

Mini Handheld LCR Meter

Frequency 100Hz, 120Hz, 400Hz, 1kHz, 4kHz, 10kHz, 40kHz, 50kHz, 75kHz, 100kHz

Hantek1833C



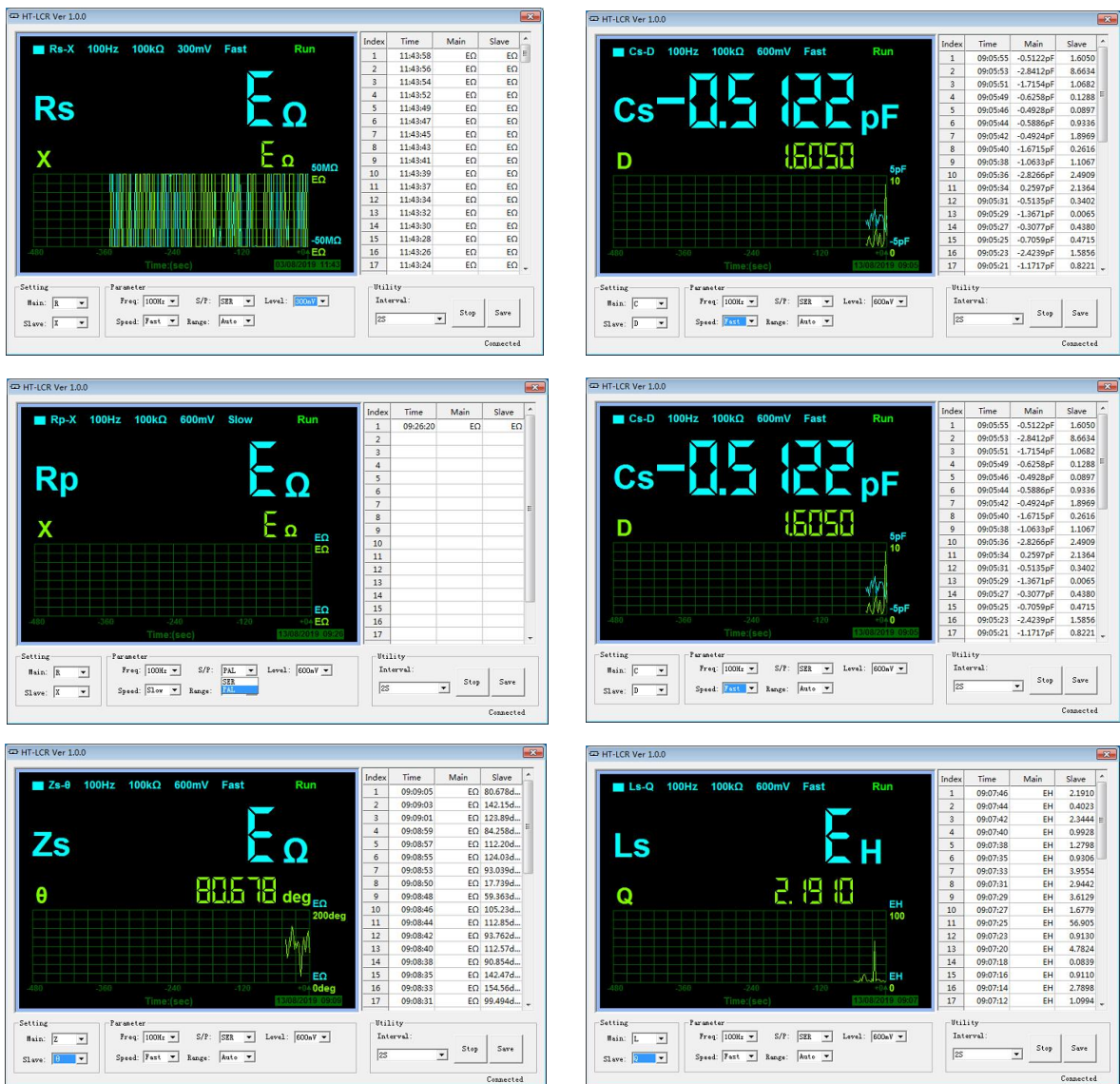
Accessory



Features

- Accuracy: 0.30%.
- 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, 50kHz, 75kHz, 100kHz.
- Measurement range: Inductance (L) 0-2000H, Capacitance (C) 0-20mF, Resistance (R) 0-20M Ω .
- Auto identification (AUTO/R/C/L/Z) which automatically determines and displays component type and measurements.

PC Software Functions



Specification

Model	Hantek1833C	
Test Frequency	100Hz, 120Hz, 400Hz, 1kHz, 4kHz, 10kHz, 40kHz, 50kHz, 75kHz, 100kHz	
Accuracy	0.30%	
Equivalent Circuit	series, parallel	
Test Signal Level	0.6Vrms, 0.3Vrms	
Ranging Mode	Manual and Auto	
Measurements	Major	L/C/R/Z
	Minor	X/D/Q/θ/ESR
Inductance Range	(L) 0-2000H	
Capacitance Range	(C) 0-20mF	
Impedance/Resistance Range	(R) 0-20MΩ	
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) x 98 mm (W) x 40 mm (D)	
Weight	165 grams with battery	
Accessory	1pc Type-C data cable 1pc power adaptor 1pc short circuit metal sheet 1pair test clips (1pc red + 1pc black)	

Capacitance (C) and Dissipation (D)

100Hz/120Hz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
20mF	4.000mF~20.000mF	8.00%+5 digits	0.08	Series
4mF	400.0μF~3.9999mF	2.00%+3 digits	0.02	Series
400μF	40.00μF~399.99μF	0.60%+2 digits	0.006	Series
40μF	4.000μF~39.999μF	0.40%+2 digits	0.004	Series
4μF	400.0nF~3.9999μF	0.40%+2 digits	0.004	--
400nF	40.00nF~399.99nF	0.4%+2 digits	0.004	Parallel
40nF	4.000nF~39.999nF	0.5%+3 digits	0.005	Parallel
4nF	0pF~3.999nF	1.5%+5 digits	--	Parallel

1KHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
1000uF	400.0uF~999.9uF	3.00%+5 digits	0.03	Series
400μF	40.00μF~399.99μF	1.50%+3 digits	0.015	Series
40μF	4.000μF~39.999μF	0.60%+2 digits	0.006	Series
4μF	400.0nF~3.9999μF	0.40%+2 digits	0.004	--
400nF	40.00nF~399.99nF	0.4%+2 digits	0.004	Parallel
40nF	4.000nF~39.999nF	0.6%+3 digits	0.006	Parallel
4nF	400.0pF~3.9999nF	0.6%+3 digits	0.006	Parallel
400pF	0.0pF~399.9pF	3%+5 digits	--	Parallel

10KHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
100μF	40.00μF~100.00μF	4.00%+5 digits	0.04	Series
40μF	4.000μF~39.999μF	2.0%+3 digits	0.02	Series
4μF	400.0nF~3.9999μF	0.60%+2 digits	0.006	Series
400nF	40.00nF~399.99nF	0.4%+2 digits	0.004	Series
40nF	4.000nF~39.999nF	0.4%+2 digits	0.004	--
4nF	400.0pF~3.9999nF	0.4%+2 digits	0.004	Parallel
400pF	40.00pF~399.99pF	0.6%+3 digits	0.006	Parallel
40pF	0.00pF~39.99pF	2.5%+5 digits	--	Parallel

40KHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
100 μ F	40.00 μ F~100.00 μ F	6.00%+5 digits	0.06	Series
40 μ F	4.000 μ F~39.999 μ F	4.0%+3 digits	0.04	Series
4 μ F	400.0nF~3.9999 μ F	1.0%+2 digits	0.01	Series
400nF	40.00nF~399.99nF	0.6%+2 digits	0.006	Series
40nF	4.000nF~39.999nF	0.6%+2 digits	0.006	--
4nF	400.0pF~3.9999nF	0.6%+2 digits	0.006	Parallel
400pF	40.00pF~399.99pF	1%+3 digits	0.01	Parallel
40pF	0.000pF~39.99pF	3%+5 digits	--	Parallel

100KHz

Range	Display Range	Accuracy Ce	Accuracy De	Recommend Equivalent Mode
10 μ F	4.000 μ F~10.000 μ F	8.0%+20 digits	0.08	Series
4 μ F	400.0nF~3.9999 μ F	5.0%+10 digits	0.05	Series
400nF	40.00nF~399.99nF	1.5%+5 digits	0.015	Series
40nF	4.000nF~39.999nF	1%+2 digits	0.01	Series
4nF	400.0pF~3.999nF	1%+2 digits	0.01	--
400pF	40.00pF~399.99pF	1.5%+2 digits	0.015	Parallel
40pF	4.000pF~39.999pF	2%+5 digits	0.02	Parallel
4pF	0.000pF~3.999pF	5%+10 digits	--	Parallel

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

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1000H	400.0H~999.9H	2.00%+3 digits	0.02	Parallel
400H	40.000H~399.99H	0.60%+2 digits	0.006	Parallel
40H	4.000H~39.999H	0.40%+2 digits	0.004	Parallel
4H	400.0mH~3.9999H	0.40%+2 digits	0.004	--
400mH	40.00mH~399.99mH	0.4%+2 digits	0.004	Series
40mH	4.000mH~39.999mH	0.6%+3 digits	0.006	Series
4mH	0uH~3.999mH	3.0%+5 digits	--	Series

1KHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1H	400.0mH~999.9mH	1.50%+3 digits	0.015	Parallel
400mH	40.00mH~399.99mH	0.4%+2 digits	0.004	Parallel
40mH	4.000mH~39.999mH	0.4%+2 digits	0.004	--
4mH	400.0uH~3.9999mH	0.4%+2 digits	0.004	Series
400uH	40.00uH~399.99uH	0.8%+3 digits	0.008	Series
40uH	0.00uH~39.99uH	3.0%+5 digits	--	Series

10KHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
100H	40.00H~100.00H	2.0%+3 digits	0.02	Parallel
40H	4.000H~39.999H	0.60%+2 digits	0.006	Parallel
4H	400.0mH~3.9999H	0.40%+2 digits	0.004	Parallel
400mH	40.00mH~399.99mH	0.4%+2 digits	0.004	--
40mH	4.000mH~39.999mH	0.4%+2 digits	0.004	Series
4mH	400.0uH~3.9999mH	1%+3 digits	0.01	Series
400uH	0.0uH~399.9uH	3.0%+5 digits	--	Series

40KHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
1H	400.0mH~999.9mH	2.0%+4 digits	0.02	Parallel
400mH	40.00mH~399.99mH	0.8%+2 digits	0.008	Parallel
40mH	4.000mH~39.999mH	0.8%+2 digits	0.008	--
4mH	400.0uH~3.9999mH	0.8%+2 digits	0.008	Series
400uH	40.00uH~399.99uH	1.5%+3 digits	0.015	Series
40uH	0.000uH~39.999uH	4.0%+5 digits	--	Series

100KHz

Range	Display Range	Accuracy Le	Accuracy De	Recommend Equivalent Mode
100mH	40.00mH~399.99mH	2.5%+2 digits	0.025	Parallel
40mH	4.000mH~39.999mH	1.5%+2 digits	0.015	Parallel
4mH	400.0uH~3.9999mH	1.0%+2 digits	0.01	--
400uH	40.00uH~399.99uH	1.0%+2 digits	0.01	Series
40uH	4.000uH~39.999uH	1.5%+5 digits	0.015	Series
4uH	0.000uH~3.999uH	4%+10 digits	--	Series

Impedance (Z) and Phase Angle

100Hz, 120Hz, 1KHz, 10KHz

Range	Display Range	Accuracy Ze	Accuracy	Recommend Equivalent Mode
20MΩ	4.000MΩ~20.000MΩ	3.0%+10 digits	3.4°	Parallel
4MΩ	400.0kΩ~3.9999MΩ	1.2%+3 digits	0.7°	Parallel
400kΩ	40.00kΩ~399.99kΩ	0.3%+3 digits	0.2°	Parallel
40kΩ	4.000kΩ~39.999kΩ	0.25%+2 digits	0.1°	--
4kΩ	400.0Ω~3.9999kΩ	0.25%+2 digits	0.1°	Series
400Ω	40.00Ω~399.99Ω	0.25%+2 digits	0.1°	Series
40Ω	4.000Ω~39.999Ω	0.5%+3 digits	0.3°	Series
4Ω	0.4000Ω~3.9999Ω	2.0%+3 digits	1.1°	Series
0.4Ω	0.0000Ω~0.3999Ω	4.0%+3 digits	--	Series

40KHz

Range	Display Range	Accuracy Ze	Accuracy	Recommend Equivalent Mode
20MΩ	4.000MΩ~20.000MΩ	7.0%+41 digits	4.0°	Parallel
4MΩ	400.0kΩ~3.9999MΩ	2.5%+3 digits	1.4°	Parallel
400kΩ	40.00kΩ~399.99kΩ	1.0%+4 digits	0.6°	Parallel
40kΩ	4.000kΩ~39.999kΩ	1.0%+4 digits	0.6°	--
4kΩ	400.0Ω~3.9999kΩ	0.5%+3 digits	0.3°	Series
400Ω	40.00Ω~399.99Ω	0.5%+3 digits	0.3°	Series
40Ω	4.000Ω~39.999Ω	0.7%+4 digits	0.4°	Series
4Ω	0.4000Ω~3.9999Ω	2.0%+6 digits	1.1°	Series
0.4Ω	0.0000Ω~0.3999Ω	5.0%+10 digits	--	Series

100KHz

Range	Display Range	Accuracy Ze	Accuracy	Recommend Equivalent Mode
20MΩ	4.000MΩ~20.000MΩ	9.0%+20 digits	5.2°	Parallel
4MΩ	400.0kΩ~3.9999MΩ	4.0%+10 digits	2.3°	Parallel
400kΩ	40.00kΩ~399.99kΩ	1.5%+4 digits	0.9°	Parallel
40kΩ	4.000kΩ~39.999kΩ	1.0%+2digits	0.6°	Parallel
4kΩ	400.0Ω~3.9999kΩ	0.7%+2 digits	04°	--
400Ω	40.00Ω~399.99Ω	0.7%+2 digits	0.4°	Series
40Ω	4.000Ω~39.999Ω	1.0%+5 digits	0.6°	Series
4Ω	0.4000Ω~3.9999Ω	3.0%+10 digits	1.7°	Series
0.4Ω	0.0000Ω~0.3999Ω	7%+20 digits	--	Series