



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 R_p). 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.



DT-9935

DIGITAL LCR-Q METER

- | 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 200.00 Ω ~ 200.0M Ω
- | 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 μ H ~ 2000.0 H C : 2000.0 pF ~ 2.000 mF
R : 20.000 Ω ~ 200.0 M Ω
- | 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
Cp : Parallel Capacitance Rs : Serial Resistance
Rp : Parallel Resistance
- | Second Parameter Display:
 θ : Phase Angle ESR : Equivalence Serial Resistance
D : Dissipation Factor Q : Quality Factor
- | Auto power off
- | Battery detect
- | Hold mode
- | Relative mode

Electrical Specifications

Inductance @ Ta = 18 ~ 28°C(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

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

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

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
20.000mH	1uH	2.0%±15d	2.0%±50d	Parallel
200.00mH	0.01mH	2.5%±15d	2.5%±50d	Parallel

Electrical Specifications**Capacitance @ Ta = 18 ~ 28°C (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 = 1kHz

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 = 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
2000.0nF	0.1nF	1.0%±8d	1.0%±50d	Series
20.000uF	1nF	2.0%±8d	2.0%±50d	Series
200.0uF	0.1uF	4.5%±15d	4.5%±50d	Series

Frequency = 100kHz

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

Resistance @ Ta = 18 ~ 28°C(De)

Frequency = 100 Hz/120 Hz

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

Frequency = 1kHz

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

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	---
20.00MΩ	0.01MΩ	2.8%±10d	---

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	---
2.000MΩ	1kΩ	2.5%±30d	---



Electrical Specifications

DC Resistance @ Ta = 18 ~ 28°C (De)

Frequency = 100Hz/120Hz/1kHz/10kHz/100kHz

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°C(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	±0.030	±0.010	±0.009	±0.010	±0.020	±0.090
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°C (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°	

Accessories

Carrying Case, Test Lead set, SMT Clip, Battery, Instruction Manual and Test Certificate.

CEM Test Instruments GmbH

Lütticher Str. 132

40547 Düsseldorf, Germany

Email: info@cem-instruments.de

www.cem-instruments.de

