

100 Hz 120 Hz 1 KHz 10 KHz 100 KHz, Professional

# LCR METER

Model : LCR-9184

ISO-9001, CE, IEC1010

[www.yalab.com.tw](http://www.yalab.com.tw)

02-2389-0101



HOLSTER, optional  
Model : HS-03



SMD TESTER, optional  
Model : SMDA-22

◁ SMD TEST CLIP, optional  
Model : SMDC-21



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*The Art of Measurement*

100 Hz/120 Hz/1 KHz/10 KHz/100 KHz Ls/Lp/Cs/Cp/Rs/Rp with D/Q/θ /ESR parameters

# professional LCR METER

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## FEATURE

* 19,999/1,999 counts dual LCD display.
* AutoLCR smart check and measurement.
* Serial/Parallel modes are selectable.
* Ls/Lp/Cs/Cp with D/Q/θ /ESR parameters.
* Support DCR mode 1.00 Ω to 200.0 MΩ .
* Five different test frequency are available : 100 Hz/120 Hz/1 KHz/10 KHz/100 KHz.
* Test AC signal level : 0.6 V rms typically.
* Test range : ( ex. F = 1 KHz ) L : 200.00 uH-2000.0 H , C : 2000.0 pF-2.000 mF , R : 20.000Ω-200.0 MΩ
* Multi-level battery detector.
* LCD with green light backlight , easy reading.
* RS232/USB PC Computer interface.
* Can default auto power off.

## GENERAL SPECIFICATION

Display	LCD size : 56.4 X 52.9 mm. LCD with green backlight ( ON /OFF )
Test frequency	100 Hz/120 Hz/1 KHz/10 KHz/100 KHz
Function	L/C/R Function selector Frequency selector D/Q/θ /ESR selector Sorting mode selector Backlight
Dissipation factor	0.000 to 999
Quality factor	0.000 to 999
θ measurement	± 90°
Sorting tolerance mode	± 0.25%, ± 0.5%, ± 1%, ± 2%, ± 5%, ± 10%, ± 20%, +80% -20%
Calibration	Open/Short calibration
Data Hold	Freeze the display reading
Data output	RS232/USB PC computer interface
Power off	Auto shut off saves battery life or manual off by push button
Operating temperature	0°C to 50°C
Operating humidity	Less then 85% R.H.
Power Supply	006P DC 9V battery * Alkaline or Heavy duty type DC 9V adapter input * AC/DC power adapter is optional.
Power consumption	DC 16 mA approximately * Under LCD backlight off.
Dimension	193 x 88 x 41mm
Weight	420 g * meter only
Standard Accessories Included	* Instruction manual..... 1 PC * Alligator clips ( red and black )..... 1 Pair
Optional Accessories	SMD tester, SMDA-22 SMD test clip, SMDC-21 Holster, HS-03 AC to DC 9V adapter Hard carrying case, CA-06 Soft carrying case, CA-05A USB cable, USB-01 RS232 cable, UP-CB02 Excel data acquisition software, SW-E803



**Model : LCR-9184 VS LCR-9183**

\* Function same as LCR-9184, but without LCD backlight structure, without sorting function and the accuracy will be larger than LCR-9184.

**ELECTRICAL SPECIFICATIONS (23± 5 °C)****Resistance ( DCR )**

Range	Accuracy	Remark
20 Ω	± ( 0.5% + 5d )	After Short CAL.
200 Ω	± ( 0.5% + 5d )	
2 KΩ	± ( 0.5% + 5d )	
20 KΩ	± ( 0.5% + 5d )	
200 KΩ	± ( 0.5% + 5d )	
2 MΩ	± ( 0.5% + 5d )	After Open CAL.
20 MΩ	± ( 1% + 5d )	After Open CAL.
200 MΩ	± ( 2% + 5d )	After Open CAL.

**Resistance ( Rp/Rs )**

Range	Accuracy 100 Hz/120 Hz	Accuracy 1000 Hz	Remark
20 Ω	± ( 1% + 5d )	± ( 1% + 5d )	After Short CAL.
200 Ω	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2 MΩ	± ( 1% + 5d )	± ( 1% + 5d )	After Open CAL.
20 MΩ	± ( 1% + 5d )	± ( 2% + 5d )	After Open CAL.
200 MΩ	± ( 2% + 5d )	± ( 5% + 5d )	After Open CAL.

Range	Accuracy 10 KHz	Accuracy 100 KHz	Remark
20 Ω	± ( 1% + 5d )	± ( 2% + 5d )	After Short CAL.
200 Ω	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 KΩ	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2 MΩ	± ( 1% + 5d )	± ( 2% + 5d )	After Open CAL.
20 MΩ	± ( 2% + 5d )	-----	After Open CAL.



**Capacitance ( Cp/Cs ) : D ≤ 0.1**

Range	Accuracy 100 Hz/120 Hz	Accuracy 1000 Hz	Remark
20 pF	± ( 2% + 5d )	± ( 1% + 5d )	After Open CAL.
200 pF	± ( 1% + 5d )	± ( 1% + 5d )	After Open CAL.
2000 pF	± ( 0.8% + 5d )	± ( 0.8% + 5d )	After Open CAL.
20 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2000 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 uF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 uF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	After Short CAL.
2000 uF	± ( 1% + 5d )	± ( 1% + 5d )	After Short CAL.
20 mF	± ( 2% + 5d )	-----	After Short CAL.

Range	Accuracy 10 KHz	Accuracy 100 KHz	Remark
20 pF	± ( 1% + 5d )	± ( 1% + 5d )	After Open CAL.
200 pF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	After Open CAL.
2000 pF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	After Open CAL.
20 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2000 nF	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 uF	± ( 0.8% + 5d )	± ( 0.8% + 5d )	
200 uF	± ( 1% + 5d )	-----	After Short CAL.

**Inductance ( Lp/Ls ) : D ≤ 0.1**

Range	Accuracy 100 Hz/120 Hz	Accuracy 1000 Hz	Remark
20 uH	± ( 1% + 5d )	± ( 1% + 5d )	After Short CAL.
200 uH	± ( 1% + 5d )	± ( 1% + 5d )	After Short CAL.
2000 uH	± ( 0.8% + 5d )	± ( 0.8% + 5d )	
20 mH	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 mH	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
2000 mH	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 H	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 H	± ( 0.5% + 5d )	± ( 0.8% + 5d )	
2000 H	± ( 1% + 5d )	-----	After Open CAL.

Range	Accuracy 10 KHz	Accuracy 100 KHz	Remark
20 uH	± ( 1% + 5d )	± ( 1% + 5d )	After Short CAL.
200 uH	± ( 0.8% + 5d )	± ( 0.8% + 5d )	After Short CAL.
2000 uH	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
20 mH	± ( 0.5% + 5d )	± ( 0.5% + 5d )	
200 mH	± ( 0.5% + 5d )	-----	
2000 mH	± ( 0.5% + 5d )	-----	

\* Appearance and specifications listed in this brochure are subject to change without notice.

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