

Calibrator



Calibrators regenerate electrical signals. In measurement and control technology, they are used to adjust and check measurement and control applications.

The measuring variables to be tested are assigned to standard measurement signals or control variables. These measurement signals / control variables are called standardised signals which are defined as 0 ... 20 mA, 4 ... 20 mA, 0 ... 10 V and 0.2 ... 1 bar. These magnitudes are, for example, assigned to a temperature, a current flow or to an actuating variable of a control valve. Since accurate control and transmission of process signals are essential, all measurement instruments and controls or complete control systems should be calibrated previously by means of a calibrator and existing controls should be checked at regular intervals and, if necessary, recalibrated using a process calibrator.

Our high-precision calibrators ensure the necessary degree of security for experts in measurement and control technology or in quality control.

PCE-123

Setpoint Device for Simulation

- proceses calibrator for any operation
- temperature: K-, J-, E-, T-type sensors (°C and °F)
- standardised signals: 4 ... 20 mA / 0 ... 100 mV / 0 ... 1 V / 0 ... 12 V
- frequency range: 1 ... 62,500 Hz



TECHNICAL SPECIFICATIONS

Sensor type	K, J, E, T
Ranges	-200 ... 0 °C & 0 ... +1,370 °C; 4 ... 20 mA / 0 ... 20 mA / 0 ... 24 mA; 0 ... 100.00 mV / ... 10.000 V / ... 1.0000 V 1 ... 125 Hz & 126 ... 62.5 kHz
Resolution	1 °C; 1 µA; 10 µV / 1 mV / 1.0000 V; 1 Hz / from 126 Hz 604 pre-set frequencies
Accuracy	±0.025 % ±3 µA; ±0.05 % ±30 µV / ±3 mV / ±300 µV; ≤1.1 °C (p. sensor type)
Display	LC display
Power supp.	1 x 9 V or 6 x 1.5 V battery pack
Oper. condit.	0 ... +50 °C, <85 % RH
Dimensions	88 x 168 x 26 mm
Weight	330 g

INCLUDES

Calibrator, K-type adaptor, pack of batteries, test leads with crocodile clips, carrying case, instruction manual

ITEM NO.	ITEM
K-PCE-123	process calibrator

OPTIONAL ACCESSORIES

K-CAL-PCE-123	ISO calibration certificate
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PCE-789

Multifunctional Calibrator / Simulator

- simulates and measures current, voltage, frequency, temperature (types: K, J, E, T, R, S, N, L, U, B, C)
- integrated function generator
- graphical display with backlight
- data logging function / powered by rechargeable battery
- individually created signal waveforms can be displayed



TECHNICAL SPECIFICATIONS

Simulation / generation		
Current	(no charge voltage > 15 V)	
Range	-4 ... 24 mA	
Resolution	1 µA	
Accuracy	±0.03 % +5 dgt	
Voltage	(max. 1 mA)	
Range	-3 ... 15 V	
Resolution	1 mV	
Accuracy	±0.1 % +5 dgt	
Thermocouples		
Range	depends on type	
Resolution	0.1 °C	
Accuracy	depends on type	
Frequency		
Range	0.3 ... 20,000 Hz	
Resolution	0.1 Hz	
Accuracy	0.002 ... 2 Hz	
Measurement		
Current		
Range	-4 ... 24 mA	
Resolution	1 µA	
Accuracy	±0.1 % +5 dgt	
Voltage		
Range	-3 ... 15 V	

Resolution	1 µV
Accuracy	±0.1 % +5 dgt
Thermocouples	
Range	depends on type
Resolution	0.1 °C
Accuracy	depends on type
General	
Power s.	internal recharg. battery or mains adaptor
Environmental conditions	
Operation	0 ... +50 °C, 85 % RH
Storage	-20 ... +60 °C, 75 % RH
Dimens.	214 x 99 x 56 mm
Weight	650 g

INCLUDES

Multifunctional calibrator, K-type adaptor, 2 x test leads, 2 x crocodile clips, 2 x measuring tips, software, USB cable, mains adaptor, carrying case, instruction manual

ITEM NO.	ITEM
K-PCE-789	multifunctional calibrator

OPTIONAL ACCESSORIES

K-CAL-PCE-789	ISO calibration certificate
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