

Calibrator PCE-123-ICA

Current calibrator PCE-123-ICA

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 / Incl. ISO Calibration Certificate

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 1,000V / 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)
- **Incl. ISO Calibration Certificate**

Specifications:

mA DC current

(maximum load at 1kΩ, powered by 24V)

Range	4 to 20-mA / 0 to 20-mA / 0 to 24-mA
Resolution	1μA
Accuracy	±0.025% ±3μA
Alert	Beeps when there is a short circuit or output current >1mA .

mV current, V DC (power 1-mA)

Ranges	0 to 100.00 mV 0 to 10.000 V 0 to 1.0000 V
Resolution	10 μV 1 mV 1.0000 V
Accuracy	± 0.05% ±30 μV ± 0.05% ±3 mV ± 0.05% ±300 μV

Alert	Beeps when there is a short circuit or output current >10mV.
Temperature sensor thermocouple type-K, J, E, T (1 kΩ 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 / 1.8°F (across entire range)
Accuracy	K: $\pm 1.1^\circ\text{C}$ / 2°F and $\pm 0.8^\circ\text{C}$ / 1.4°F J: $\pm 0.9^\circ\text{C}$ / 1.6°F and $\pm 0.7^\circ\text{C}$ / 1.3°F E: $\pm 0.9^\circ\text{C}$ / 1.6°F and $\pm 0.7^\circ\text{C}$ / 1.3°F T: $\pm 1.0^\circ\text{C}$ / 1.8°F and $\pm 0.8^\circ\text{C}$ / 1.4°F

Frequency

Range	1 to 125Hz and 126 to 62.5kHz
Resolution	1 to 125Hz / 1Hz 126 to 62.5kHz / 604 readings
Accuracy	$\pm 0.04\text{Hz}$
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	60-mA to 180-mA (depending on output)
Battery indicator	5.5V for 150-mA
Dimensions	88 x 168 x 26 mm / 3.4 x 6.6 x 1 in
Weight	330 g / 11.6 oz

Delivery scope:

- 1 x PCE-123-ICA Current Calibrator
- 1 x Carrying case
- 1 x Type-k adaptor
- 6 x Batteries
- 1 x Test cables with alligator clips
- 1 x User's manual
- 1 x ISO Calibration Certificate