**LLC 100** 

Rel. 20140326

The handheld calibrator **LR-***Cal* **LLC 100** is a portable measuring and sourcing device.

- Measuring Milliamps and Volts
- Sourcing Milliamps
- Measuring circuit continuity
- 24V internal loop supply
- Selectable Step and Ramp functions
- Datalogging via SD card
- USB Interface
- · Lithium-Ion battery with mains charger
- Graphically display of trends

Using the latest ARM processor, the LR-Cal LLC 100 becomes a powerfull field instrument with the added feature of data logging via SD card. It's speciality is Milliamp loop powered instruments, which it can measure, source and simulate. Sourcing can be increment, step, ramp or valve stroking. DC voltage and circuit continuity can also be measured.

A trend logging feature with programmable time base is supplied for long term loop monitoring. It can display values in mA and % or % and mA, with built in 24V excitation loop power.

The LR-Cal LLC 100's logging facility stores data on the SD card supplied, which is easily downloaded from the SD card to a PC via the on board USB port and useable in most common spreadsheet formats. It's small size, Li-lon battery and high precision make the loop calibrator LR-Cal LLC 100 ideal for industrial field calibration.

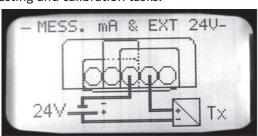


A case, a rubber boot and a SD card are included in standard scope of delivery.



The operation of the loop calibrator LR-Cal LLC 100 is very simple and easy.

Example: the Help-Menu shows on the display Wiring Schematics for almost all kind of testing and calibration tasks.



The keypad of model LR-Cal LLC 100:



## Loop Calibrator Measuring mA + V, Sourcing mA



## **Technical Data**

Measuring of MilliampsRange:0...24 mAImpedance:±17 Ω

Accuracy: 0.01% FS ±1 digit

Resolution: 1 μA

Measuring of Volts Range: 0...32 VDC

Impedance:  $>110 \text{ K}\Omega$ 

Accuracy: 0.005% FS ±1 digit

Resolution: 1 mV

**Measuring of Continuity**  $<100 \Omega$  trigger at 1mA (visual and audible confirmation)

Sourcing of MilliampsRange:0...24 mAMax. Load:500 Ω

Accuracy: 0.005% FS ±1 digit

Resolution: 1 μA

**Isolation:** Max. 100 VDC between all input and output circuits

**Supply** Type: Lithium Ion Battery, chargeable

Charing time: approx. 5 h

Usage time: typically 8 h, depending on functions used

**Charger:** Charging input: 10...15 VDC

Mains charger input: 100...240 VAC, 0.5 A, 50/60 Hz

Mains charger output: 12 VDC at 1.5 A 12 VDC at 1A with a cigarette lighter plug

**Temperature Ranges:** Storage: -40...+60°C incl. battery

Usage: 0...+50°C

**Relative Humidity:** 0...85% r.h. (non-condensing)

Case: IP54 dust and splash proof. UL94V-0 flame retardant ABS plastic

Rubber Boot: green

Optional car charger:

**Dimension:** without rubber boot: 149 x 34 x 77 mm

with rubber boot: 155 x 43 x 86 mm

Weight: approx. 340 g (without case)

Scope of standard Delivery: Calibrator LR-Cal LLC 100 with Rubber Boot

SD card

Red and black stackable safety test leads

Mains Charger 115...230 VAC

Plastic case with foam

Operating Manual (German/English) Factory Certificate of Calibration

Warranty: 24 months after date of delivery

Order-Code	Description
LRCAL-100-KFZ-LADER	Car Charger (12 VDC Car Lighter)
LRCAL-100-SP-SICH	Spare Fuses 250 mA SMD
LRCAL-100-SP-KABEL	Spare set of Test Leads (red/black)
LRCAL-100-SP-BATT	Spare Battery Pack (Li-Ion)
LRCAL-100-SP-LADER	Spare Charger mains 115230 VAC
LRCAL-100-SP-SCHUTZ	Spare Rubber Boot (green)
LRCAL-100-SP-KOFFER	Spare plastic Case with custom foam
LLC100-SP-TASTATUR	Spare Keypad



## Authorized Distributor



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