



**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

TEST FREQUENCY	
	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
BASIC ACCURACY **	
	0.05% for basic accuracy for LCR-821/819/817 0.1% for basic accuracy for LCR-829/827/826/816
TEST SPEED	
	68ms for LCR-821/819/817/816, 34ms for LCR-829/827/826
TEST SIGNAL LEVELS	
	5mV ~ 1.275Vrms (5mV/step) for LCR-821/819/829/817/827 0.1V ~ 1.275Vrms (5mV/step) for LCR-816/826
DC BIAS	
Internal	2V
External	0 ~ 35V for LCR-821; 0 ~ 30V for LCR-819/829/817/827/816/826
DISPLAY RANGE ...	
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
TEST MODE	
	R/Q, C/D, C/R, L/Q Z/θ, L/R for LCR-821 only
EQUIVALENT CIRCUIT	
	Parallel or series selectable
MEMORY	
	100 memory blocks total
AVERAGE	
	1 to 255 times
TEST SPEED MODE	
	SLOW, MEDIUM and FAST
DISPLAY MODE	
	Value, Δ, Δ %
DISPLAY	
	240x128 dot matrix C.C.F.L back light LCD
INTERFACE	
	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)
POWER SOURCE	
Line Voltage Range	AC 100V ~ 240V, 47 ~ 63/400Hz
DIMENSIONS & WEIGHT	
	322 (W) x 149 (H) x 433 (D)mm, Approx. 5.5kg

(\*\*) : Display range refers to the range of measurement values that can be displayed on the screen.  
Please see the LCR-800 user manual for the effective measurement ranges.



LCR-821

(\*) : Basic accuracy varies with the speed, frequency, AC signal level and impedance of the DUT.

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



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