



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° ~ +180°	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

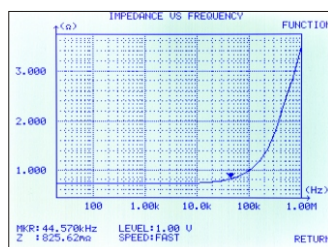
GTC-002 Instrument Cart

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