



**LCR-821 (12Hz~200kHz)**  
**LCR-819/829 (12Hz~100kHz)**  
**LCR-817/827 (12Hz~10kHz)**  
**LCR-816/826(100Hz~2kHz)**



## FEATURES

- \* **Test Frequency:**
  - 12Hz~200kHz (LCR-821)
  - 12Hz~100kHz (LCR-819/829)
  - 12Hz~10kHz (LCR-817/827)
  - 100Hz~2kHz (LCR-816/826)
- \* **0.05~0.1% Measurement Accuracy**
- \* **100 Sets Memory for Save/Recall of Settings**
- \* **R/Q, C/D, C/R, L/Q Test Modes for all Models; Z/θ, L/R for LCR-821 Only**
- \* **Absolute Value, Δ Value, and Δ % Measurement Display**
- \* **240 x 128 dot Matrix LCD Display**
- \* **Displays Condition and Test Result Simultaneously**
- \* **Interface : RS-232C (LCR-821/819/817/816)**  
**Handler (LCR-829/827/826)**

The LCR-800 Series are high-end digital LCR meters for component/material measurements, applicable to various R&D activities and assembly lines. The large 240 x 128 dot matrix LCD display provides ample room for two measurement items and setup parameters allowing you to grasp measurement results quickly. All test modes are able to measure supplementary factors such as, R/Q, C/D, C/R, and L/Q. The LCR-821 also contains precise resistance measurements as a combination of absolute value and phase angle. 100 sets of measurement setup memory allow sharing a single unit among multiple testing conditions or sites. For a better viewing experience with a standard PC monitor, proprietary Windows based software is accessible via the RS-232C terminal. The handler interface is also a standard feature for LCR-826/827/829.

SPECIFICATIONS	
<b>TEST FREQUENCY</b>	
	12Hz ~ 200kHz (504 steps) for LCR-821 12Hz ~ 100kHz(503 steps) for LCR-819/829 12Hz ~ 10kHz(489 steps) for LCR-817/827 100Hz ~2kHz (245 steps) for LCR-816/826
<b>BASIC ACCURACY</b>	
	0.05% for basic accuracy for LCR-821/819/817 0.1% for basic accuracy for LCR-829/827/826/816
<b>TEST SPEED</b>	
	68ms for LCR-821/819/817/816, 34ms for LCR-829/827/826
<b>TEST SIGNAL LEVELS</b>	
	5mV ~ 1.275Vrms (5mV/step) for LCR-821/819/829/817/827 0.1V ~ 1.275Vrms (5mV/step) for LCR-816/826
<b>DC BIAS</b>	
Internal	2V
External	0 ~ 35V for LCR-821; 0 ~ 30V for LCR-819/829/817/827/816/826
<b>DISPLAY RANGE</b>	
Resistance	R 0.00001Ω ~ 99999kΩ
Capacitance	C 0.00001pF ~ 99999μF
Inductance	L 0.00001mH ~ 99999H
Quality Factor	Q 0.0001 ~ 9999
Dissipation Factor	D 0.0001 ~ 9999
Impedance	Z  0.00001Ω ~ 99999k for LCR-821
Phase Angle ( Degree )	θ -180.00° ~ 180.00° for LCR-821
<b>TEST MODE</b>	
	R/Q, C/D, C/R, L/Q Z/θ, L/R for LCR-821 only
<b>EQUIVALENT CIRCUIT</b>	
	Parallel or series selectable
<b>MEMORY</b>	
	100 memory blocks total
<b>AVERAGE</b>	
	1 to 255 times
<b>TEST SPEED MODE</b>	
	SLOW, MEDIUM and FAST
<b>DISPLAY MODE</b>	
	Value, Δ, Δ %
<b>DISPLAY</b>	
	240x128 dot matrix C.C.F.L back light LCD
<b>INTERFACE</b>	
	Standard Interface : RS-232C for LCR-821 Standard Interface : Handler Interface for LCR-829/827/826 Optional : RS-232C Interface for LCR-819/817/816 (factory installed) (Including LCR-Viewer Software)
<b>POWER SOURCE</b>	
Line Voltage Range	AC 100V ~ 240V, 47 ~ 63/400Hz
<b>DIMENSIONS &amp; WEIGHT</b>	
	322 (W) x 149 (H) x 433 (D)mm, Approx. 5.5kg



**LCR-821**

**LCR-821 Rear Panel**



**LCR-829 Rear Panel**



**LCR-819 Rear Panel**



LCR-800 SERIES SELECTION GUIDE							
MODEL	LCR-821	LCR-819	LCR-829	LCR-817	LCR-827	LCR-816	LCR-826
Display	240 x 128 dot matrix CCFL back light LCD						
Test Frequency	12Hz~200kHz (504 steps)	12Hz~100kHz (503 steps)		12Hz~10kHz (489 steps)		100Hz~2kHz (245 steps)	
Basic Accuracy	0.05%	0.05%	0.1%	0.05%	0.1%	0.1%	
Test Mode	R/Q, C/D, C/R L/Q, Z/θ, L/R	R/Q, C/D, C/R, L/Q		R/Q, C/D, C/R, L/Q		R/Q, C/D, C/R, L/Q	
Memory	100 memory blocks totally						
DC BIAS	Internal	2V	2V		2V		2V
	External	0 ~35V	0 ~30V		0 ~30V		0 ~30V
Interface	RS-232	Std.	Opt.		Opt.		Opt.
	Handler			Std.		Std.	Std.

**ORDERING INFORMATION**

- LCR-821** 200kHz High Precision LCR Meter with RS-232 Interface
- LCR-819** 100kHz High Precision LCR Meter
- LCR-829** 100kHz High Precision LCR Meter with Handler Interface
- LCR-817** 10kHz High Precision LCR Meter
- LCR-827** 10kHz High Precision LCR Meter with Handler Interface
- LCR-816** 2kHz High Precision LCR Meter
- LCR-826** 2kHz High Precision LCR Meter with Handler Interface

ACCESSORIES :  
User manual x 1, Power cord x1, LCR-06A x 1

**OPTION**

Opt.01 RS-232C Interface ( Factory Installed )

**OPTIONAL ACCESSORIES**

- LCR-05** Test Fixture for Axial & Radial Leaded Components
- LCR-06A** Kelvin Clip Test Lead
- LCR-07** Test Fixture, Two-Wire with Alligator Clips
- LCR-08** Test Fixture (Tweezers) for SMD/Chip Components
- LCR-09** Test Fixture for SMD/Chip Components
- LCR-13** Test Fixture for SMD/Chip Components
- GRA-402** Rack Adapter Panel, Rack Mounting (19", 4U)
- GTL-232** RS232C Cable, 9-pin Female to 9-pin, null Modem for Computer
- GTC-001** Instrument Cart
- GTC-002** Instrument Cart

**FREE DOWNLOAD**

PC Software LCR-Viewer

**LCR-06A**



Description:  
Kelvin clip test leads.  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V

**LCR-05**

Patent:185538



Description:  
Test fixture for measurement of both axial and vertical lead components  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V

**LCR-07**



Description:  
Test leads for conventional component measurement. It is especially useful for high impedance measurement. (With alligator clips)  
Two-wire measurement; apply to low C or high R.  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V

**LCR-08**

Patent:188540



Description:  
SMD / clip tweezers  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V

**LCR-09**

Patent:186171



Description:  
SMD / chip test fixture  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V  
Size range from 0603 to 1812

**LCR-13**

Patent:186171



Description:  
SMD / chip test fixture  
Frequency: DC to 1MHz  
Max. Voltage: +/- 35V  
Size range from 0201 to 0805