mA .

mV current, V DC

(power 1mA)

	0 to 100.00 mV
Ranges	0 to 10.000 V 0 to 1.0000 V
	10 μ V
Resolution	1 mV 1.0000 V
Accuracy	$\pm 0.05\% \pm 30 \mu$ V $\pm 0.05\% \pm 3$ mV $\pm 0.05\% \pm 300 \mu$ V
Alert	beeps when there is a short circuit or ouput current >10mV.

Temperature sensor thermocouple type-K, J, E, T

(1 k Ω min.)

Ranges	K: -200 ... 0 °C / -328 ... 32 °F and 0 ... 1370 °C / 32 ... 2498 °F J: -100 ... 0 °C / -148 ... 32 °F and 0 ... 760 °C / 32 ... 1400 °F E: -10 ... 0 °C / 14 ... 32 °F and 0 ... 700°C / 32 ... 1292 °F T: -200 ... 0°C / -328 ... 32 °F and T: 0 ... 400 °C / 32 ... 752 °F
Resolution	1°C (across entire range)
Accuracy	K: $\pm 1.1^\circ$ C and $\pm 0.8^\circ$ C J: $\pm 0.9^\circ$ C and $\pm 0.7^\circ$ C E: $\pm 0.9^\circ$ C and $\pm 0.7^\circ$ C T: $\pm 1.0^\circ$ C and $\pm 0.8^\circ$ C

Frequency

Range	1 to 125Hz and 126 to 62.5kHz
Resolution	1 to 125Hz / 1Hz 126 to 62.5kHz / 604 readings
Accuracy	± 0.04 Hz
Selection	604 frequencies

General characteristics

Display	5 position LCD
Operating conditions	0 ... 50 °C / 32 ... 122 °F <85% r.h.
Storage conditions	-20 ... 60 °C / -4 ... 140 °F; <85% r.h.
Power	1 9V battery or 6 x 1.5V batteries
Consumption	60mA to 180mA (depending on output)
Battery indicator	5.5V for 150mA
Dimensions	88 x 168 x 26mm / 3.4 x 6.6 x 1 in
Weight	330 g / 11.6 oz

More information

Manual



More product info



Similar products



Subject to change