

# LCR Elite1

an efficient, convenient & accurate LCR metre

LCR Elite1 is a portable LCR metre with unique mechanical and electronic design. It integrates a pair of tweezers like probes and a digital LCR metre into one compact, lightweight, battery powered device.

## Simple Navigation Button:

Automatic or manual selection for component type, test frequencies and circuit modes. A single button allows access to four different modes.

## Crisp OLED Display:

The primary display shows component type and value. The secondary display shows Rs or Rp. Testing parameters and battery indicator are also displayed.

## Ergonomic Design:

The portable design allows user one handed operation to improve productivity.

## Standard USB Charging:

The built-in rechargeable lithium-ion polymer battery can be conveniently charged using your computer or a USB power adapter.

## Precise Gold Plated Tips:

Pick up and measure SMD resistors, capacitors and inductors easily, reliably and accurately.



**Made in Canada**

## Sophisticated Design for SMD Component Measurement:

LCR Elite1 is designed to measure inductance, capacitance and resistance with high accuracy. It provides a simple and efficient solution for measuring and identifying SMD components as well as troubleshooting electronic circuits.

The gold-plated precise tips are designed to contact the SMD components easily and reliably with the size down to 0201.

The 4-wire shielded probe makes parasitic parameters small and very predictable. It improves measurement accuracy and significantly reduces the probability of measurement errors related to setup.

The compact design allows user one hand operation and makes a convenient way to take measurements and read results.

## Automated Component Identification

LCR Elite1 simplifies measurements by using the automatic component identification function. It automatically identifies L, C, or R and selects proper testing frequency and circuit mode (parallel or series). Alternatively, user can use manual mode to set the desired parameters for measurement.

Detailed component analysis is provided on the OLED display. The primary display shows component type and value. The secondary display shows  $R_s$  (series equivalent resistance) or  $R_p$  (parallel equivalent resistance). Testing parameters and battery indicator are also displayed.

## Easy Operation

LCR Elite1 provides shortcut to go to the default mode quickly. As long as the navigation button is pressed down for approximately 2 seconds, the device goes to the default mode no matter which mode it is currently in. The device can be turned off as long as the navigation button is pressed down longer than 5 seconds.

## Long Battery Life

LCR Elite1 is powered by an internal, lithium-ion polymer rechargeable battery. It can be charged by a computer or a USB power adapter (available separately).

The power consumption is optimized to make the battery last a day for typical measurement. The standby time can be longer than a whole year. It makes the device an ideal choice for broad range of applications and missions, including R&D labs, production lines, service and repair, etc.

Testing Signal	
Test frequency:	100 Hz, 1 kHz, 10 kHz
Test signal level:	0.45Vrms
Source impedance:	100 $\Omega \pm 1\%$

Measurement Range	
Resistance R:	25 m $\Omega$ to 10 M $\Omega$
Inductance L:	1.0 $\mu$ H to 1 H
Capacitance C:	0.3 pF to 500 $\mu$ F

Basic Accuracy *	
Resistance R:	0.5 %
Inductance L:	1.0 %
Capacitance C:	1.0 %

\* For more detailed information, please refer to LCR Elite1 User Manual.

Product Characteristics	
Size:	151 x 19 x 14.5mm
Weight:	30 grams
Operating temperature:	-10°C to 50°C
Battery Type:	LiPO rechargeable, 3.7V 150mAH
Battery Life:	All day in typical measurement
Charging time:	2.5 hours typical

Learn more at:  
[www.lcrresearch.com](http://www.lcrresearch.com)

email us at: [sales@lcrresearch.com](mailto:sales@lcrresearch.com)

LCR Research Ltd.  
 660 Eglinton Ave East, Sunnybrook PO Box 50207,  
 Toronto, Ontario, Canada M4G 0B5