



PCE-LOC 20 Calibrator

For Simulation and Measurement of Current and Voltage / Li-Ion battery / Continuity tester / Ramp function / Data logger

The calibrator PCE-LOC 20 can be used to directly simulate process currents in current loop, mV and mA. This allows the calibrator to be used to set process displays, data loggers, paperless recorders, etc. Thanks to the galvanically isolated connections, this calibrator can simultaneously serve as a source and as a measuring device. Here, it does not matter whether currents are measured and voltages are simulated, since the functions work completely independently of each other.

The calibrator PCE-LOC 20 has a high accuracy of 0.02% of the measured value in all operating modes. The calibrator is powered by a rechargeable battery that can be charged via a USB power adapter. The memory can also be read out by the calibrator via this interface. For ease of operation, the LCD contributes from the calibrator.

In addition to the direct specification of the simulated parameters, the calibrator has a ramp mode that allows the parameters to be changed incrementally and automatically over a defined period of time. The calibrator PCE-LOC 20 can also specify the scaled process value. This means, for example, that a temperature in °C / °F is specified directly and the calibrator simulates the analog process value in mA.

- Simultaneous simulation and measurement mode
- Battery operation
- For mA, mV and V
- Graphic display
- Supply of sensors possible
- Manual mode & ramp function
- Continuity test
- Data logger function



Subject to change



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Specifications

Measurement parameter Voltage mV		
Measuring range	Resolution	Accuracy
0 250 mV	0.01 mV	± 0.02%of reading + 2 Dgt
Voltage DC V		
0 30V	0.001V	± 0.02%of reading + 2 Dgt
Current DC mA		
0 24-mA	0.001-mA	± 0.02%of reading + 2 Dgt
Simulation parameters		
Voltage mV		
0 250 mV	0.01 mV	± 0.02%of reading + 2 Dgt
Voltage DC V		
0 12V	0.001V	± 0.02%of reading + 2 Dgt
Current DC mA		
0 24-mA	0.001-mA	± 0.02%of reading + 2 Dgt

General Specifications PCE-LOC 20

Display modes	Measurement: mA / V / / mV	
	Simulation: mA / V / / mV	
Maximum input voltage	30V DC	
Input impedance measurement	mV / V:> 1 MΩ	
	Current measurement: 10 Ω	
Response time	<100 ms	
Load impedance	> 10 k Ω at mV / V	
	<750Ω at mA	
Refresh rate display	10 Hz	
Isolation	500V DC	
Data storage	Internal memory	
	150000 readings	
Interface	USB 2.0	
Display	2.4" TFT LCD	
	240 x 320 pixels	
	LED illuminated	
Output voltage current loop	24V DC / 24-mA	
HART mA loop resistance	$250 \Omega \pm 20\%$	
Special features	Step and ramp function	
	Automatic and manual mode \sqrt{x} , x2: For the	
	measuring function	

More information

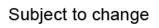


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Continuity test	Adjustable threshold up to 100 Ω
Power supply	3.7V / 2300-mAh Li-ion battery
Charging time	About 5 h
Power adapter	Input: 100 240V AC / 50/60 Hz
	Output: 5V / 1 A DC
Battery life	Approx. 18 h: Simulation and measurement
	with low LCD illumination, approx. 8 h:
	Measurement with low LCD illumination
Dimensions	162 x 82 x 40 mm / 6.4 x 3.2 x 1.6 in
Weight	About 300 g / < 1 lb
Degree of protection	IP20
Operating conditions	Battery operation: 0 55°C / 32 131°F, 30
	90% RH Main operation: 0 45°C / 32
	113°F, 30 90% RH
Storage conditions	-20 60°C / -4 140°F, 30 90%RH non-
	condensing
Heating time	About 15 minutes





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