

FEATURES

- Dual LCD display
- Auto LCR smart check and measurement
- Series/Parallel modes are selectable
- Ls/Lp/Cs/Cp with D/Q/θ/ESR parameters
- Support DCR mode
200.00Ω~200.0MΩ
- Five different test frequency are available: 100/120/1k/10k/100k Hz
- Test AC signal level: 0.6mVRMS typ.
- Test range: (ex. F=1kHz)
L:200.00 μH ~ 2000.0 H
C:2000.0 pF ~ 2.000 mF
R:20.000 Ω ~ 200.0 MΩ
- Multi-level battery voltage detector
- Support Backlight & Buzzer sound driver
- Primary Parameters Display:
DCR:DC Resistance
Ls:Serial Inductance
Lp:Parallel Inductance
Cs:Serial Capacitance

RS PRO LCR Meter

RS Stock No.: XXX-XXX



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

The LCR meter could measure Inductance/Capacitance/ Resistance with secondary parameters including dissipation factor (D), quality factor(Q), phase angle(θ), equivalent series/parallel resistance(ESR or Rp). The meter is fully auto ranging operation for AC impedance & DC resistance measurement. It means the user could measure the L/C/R components directly at AUTOLCR smart mode without changing the function key. User could also select the target test frequencies of 100Hz/120Hz/1kHz/10kHz /100kHz depending on DUT(device under test) type. Components could be measured in series or parallel mode according to the DUT impedance automatically.

General Specifications

Model Number	RS-9935
Type	Handheld
Components Type	Inductors, Capacitors, Resistors
Measurement Parameters	Auto LCR / L / C / ACR / DC), Ls/Lp/Cs/Cp with D/Q/ θ /ESR
Test Mode	Series / Parallel
Test Frequency	100Hz to 100kHz
Memory	
Display Type	Dual LCD
Auto Ranging	Yes
Data Hold	Yes
Auto Power Off time	Yes
Low Battery Indicator	Yes
Overload Indication	Yes
Calibration Availability	YES

Accuracy Specification

Notes:

- Measurement performed at the test socket.
- Measurements performed after correct open and short calibration.

- DUT and test leads must be properly shielded to guard if necessary.
- Q value is the reciprocal of DF.
- Accuracies based within 10% to 100% of full scale of range;
- values outside of range should be used as reference only.
- — means parallel or series measurement mode.

Inductance @ Ta =18 ~ 28 (De) (Frequency =100 Hz/120 Hz)

Range	Resolution	Lx Accuracy	DF Accuracy	Measurement Mode
20.000mH	1uH	1.5% ± 10d	1.5% ± 50d	Series
200.00mH	0.01mH	1.4% ± 15d	1.4%± 50d	Series
2000.0mH	0.1mH	1.5%± 15d	1.5%± 50d	Series
20.000H	1mH	1.6%± 10d	1.6% ± 50d	---
200.00H	0.01H	1.3%± 10d	1.3%± 50d	Parallel
2000.0H	0.1H	2.0%± 15d	2.0%± 50d	Parallel
20.000kH	0.001kH	2.5%± 15d	2.5%± 0d	Parallel

Inductance @ Ta =18 ~ 28 (De) (Frequency = 1kHz)

Range	Resolution	Lx Accuracy	DF Accuracy	Measurement Mode
2000.0uH	0.1uH	1.3% ± 10d	1.3%± 50d	Series
20.000mH	1uH	1.2%± 10d	1.2%±50d	Series
200.00mH	0.01mH	1.2%± 10d	1.2% ±50d	Series
2000.0mH	0.1mH	1.5%± 15d	1.5%± 50d	---
20.000H	1mH	1.5%± 15d	1.5% ±50d	Parallel
200.00H	0.01H	2.0%±10d	2.0%± 50d	Parallel
2000.0H	0.1H	2.5%± 15d	2.5%± 50d	Parallel

Inductance @ Ta =18 ~ 28 (De) (Frequency = 10kHz)

Range	Resolution	Lx Accuracy	DF Accuracy	Measurement Mode
200.00uH	0.01uH	1.8%±10d	1.8%±50d	Series
2000.0uH	0.1uH	1.5%±10d	1.5%±50d	Series
20.000mH	1uH	1.2%±10d	1.2%±50d	Series
200.00mH	0.01mH	1.5%±15d	1.5%± 50d	---
2000.0mH	0.1mH	2.0%±10d	2.0%± 50d	Parallel
20.000H	1mH	2.5%±15d	2.5%± 50d	Parallel

Inductance @ Ta =18 ~ 28 (De) (Frequency = 100kHz)

Range	Resolution	Lx Accuracy	DF Accuracy	Measurement Mode
20.000uH	0.001uH	2.5%±10d	2.5%±50d	Series
200.00uH	0.01uH	1.5%±10d	1.5%±50d	Series
2000.0uH	0.1uH	1.3%±15d	1.3%±50d	Series
20.000m	1uH	2.0%±15d	2.0%±50d	Parallel
200.00mH	0.01mH	2.5%±15d	2.5%±50d	Parallel

Capacitance @ Ta =18 ~ 28 (De) (Frequency = 100 Hz/120 Hz)

Range	Resolution	Cx Accuracy	DF Accuracy	Measurement Mode
20.000nF	1pF	2.5%± 10d	2.5%± 50d	Parallel
200.00nF	0.01nF	1.2%± 10d	1.2%± 50d	---
2000.0nF	0.1nF	0.9%± 10d	0.9%± 50d	---
20.000uF	1nF	1.0%± 15d	1.0%± 50d	Series
200.00uF	0.01uF	1.2%± 10d	1.2%± 50d	Series
2000.0uF	0.1uF	2.5%± 10d	2.5%± 50d	Series
20.00mF	0.01mF	5.0%± 10d	5.0%± 50d	Series

Frequency = 100 Hz/120 Hz (Frequency = 1kHz)

Range	Resolution	Accuracy	DF Accuracy	Measurement Mode
2000.0pF	0.1pF	3.5%± 15d	3.5%± 50d	Parallel
20.000nF	1pF	1.0%± 10d	1.0%± 50d	---
200.00nF	0.01nF	0.9%± 10d	0.9%± 50d	---
2000.0nF	0.1nF	1.0%± 10d	1.0%± 50d	Series
20.000uF	1nF	1.2%± 15d	1.2%± 50d	Series
200.00uF	0.01uF	2.5%± 10d	2.5%± 50d	Series
2000uF	1uF	4%± 20d	4%± 50d	Series

Frequency = 100 Hz/120 Hz (Frequency = 10kHz)

Range	Resolution	Cx Accuracy	DF Accuracy	Measurement Mode
200.00pF	0.01pF	3.0%± 8d	3.0%± 50d	Parallel
2000.0pF	0.1pF	1.0%± 10d	1.0%± 50d	---
20.000nF	1pF	0.9%± 10d	0.9%± 50d	---
200.00nF	0.01nF	0.8%± 10d	0.8%± 50d	Series

<i>2000.0nF</i>	0.1nF	1.0%± 8d	1.0%± 50d	Series
<i>20.000uF</i>	1nF	2.0%± 8d	2.0%± 50d	Series
<i>200.0uF</i>	0.1uF	4.5%± 15d	4.5%± 50d	Series

Frequency = 100 Hz/120 Hz (Frequency = 100kHz)

<i>Range</i>	Resolution	C_x Accuracy	DF Accuracy	Measurement Mode
<i>200.00pF</i>	0.01pF	2.5%± 15d	2.5%± 50d	Parallel
<i>2000.0pF</i>	0.1pF	1.0%± 8d	1.0%± 50d	Parallel
<i>20.000nF</i>	1pF	1.8%± 8d	1.8%± 50d	Parallel
<i>200.00nF</i>	0.01nF	1.5%± 10d	1.5%± 50d	Series
<i>2000.0nF</i>	0.1nF	2.5%± 15d	2.5%± 50d	Series

Resistance @ Ta =18 ~ 28 (De) (Frequency = 100 Hz/120 Hz)

<i>Range</i>	Resolution	R_x Accuracy	Measurement Mode
<i>200.00Ω</i>	0.01Ω	1.2%± 10d	---
<i>2.0000kΩ</i>	0.1Ω	0.8%± 5d	---
<i>20.000kΩ</i>	1Ω	0.9%± 5d	---
<i>200.00kΩ</i>	0.01kΩ	0.7%± 3d	---
<i>2.0000MΩ</i>	0.1kΩ	1.0%± 5d	---
<i>20.000MΩ</i>	1kΩ	2.2%± 10d	---
<i>200.0MΩ</i>	0.1MΩ	2.5%± 10d	---

Resistance @ Ta =18 ~ 28 (De) (Frequency = 1kHz)

<i>Range</i>	Resolution	R_x Accuracy	Measurement Mode
<i>20.000Ω</i>	1mΩ	1.2%± 10d	---
<i>200.00Ω</i>	0.01Ω	0.8%± 5d	---
<i>2.0000kΩ</i>	0.1Ω	0.8%± 3d	---
<i>20.000kΩ</i>	1Ω	0.7%± 3d	---
<i>200.00kΩ</i>	0.01kΩ	1.0%± 5d	---
<i>2.0000MΩ</i>	0.1kΩ	1.5%± 10d	---
<i>20.000M</i>	1kΩ	1.8%± 10d	---
<i>200.0MΩ</i>	0.1MΩ	6.0%± 50d	---

Resistance @ Ta =18 ~ 28 (De) (Frequency = 10kHz)

Range	Resolution	Rx Accuracy	Measurement Mode
20.000Ω	1mΩ	1.5%± 10d	---
200.00Ω	0.01Ω	0.8%± 10d	---
2.0000kΩ	0.1Ω	0.9%± 5d	---
20.000kΩ	1Ω	0.8%± 3d	---
200.00kΩ	0.01kΩ	1.0%± 5d	---
2.0000MΩ	0.1kΩ	2.5%± 10d	---
20.000M	0.01MΩ	2.8%±10d	---

Resistance @ Ta =18 ~ 28 (De) (Frequency = 100kHz)

Range	Resolution	Rx Accuracy	Measurement Mode
20.000Ω	1mΩ	2.3%± 10d	---
200.00Ω	0.01Ω	1.5%± 5d	---
2.0000kΩ	0.1Ω	0.8%± 20d	---
20.000kΩ	1Ω	0.8%± 20d	---
200.00kΩ	0.01kΩ	1.5%± 10d	---
2.0000MΩ	0.1kΩ	2.5%± 30d	---

DC Resistance @ Ta =18 ~ 28 (De) (Frequency = 100Hz/120Hz/1kHz/10kHz/100kHzDC)

Range	Resolution	Rx Accuracy	Measurement Mode
200.00Ω	±0.01Ω	1.8%± 10d	---
2.0000kΩ	±0.1Ω	0.6%± 20d	---
20.000kΩ	±1Ω	0.6%± 10d	---
200.00kΩ	±0.01kΩ	0.5%± 3d	---
2.0000MΩ	±0.1kΩ	1.5%± 5d	---
20.000MΩ	±1kΩ	2.0%± 5d	---
200.0MΩ	±0.1MΩ	2.5%± 5d	---

D value Accuracy @ Ta =18 ~ 28 (De)

Freq. / Z	0.1- 1Ω	1-10Ω	10-100kΩ	100k-1MΩ	1M-20MΩ	20M-200MΩ
100/120Hz	±0.030	±0.010	±0.009	±0.010	±0.020	±0.040
1kHz	±0.03	±0.010	±0.009	±0.010	±0.020	±0.009
10kHz	±0.030	±0.010	±0.009	±0.009	±0.010	±0.040
100kHz	±0.040	±0.030	±0.010	±0.010	±0.020	±0.040

D value Accuracy @ Ta =18 ~ 28 (De)

Freq. / Z	0.1- 1Ω	1-10Ω	10-100kΩ	100k-1MΩ	1M-20MΩ	20M-200MΩ
100/120Hz	±0.65°	±0.36°	±0.23°	±0.45°	±0.65°	±1.35°
1kHz	±0.65°	±0.36°	±0.23°	±0.45°	±0.65°	±3.63°
10kHz	±0.65°	±0.36°	±0.23°	±0.45°	±1.35°	N/A
100kHz	±1.27°	±0.65°	±0.49°	±0.65°	±1.35°	±1.35°

Electrical Specifications

Power Source Battery

Battery Included Yes

Battery Type AA

Mechanical Specifications

Dimensions 220mm X 96mm X 60mm

Length 220mm

Width 96mm

Height 60mm

Weight 360g

Additional Information

Custom Tariff Number 90308910000

Approvals

Compliance/Certifications CE

Product Additional Function and Information / Illustrations