



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

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

(**) : 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

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	2V	2V
	External	0~35V	0~30V	0~30V	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-821 Rear Panel



LCR-829 Rear Panel



LCR-819 Rear Panel



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