



LCR-615 Handheld Digital LCR Meter

Leveraging its leading impedance testing technology, **TECPEL** has introduced the industry's most powerful new-generation **LCR-615 Handheld Digital LCR Meter**. This instrument is the result of years of dedicated research and development in passive component testing.

The **LCR-615** features an ultra-low power design with high-density SMD assembly. Primary and secondary parameters are displayed simultaneously on a backlit LCD screen. Its elegant, one-piece two-color housing and user-friendly operation ensure simple and efficient use.

With a test signal frequency up to 100kHz, 40,000-count display for main parameters, and dissipation factor resolution of 0.0001, the LCR-615 provides highly accurate and convenient measurements of passive components in any environment, even for extended usage.

The instrument further enhances versatility by supporting resistance, inductance, capacitance, and DCR testing, delivering accuracy up to 0.1%. The LCR-615 also offers a USB communication interface for data transfer and remote control via PC. To meet increasing demands for SMD component testing, both SMD clips and Kelvin test clips are included.



Key Features

- Up to 0.1% measurement accuracy
- 100kHz maximum test signal frequency
- Selectable test signal levels (0.3 Vrms, 0.6 Vrms, 1 Vrms)
- Built-in DCR measurement function
- Enhanced input surge protection
- 40,000 max. reading for primary parameters, D/Q resolution 0.0001
- Ultra-low power consumption (typical current: 25mA)
- Patented five-terminal test socket and three-terminal banana jack compatibility
- Intelligent automatic LCR selection
- High-speed testing: up to 4 times/sec (AC) and 3 times/sec (DCR), with fast auto-ranging
- Constant 100Ω output impedance
- Percentage display and four-level tolerance comparison modes (1%, 5%, 10%, 20%)
- Battery charging supported while ON/OFF
- Test terminal protection

- Data hold, max/min/average recording functions
- Real-time function configuration and status memory
- Mini-USB communication interface with SCPI Command Set
- Free FastAccess PC software available
- Stylish dual-color injection-molded housing

Technical Specifications

Model	LCR-615
Measured Parameters	Primary: L / C / R / Z / DCR Secondary: D / Q / R / θ / ESR
Equivalent Modes	Series, Parallel
Parameter & Mode Selection	Manual / Auto
Range Selection	Auto
Test Terminals	3-terminal, 5-terminal
Test Speed	4 times/sec, 1.5 times/sec
DCR Speed	3 times/sec
Calibration	Open, Short
Tolerance Comparison	1%, 5%, 10%, 20%
Input Fuse	0.1A / 250V
Interface	Mini-USB
Test Signal Frequency	100Hz, 120Hz, 1kHz, 10kHz, 100kHz
Test Signal Level	0.3 Vrms, 0.6 Vrms, 1 Vrms
Source Impedance	100 Ω
Display	LCD dual display (primary & secondary parameters) with backlight
Reading	Primary max. 40,000 counts Secondary D/Q min. resolution: 0.0001
Accuracy	Up to 0.1%
Measurement Ranges	L: 0.000 μ H – 1000.0 H C: 0.000 pF – 20.000 mF Z/R: 0.0000 Ω – 10.000 M Ω DCR: 0.0000 Ω – 20.000 M Ω ESR: 0.0000 Ω – 999.9 Ω D: 0.0000 – 9.999 Q: 0.0000 – 9999 θ : 0.00° – \pm 180.0°
Battery	8.4V Ni-MH 200mAh rechargeable battery
AC Adapter	Input: 120V / 50Hz Output: 12V – 15V (100 Ω load)
Standby (OFF) Current	11 μ A
Battery Life	Up to 16 hours (depending on usage)
Auto Power Off	5, 15, 30, 60 min, or OFF (default: 5 min)
Low Battery Indication	Warning when battery voltage < 6.8V