

TECPEL Precision LCR Instrument

200KHz LCR Instrument



LCR-200



- Measurement parameters: Z, Ls, Lp, Cs, Cp, DCR, ESR, D, Q and basic accuracy 0.1%.
- Test conditions: 100Hz, 120Hz, 1KHz, 10KHz, 100KHz, 200KHz; 1Vrms, 250mVrms, 50mVrms, 1Vdc(DCR only)
- DMM functionalities
- Dual LCD display with LED backlit
- Open/short calibration
- Remote binning capability
- Auto range/range hold selection
- RS-232 interface

Test conditions		Measurement ranges		AC/DC current	
Frequency	100Hz/120Hz/1KHz/10KHz/ 100KHz/200KHz	Z	0.000 Ω to 500.0 MΩ	Range	2A, 0.2A, 20mA and 2mA
Level	1V rms/250mVrms/ 50mVrms/ 1Vdc (DCR only)	L	0.030 μH to 9999H	Resolution	1mA, 0.1mA, 0.01mA and 1uA
Measurement parameters	Z, Ls, Lp, Cs, Cp, DCR, ESR, D, Q, and θ.	C	0.003 pF to 80.00 mF	Accuracy	±(0.4%+3 digits) DC ±(0.8%+5 digits)AC@40Hz~1KHz
Basic accuracy	0.1%	DCR	0.000 Ω to 500.0 MΩ	Current shunt	0.1Ω@current ≥ 20mA; 10Ω@current ≤ 20mA
Primary parameters display		ESR	0.000 Ω to 9999 Ω	Continuity check	
Z	AC impedance	D	0.000 to 9999	Continuity threshold	50Ω(approximately)
DCR	DC resistance	Q	0.000 to 9999	Continuity indicator	Tone buzzer
Ls	Serial inductance	θ	-180.0° to 180.0°	Input protection:	600V (max)
Lp	Parallel Inductance	V	0.000mV to ± 600.0V	Diode test	
Cs	Serial capacitance	I	0.000mA to ± 2.000A	Test current	2.5mA (typical)
Cp	Parallel capacitance	DMM functionalities		Open circuit voltage	5.0VDC (nominal)
Secondary parameters display		DC voltage		Input protection	600V (Max.)
θ	Angle impedance	Range	2V, 20V, 200V and 600V	General	
ESR	Equivalent series resistance	Resolution	1mV, 10mV, 100mV, 1V	Temperature	0 to 40°C (operating) -20 to 70°C (storage)
D	Dissipation factor	Accuracy	±(0.4%+ 3 digits)	Relative humidity	Up to 85%
Q	Quality factor	Input impedance	1MΩ	AC power	110V/220V±10%, 60/50Hz
Combinations of display		AC voltage (true RMS)		Dimensions (DxWxH)	300x220x150mm (11.8"x8.7"x5.9")
Serial mode	Z-θ, Cs-D, Cs-Q, Cs-ESR, Ls-D, Ls-Q, Ls-ESR	Range	2V, 20V, 200V and 600V	Weight	4.5 kgs
Parallel mode	Cp-D, Cp-Q, Lp-D, Lp-Q	Resolution	1mV, 10mV, 100mV, 1V	Standard accessories	TL-09C Kelvin clips x 1pc Test leads x 1pc
		Accuracy	±(0.8%+5 digits) @ 40Hz~ 1KHz		
		Input impedance	1MΩ		

Optional Accessories



TL-09A



TL-09B



TL-09C

- TL-09A SMD test probe
- TL-09B component fixture
- TL-09C Kelvin clips