Mini Handheld LCR Meter

RoHS Compliant

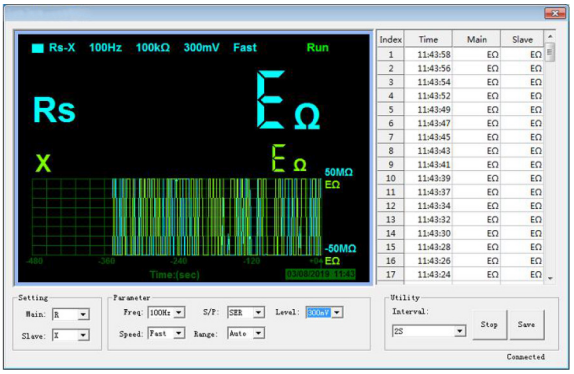
Features

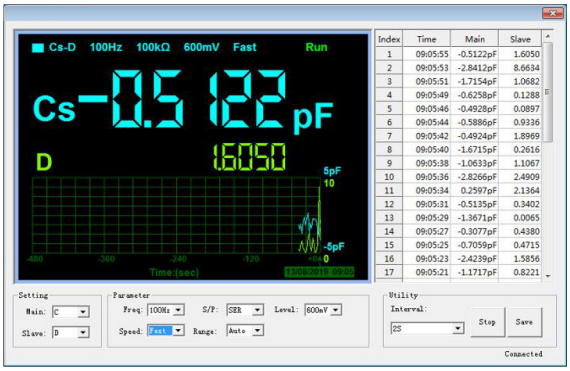
- Accuracy: 0.3%.
- With 2.8 inch TFT LCD.
- With data record function.
- Battery lasts up to 16 hours/AC-powered.
- Type C-to-USB connectivity for usage on PC.
- Detailed component analysis with L, C, R, Z, X, D, Q, θ, ESR functions.
- With 7 selectable test frequencies: 100Hz, 120Hz, 400Hz, 1kHz, 4kHz, 10kHz, 40kHz.
- Measurement range: Inductance (L) 0 to 2000H, Capacitance (C) 0 to 20mF, Resistance (R) 0 to 20MΩ.
- Auto identification (AUTO/R/C/L/Z) which automatically determines and displays component type and measurements.

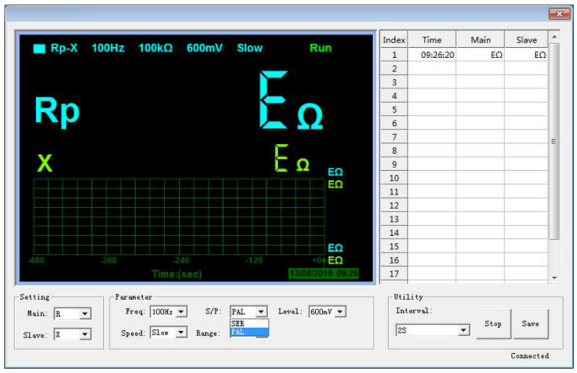
Specification

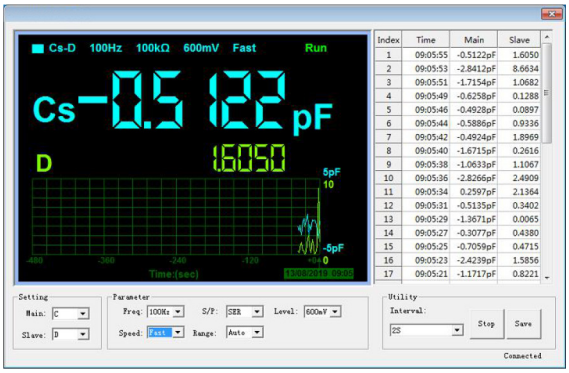
Test Frequency	100Hz, 120Hz, 400Hz, 1kHz, 4kHz, 10kHz, 40kHz	
Accuracy	0.3%	
Equivalent Circuit	Series, Parallel	
Test Signal Level	0.6V rms	
Ranging Mode	Manual and Auto	
Measurements	Major	L/C/R/Z
	Minor	X/D/Q/θ/ESR
Inductance Range (L)	0H to 2000H	
Capacitance Range (C)	0mF to 20mF	
Impedance/Resistance Range (R)	0Ω to 20MΩ	
Measurement Rate	High Rate	4 times/second
	Medium Rate	2 times/second
	Low Rate	1 time/second
Calibration Function	Open, Close	
Input Terminals/Sockets	3 terminals and 5 component sockets	
Display	2.8 inch TFT LCD	
Power Supply	Two 3.7V Lithium Battery or optional power adaptor	
Dimensions	199 mm (H) × 98 mm (W) × 40 mm (D)	
Weight	165 grams with battery	

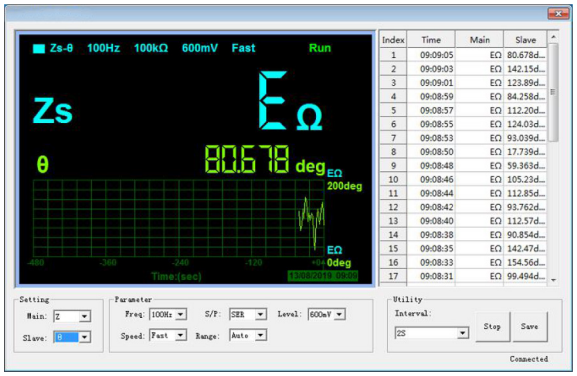
PC Software Functions

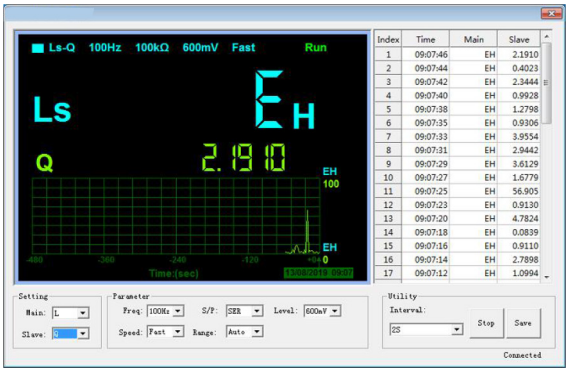












Capacitance (C) and Dissipation (D)

100Hz/120Hz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
20mF	4mF to 20mF	8%+5 digits	0.08	Series
4mF	400µF to 3.9999mF	2%+3 digits	0.02	Series
400µF	400µF to 399.99µF	0.6%+2 digits	0.006	Series
40µF	4µF to 39.999µF	0.4%+2 digits	0.004	Series
4µF	400nF to 3.9999µF	0.4%+2 digits	0.004	-
400nF	40nF to 399.99nF	0.4%+2 digits	0.004	Parallel
40nF	4nF to 39.999nF	0.5%+3 digits	0.005	Parallel
4nF	0pF to 3.999nF	1.5%+5 digits	-	Parallel

1kHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
1000uF	400uF to 999.9uF	3%+5 digits	0.03	Series
400µF	40µF to 399.99µF	1.5%+3 digits	0.015	Series
40µF	4µF to 39.999µF	0.6%+2 digits	0.006	Series
4µF	400nF to 3.9999µF	0.4%+2 digits	0.004	--
400nF	40nF to 399.99nF	0.4%+2 digits	0.004	Parallel
40nF	4nF to 39.999nF	0.6%+3 digits	0.006	Parallel
4nF	400pF to 3.9999nF	0.6%+3 digits	0.006	Parallel
400pF	0pF to 399.9pF	3%+5 digits	--	Parallel

10kHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
100µF	40µF to 100µF	4%+5 digits	0.04	Series
40µF	4µF to 39.999µF	2%+3 digits	0.02	Series
4µF	400nF to 3.9999µF	0.6%+2 digits	0.006	Series
400nF	40nF to 399.99nF	0.4%+2 digits	0.004	Series
40nF	4nF to 39.999nF	0.4%+2 digits	0.004	--
4nF	4000pF to 3.9999nF	0.4%+2 digits	0.004	Parallel
400pF	40pF to 399.99pF	0.6%+3 digits	0.006	Parallel
40pF	0pF to 39.99pF	2.5%+5 digits	--	Parallel

40kHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
100µF	40µF to 100µF	6%+5 digits	0.06	Series
40µF	4µF to 39.999µF	4%+3 digits	0.04	Series
4µF	400nF to 3.9999µF	1%+2 digits	0.01	Series
400nF	40nF to 399.99nF	0.6%+2 digits	0.006	Series
40nF	4nF to 39.999nF	0.6%+2 digits	0.006	--
4nF	400pF to 3.9999nF	0.6%+2 digits	0.006	Parallel
400pF	40pF to 399.99pF	1%+3 digits	0.01	Parallel
40pF	0pF to 39.99pF	3%+5 digits	--	Parallel

Inductance (L) and Quality Factor
100Hz/120Hz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1000H	400H to 999.9H	2%+3 digits	0.02	Parallel
400H	40H to 399.99H	0.6%+2 digits	0.006	Parallel
40H	4H to 39.999H	0.4%+2 digits	0.004	Parallel
4H	400mH to 3.9999H	0.4%+2 digits	0.004	--
400mH	40mH to 399.99mH	0.4%+2 digits	0.004	Series
40mH	4mH to 39.999mH	0.6%+3 digits	0.006	Series
4mH	0uH to 3.999mH	3%+5 digits	--	Series

1kHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1H	400mH to 999.9mH	1.5%+3 digits	0.015	Parallel
400mH	40mH to 399.99mH	0.4%+2 digits	0.004	Parallel
40mH	4mH to 39.999mH	0.4%+2 digits	0.004	--
4mH	400uH to 3.9999mH	0.4%+2 digits	0.004	Series
400uH	40uH to 399.99uH	0.8%+3 digits	0.008	Series
40uH	0uH to 39.99uH	3%+5 digits	--	Series

10kHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
100H	40H to 100H	2%+3 digits	0.02	Parallel
40H	4H to 39.999H	0.6%+2 digits	0.006	Parallel
4H	400mH to 3.9999H	0.4%+2 digits	0.004	Parallel
400mH	40mH to 399.99mH	0.4%+2 digits	0.004	-
40mH	4mH to 39.999mH	0.4%+2 digits	0.004	Series
4mH	400uH to 3.9999mH	1%+3 digits	0.01	Series
400uH	0uH to 399.9uH	3%+5 digits	-	Series

40kHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1H	400mH to 999.9mH	2%+4 digits	0.02	Parallel
400mH	40mH to 399.99mH	0.8%+2 digits	0.008	Parallel
40mH	4mH to 39.999mH	0.8%+2 digits	0.008	--
4mH	400uH to 3.9999mH	0.8%+2 digits	0.008	Series
400uH	40uH to 399.99uH	1.5%+3 digits	0.015	Series
40uH	0uH to 39.999uH	4%+5 digits	--	Series

Impedance (Z) and Phase Angle
100Hz, 120Hz, 1kHz, 10kHz

Range	Display Range	Accuracy Ze	Accuracy	Recommend Equivalent Mode
20MΩ	4MΩ to 20MΩ	3%+10 digits	3.4°	Parallel
4MΩ	400kΩ to 3.9999MΩ	1.2%+3 digits	0.7°	Parallel
400kΩ	40kΩ to 399.99kΩ	0.3%+3 digits	0.2°	Parallel
40kΩ	4kΩ to 39.999kΩ	0.25%+2 digits	0.1°	--
4kΩ	400Ω to 3.9999kΩ	0.25%+2 digits	0.1°	Series
400Ω	40Ω to 399.99Ω	0.25%+2 digits	0.1°	Series
40Ω	4Ω to 39.999Ω	0.5%+3 digits	0.3°	Series
4Ω	0.4Ω to 3.9999Ω	2%+3 digits	1.1°	Series
0.4Ω	0Ω to 0.3999Ω	4%+3 digits	--	Series

40kHz

Range	Display Range	Accuracy Ze	Accuracy	Recommend Equivalent Mode
20MΩ	4MΩ to 20MΩ	7%+41 digits	4°	Parallel
4MΩ	400kΩ to 3.9999MΩ	2.5%+3 digits	1.4°	Parallel
400kΩ	40kΩ to 399.99kΩ	1%+4 digits	0.6°	Parallel
40kΩ	4kΩ to 39.999kΩ	1%+4 digits	0.6°	--
4kΩ	400Ω to 3.9999kΩ	0.5%+3 digits	0.3°	Series
400Ω	40Ω to 399.99Ω	0.5%+3 digits	0.3°	Series
40Ω	4Ω to 39.999Ω	0.7%+4 digits	0.4°	Series
4Ω	0.4Ω to 3.9999Ω	2%+6 digits	1.1°	Series
0.4Ω	0Ω to 0.3999Ω	5%+10 digits	--	Series

Accessory Included

Test lead clips (1pc Red + 1pc Black)

Short circuit metal sheet

Type-C data cable

Part Number Table

Description	Part Number
Mini Handheld LCR Meter, 0.3% Accuracy, 40kHz, 2.8” TFT LCD	MP700433