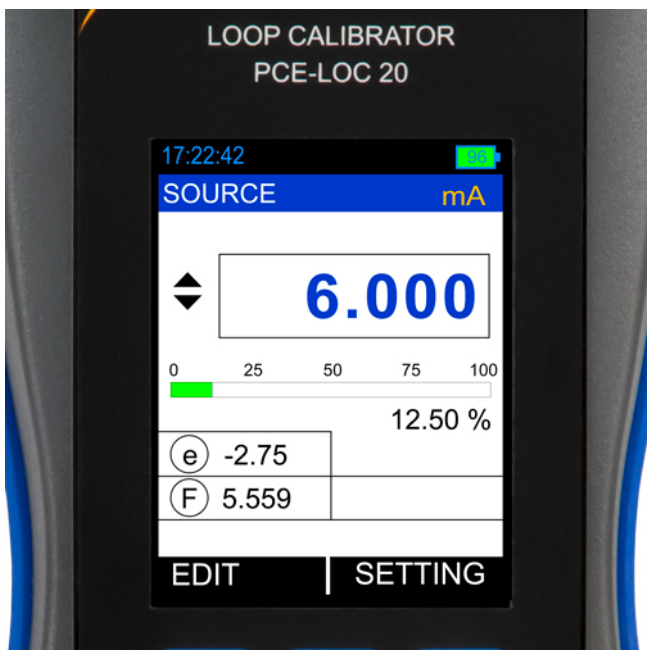
Calibrator PCE-LOC 20



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

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 kΩ 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 Ω ± 20%
Special features	Step and ramp function Automatic and manual mode √x, x2: For the measuring function

Subject to change

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

Subject to change