# Atlas LCR

passive component analyser

Model: LCR40



# **PRODUCT BRIEF**

## Designed and made in the UK

The LCR40 is an advanced instrument that greatly simplifies the testing of passive components.

Traditional LCR bridges are inherently complex and very time consuming to use.

The LCR40 does everything automatically, it tells you the component type in addition to component value data.

What's more, the **LCR40** automatically selects the best signal level and frequency for the particular component under test.



## Easy to use

Just clip the universal test leads to your component and press the test button. In seconds, the **LCR40** will identify the type of component (Inductor, Capacitor or Resistor) together with the component's main value. Additionally, further component data is also displayed, such as the DC resistance of an inductor.

The test frequency is automatically selected to suit the component under test and this is also confirmed on the scrollable display.

#### **Flexible**

The **LCR40** is supplied with our brand new universal 2mm connectors including a pair of gold hook probes. The 2mm plugs are compatible with many probe types including our new improved SMD Tweezers and Crocs. Other accessories are available too, such as a padded carry case, spare batteries and more.

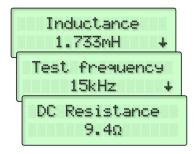
Parameter		Min	Тур	Max	Note
Resistance	range	$1\Omega$		$2M\Omega$	
	resolution	0.3 Ω	0.6Ω		
	accuracy	Typically $\pm 1.0\% \pm 1.2\Omega$		1,2,6	
Capacitance	range	0.5pF		10,000μF	
	resolution	0.2pF	0.5pF		
	accuracy	Typically ±1.5% ±1.0pF		1,2,5	
Inductance	range	1μH		2H	
	resolution	0.4μΗ	0.8μΗ		
	accuracy	Typically $\pm 1.5\% \pm 1.6\mu H$		1,2,4	
Peak test voltage (across O/C)		-1.05V		+1.05V	
Peak test current (thru S/C)		-5.0mA		+5.0mA	
Test frequency accuracy	1kHz	-1.5%	±1%	+1.5%	
	14.925kHz	-1.5%	±1%	+1.5%	
	200kHz	-1.5%	±1%	+1.5%	
Sine purity		Typically -60dB 3 <sup>rd</sup> harmonic			
Operating temperature range		15°C		35°C	3
Battery operating voltage		8.5V		13V	
Battery life		Typically ~1600 operations			7

#### Notes:

- Within 12 months of factory calibration. Please contact us if you require a full re-calibration and/or certification of traceable calibration.
- Specified at temperatures between 15°C and 30°C.
- 3. Subject to acceptable LCD visibility.
- 4. For inductances between 100μH and 100mH.
- For capacitances between 200pF and 500nF.
- For resistances between 10Ω and 1MΩ.
- 7. Based on <1 minute duration per operation.

### **Feature Summary**

- Automatic component identification.
- Automatic test frequency selection (DC, 1kHz, 15kHz, 200kHz).
- Delayed or instant analysis (for hands free operation).
- Auto power-off.
- Non-volatile probe and test lead compensation.
- Interchangeable probes sets.
- Automatic ranging and scaling with <u>real</u> units display.
- 1% basic resistance accuracy.
- 1.5% basic inductance/capacitance accuracy.





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Please note that specifications of our products are subject to change without notice. E&OE.

# **Peak Electronic Design Limited**