

The **LR-Cal LPC 100** multifunctional pressure calibrator's speciality is pressure measurement (with external reference pressure sensors **LR-Cal LPC-1**) and milliamp loop powered instruments which it can measure, source and simulate. DC voltage and circuit continuity can also be measured.

- Measuring pressure, milliamps, volts and circuit continuity
- Plug & Play changeable reference pressure sensors **LR-Cal LPC-1**
- Sourcing milliamps
- Dual display enables simultaneous input and output view
- Internal 24 V loop supply to power transmitters and measure mA during tests
- Selectable STEP and RAMP functions
- Datalogging via supplied SD memory card
- USB interface
- Chargeable Lithium-Ionen battery with mains charger
- Graphically display of trends



Interchangeable pressure sensors enable users to effortlessly connect a wide range of **LR-Cal LPC-1** reference pressure sensors. Simultaneous measurement of pressure and current are ideal for I/P testing.

Pressure switch test feature ensures accurate and safe calibration of pressure switches.

The **LR-Cal LPC 100**'s logging facility stores data on the SD memory 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, Lithium Ion battery pack and high precision makes the **LR-Cal LPC 100** ideal for industrial field calibration.



Included in standard delivery is a rubber boot, a SD memory card and a plastic case with foam.

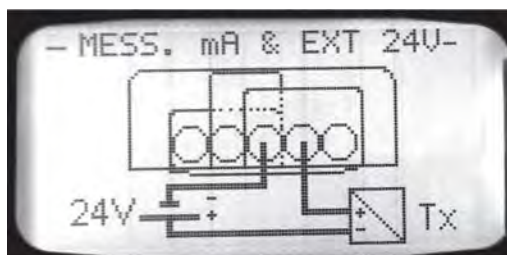


At least one reference pressure sensor **LR-Cal LPC-1** has to be ordered together with the calibrator. 11 different ranges (gauge & absolute) are available, see page 2.



Reference Pressure Sensor  
**LR-Cal LPC-1:**

The operation of the Multifunction Pressure Calibrator **LR-Cal LPC 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:



## Technical Data

MEASURING	Range:	Accuracy:	Resolution:
Pressure	see separate table, depending on type of <b>LR-Cal/ LPC-1</b> sensor		
Milliamps mA	0...24 mA (Impedance $\pm 17\ \Omega$ )	0.005% FS $\pm 1$ digit	1 mV
Millivolts mV	-10...+100 mV ( $> 1\ \text{M}\Omega$ )	0.01% FS $\pm 1$ digit	1 $\mu\text{V}$
Continuity:	with a 100 $\Omega$ trigger. Visual and audible confirmation		
SOURCING	Range:	Accuracy:	Resolution:
Milliamps mA	0...24 mA (max. load 500 $\Omega$ )	0.02% FS $\pm 1$ digit	1 $\mu\text{A}$
General Data			
Isolation:	Maximum 100 VDC between all input and output circuits		
Power supply	Type: chargeable lithium-ion battery Charging time: approx. 5 h Running time: typically 8 h (depending on used functions)		
Mains Charger:	Charger input at calibrator: 10...15 VDC Charger Input: 115...230 VAC; 0,5 A; 50/60 Hz Charger Output: 12 VDC at 1.5 A		
Optional car charger:	12 VDC at 1 A via cigarette lighter plug		
Temperature ranges:	Storage: -40...+60°C incl. battery Usage: 0...50°C		
Relative Humidity:	0...85% r.h. (non-condensing)		
Housing:	ABS plastic, IP54 dust & splash proof, UL94V-0 flame retardant		
Rubber Boot:	green		
Dimension:	without rubber boot 149 x 34 x 77 mm with rubber boot 155 x 43 x 86 mm		
Weight:	approx. 340 g		
Scope of standard Delivery:	Pressure Calibrator <b>LR-Cal/ LPC 100</b> with rubber boot SD memory card Set of safety test leads (1 x red, 1 x black) Mains Charger 115...230 VAC Plastic kit case Operating Manual (German/English) Factory Certificate of Calibration		
Warranty:	24 months after date of delivery		

## Accessories and Spare Parts:

Order-Code	Description
<b>LRCAL-100-KFZ-LADER</b>	Car Charger (12 VDC Car Lighter)
<b>LPC100-KOFFER</b>	Case for 1 LPC 100 + 5 LPC-1
<b>LPC-LPP-P-KOFFER</b>	Case for 1 LPC 100 + 5 LPC-1 + 1 LPP 40
<b>LPC-LPP-H-KOFFER</b>	Case for 1 LPC 100 + 5 LPC-1 + 1 LPP 700/1000
<b>LPC-LPP-P-H-KOFFER</b>	Case for 1 LPC 100 + 5 LPC-1 + 1 LPP 40 + 1 LPP 700/1000
<b>LRCAL-100-SP-SICH</b>	Spare Fuses 250 mA SMD
<b>LRCAL-100-SP-KABEL</b>	Spare set of test leads (red/black)
<b>LRCAL-100-SP-BATT</b>	Spare battery pack (Li-Ion)
<b>LRCAL-100-SP-LADER</b>	Spare charger mains 115...230 VAC
<b>LRCAL-100-SP-SCHUTZ</b>	Spare rubber boot (green)
<b>LRCAL-100-SP-KOFFER</b>	Spare plastic case with custom foam
<b>LPC100-SP-TASTATUR</b>	Spare keypad

Reference Pressure Sensors **LR-Cal/ LPC-1**:

Order-Code	Pressure Range	Overpressure max.	Accuracy
<b>LPC-1-0001</b>	0...1 bar	2 bar	$\pm 0.05\%$ FS
<b>LPC-1-0003</b>	0...3 bar	5 bar	$\pm 0.05\%$ FS
<b>LPC-1-0010</b>	0...10 bar	20 bar	$\pm 0.05\%$ FS
<b>LPC-1-0030</b>	0...30 bar	60 bar	$\pm 0.05\%$ FS
<b>LPC-1-0100</b>	0...100 bar	200 bar	$\pm 0.05\%$ FS
<b>LPC-1-0300</b>	0...300 bar	400 bar	$\pm 0.05\%$ FS
<b>LPC-1-0700</b>	0...700 bar	1000 bar	$\pm 0.05\%$ FS
<b>LPC-1-1000</b>	0...1000 bar	1000 bar	$\pm 0.05\%$ FS
<b>LPC-1-0101</b>	-1...+1 bar	2 bar	$\pm 0.05\%$ FS
<b>LPC-1-0103</b>	-1...+3 bar	5 bar	$\pm 0.05\%$ FS
<b>LPC-1-BARO</b>	0.8...1.2 bar absolute	2 bar	$\pm 0.05\%$ FS

**Pressure port:** 1/2" BSP male  
(via supplied adapter; without adapter it is 1/4" BSP)