

Introducing the Tekneka RCAL33, a versatile and portable multi-function LCR meter built for precise measurements. It provides complete solutions for measuring inductance (L), capacitance (C), AC resistance (R), DC resistance (DCR), dissipation factor (D), and quality factor (Q) with an unmatched accuracy of 0.3% and a resolution of 0.01%. Its dual LCD panel, with 19,999/1,999 counts, provides excellent readings even in low-light circumstances, with optional backlighting. The auto LCR mode displays characteristics like  $\theta$ , Q, D, and Rp and intelligently determines the types of impedance. It is simple to do an open/short calibration, and the results provide a PASS/FAIL rating for rapid evaluation. Users can simply control, record, analyze, and print data on a PC with a USB interface.

### Features

- 3-inch LCD screen, digital and analog scale with backlight
- Measures L, C, R, DCR, D, and Q parameters precisely
- It has automatic LCR smart measuring and check
- LCR setup secondary parameters  $\theta$ , Q, D, and Rp are displayed
- Control, record, analyze, and print data on a PC via USB
- Open/short calibration mode with outcomes of PASS/FAIL
- To freeze the measurement, select the Data Hold option
- Relative mode REL% is between -99.9% ~ 99.9%

### Applications

Tekneka RCAL33 is widely used by Instrument control technicians, calibration laboratories, industrial field service engineers, quality control professionals, maintenance technicians, and automation and control system engineers.



### Technical Specifications

#### Measurement Range

<b>DCR</b>	200 ~ 200M		
<b>D/Q</b>	0.001 ~ 1999		
$\theta$	0.00° ~ ±180.0°		
	<b>INDUCTANCE (L)</b>	<b>CAPACITANCE (C)</b>	<b>RESISTANCE (R)</b>
<b>100/120</b>	20mH ~ 20KH	20nF ~ 20mF	200Ω ~ 200MΩ
<b>1KHz</b>	2000μH ~ 2000H	2000pF ~ 2mF	20Ω ~ 200MΩ
<b>10K</b>	200μH ~ 20H	200pF ~ 200μF	20Ω ~ 20MΩ
<b>100KHz</b>	20μH ~ 200mH	200pF ~ 20μF	20Ω ~ 2MΩ

<b>Parameter</b>	Primary	DC Resistance	DCR
		Series Inductance/Capacitance	Ls/Cs
		Parallel Inductance/Capacitance	Lp/Cp
	Secondary	Phase Angle	$\theta$
		Dissipation Factor	D
		Equivalent Series Resistance	ESR
		Quality Factor	Q
		Equivalent Parallel Resistance	Rp
<b>Basic Accuracy</b>	0.3%		
<b>Frequency</b>	100/120/1K/10K/100KHz		
<b>Test Level</b>	0.6Vrms		
<b>Calibration Function</b>	Open/Short		
<b>Measurement Speed</b>	Approximately 1.2 times/second		

### Packing Includes

- Shielding Clip Line
- Kelvin 4 Terminal Measure Line
- Short Socket
- 6 x AAA Batteries
- USB Cable
- PC Link Software CD
- Calibration Certificate
- User Manual

### Ordering Info

RCAL33..... LCR Meter

#### General Specifications

Storage Temperature	-25 ~ 50°C
Operating Temperature	0 ~ 40°C
Power Supply	6 x 1.5V (AAA)
Dimension	205 x 97 x 45mm
Weight	472g
Mains Power Supply (Optional)	Input: 100V ~ 240V AC, 50 ~ 60Hz 1.8A Output: 12V DC, 2A MAX