



LCR-8101 (1MHz)



FEATURES

- * Test Frequency 20Hz ~ 1 MHz
- * 6 Digit Measurement Resolution
- * DC Resistance Measurement
- * Monitoring of DUT Voltage and Current
- * 0.1% Basic Measurement Accuracy
- * Comprehensive Measurement Functions
- * Standard Interface : RS-232 & GPIB
- * Large LCD Display
- * Intuitive User Interface
- * Multi-Step Mode
- * PASS/FAIL Test
- * Graph Mode (Option)

The LCR-8101 1MHz precision LCR meter provides accuracy and versatility for a wide range of component measurements, even including DC resistance measurement and Voltage/Current monitoring. High resolution and accuracy provide precise measurement results which help reconstruct component characteristics. The Multi-Step function allows customized measurements with Pass/Fail tests all according to a user's requirements. Parameters and limitations are defined separately for each program step. GPIB and RS-232C interface are installed as standard features for controlling the instrument and reading the measurement results. The Optional Graph Mode can display component characteristics in graphs over a wide frequency range or for different driver voltages. The rich features of the LCR-8101 lighten your measurement workload at a very competitive price.

SPECIFICATIONS

TEST FREQUENCY		
20Hz ~ 1MHz, 5 Digits, $\pm 0.005\%$		
INPUT IMPEDANCE		
100 Ω		
BASIC ACCURACY		
$\pm 0.1\%$ (R, Z, X, G, Y, B, L, C)		
TEST SPEED		
AC	DC	
MAX: 75mS	MAX: 30mS	
FAST: 150mS	FAST: 60mS	
MEDIUM: 450mS	MEDIUM: 120mS	
SLOW: 600mS	SLOW: 500mS	
TEST SIGNAL LEVELS		
Test Signal Level (rms)	Step	Accuracy
10mV ~ 999mV	1mV	$2\% \pm 5mV$
1V ~ 2V	0.01V	$2\% \pm 5mV$
SHORT CIRCUIT CURRENT		
Max. 20mA		
MEASUREMENT RANGES		
Mode	Measure Range	Best Resolution
R, Z, X	0.1m Ω ~ 100M Ω	0.1m Ω
G, Y, B	10nS ~ 1000S	10nS
L	0.1nH ~ 100kH	0.1nH
C	0.1pF ~ 1F	0.1pF
D	0.0001 ~ 9.9999	0.0001
Q	0.1 ~ 9999.9	0.1
θ	$-180^\circ \sim +180^\circ$	0.1
Rdc	0.1m Ω ~ 100M Ω	0.1m Ω
MEASUREMENT PARAMETERS		
Impedance (Z), Phase Angle (θ), Inductance (L), Capacitance (C), AC Resistance (Rac), Quality Factor (Q), Dissipation Factor (D), Admittance (Y), Conductance (G), Reactance (X), Susceptance (B), DC Resistance (Rdc)		
SERIES OR PARALLEL EQUIVALENT CIRCUIT		
C + R, C + D, C + Q, L + R, L + Q		
SERIES EQUIVALENT CIRCUIT ONLY		
X + R, X + D, X + Q		
PARALLEL EQUIVALENT CIRCUIT ONLY		
C + G, B + G, B + D, B + Q		
POLAR FORM		
Z + Phase Angle, Y + Phase Angle		
LCD DISPLAY		
320 x 240 DOT-MATRIX		
INTERFACE		
RS-232, GPIB		
POWER SOURCE		
AC 115V (+10%/-25%), AC 230V (+15% / -14%) (Selectable), 50/60Hz		
DIMENSIONS & WEIGHT		
330(W) x 170(H) x 340(D)mm, Approx. 5kg		



LCR-8101

Rear Panel



ORDERING INFORMATION

LCR-8101 1MHz Precision LCR Meter

ACCESSORIES :

User manual x1, Power cord x 1, Test lead LCR-06A x 1

OPTION

Opt.01 Graph Mode (factory installed)

OPTIONAL ACCESSORIES

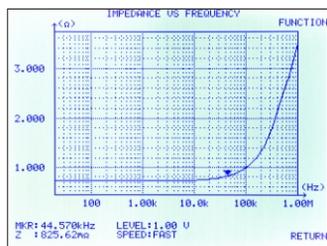
- LCR-05** Test Fixture for Axial & Radial Leaded Components
- LCR-06A** Kelvin Clip Test Lead
- LCR-07** Test Fixture, Two-Wire with Alligator Clips
- LCR-08** Test Fixture(Tweezers) for SMD/Chip Components
- LCR-09** Test Fixture for SMD/Chip Components
- LCR-13** Test Fixture for SMD/Chip Components
- GRA-404** Rack Adapter Panel, Rack Mounting (19", 4U)
- GTL-232** RS-232C Cable, 9-pin Female to 9-pin, null Modem for Computer
- GTC-001** Instrument Cart
- GTC-002** Instrument Cart

FREE DOWNLOAD

PC Software Demo software for remote control

OPTION - Graph Mode

Display of component characterization over a wide frequency range in graph charts.



LCR-06A



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

LCR-05

Patent:185538



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

LCR-07



Description: Test leads for conventional component measurement. Useful for high impedance measurement.
Two-wire measurement applicable 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
Applicable size: 0603 to 1812

LCR-13

Patent:186171



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