

# 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

# Specifications

## Measurement parameter

### Voltage mV

#### Measuring range

0 ... 250 mV

#### Resolution

0.01 mV

#### Accuracy

± 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

# More information

Manual



More product info



Similar products



Subject to change



Continuity test	Adjustable threshold up to 100 $\Omega$
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