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

LCR METER-

Model: LCR-9184 ISO-9001, C

ISO-900<u>1, CE, IEČ1010</u> ansar FGJ-NDT.IR



پترو فرهان گستر جنوب



Model : SMDC-21

The Art of Measurement

LUTRON ELECTRONIC

FGJ-NDT.IR DIGINDT.IR

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

برو فرهان کستر جنوب Model: LCR-9184

FEATURES

*	19,999/1,999 counts dual LCD display.	
*		
*	Serial/Parallel modes are selectable.	
*	Ls/Lp/Cs/Cp with D/Q/θ /ESR parameters.	
	Support DCR mode 1.00 Ω to 200.0 M Ω .	
*	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 to 2000.0 H	
	C : 2000.0 pF to 2.000 mF	
	R : 20.000Ω to 200.0 MΩ	_/
*	Multi-level battery detector.	
*	LCD with green light backlight, easy reading.	//
*	RS232/USB PC Computer interface.	/
*	Con deferrible code marriage off	

* Can default auto power off. GENERAL SPECIFICATIONS

GLITERAL SEL	CITICATIONS	
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	
	301 tillig fillode selector	
	Backlight	
Dissipation	0.000 to 999	
factor		
Quality factor	0.000 to 999	
θ	± 90°	
measurement		
Sorting	\pm 0.25%, \pm 0.5%, \pm 1%, \pm 2%, \pm 5%)
tolerance	± 10%, ± 20%, +80% -20%	
mode		
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	0°C to 50°C	
temperature		
Operating	Less then 85% R.H.	
humidity	Less their 65 /6 km ii	
Power Supply	006P DC 9V battery	
. otto, ouppi,	* Alkaline or Heavy duty type	
	DC 9V adapter input	
	* AC/DC power adapter is optional.	
Power	DC 16 mA approximately	
consumption	* Under LCD backlight off.	Α.
Dimension	193 x 88 x 41mm	- //
Weight	420 g	-/-
Weight	* meter only	
Standard	* Instruction manual	DC.
Accessories	* Alligator clips (red and black) 1	
	Alligator clips (red and black) 1	Pair
Included	SMD tester SMDA 33	
Optional	SMD tester, SMDA-22	
Accessories	SMD test clip, SMDC-21	
	Holster, HS-03	
	AC to DC 9V adapter	
+982165565901	Hard carrying case, CA-06	
+982144584619	Soft carrying case, CA-05A	
,	USB cable, USB-01	
+989034119385	RS232 cable, UP-CB02	M GO
	Excel data acquisition software, SW-E8	

ELECTRICAL SPECIFICATIONS (23 \pm 5 $^{\circ}$ C)

Resistance (DCR)

Range	Accuracy	Remark	
20 Ω	$\pm (0.5\% + 5d)$	After Short CAL.	
200 Ω	$\pm (0.5\% + 5d)$		
2 ΚΩ	$\pm (0.5\% + 5d)$		
20 ΚΩ	$\pm (0.5\% + 5d)$		
200 ΚΩ	± (0.5% + 5d)		7
2 ΜΩ	± (0.5% + 5d)	After Open CAL.	
20 ΜΩ	± (1% + 5d)	After Open CAL.	
200 MΩ	± (2% + 5d)	After Open CAL.	

Resistance (Rp/Rs)

Range	Accuracy	Accuracy	Remark
	100 Hz/120 Hz	1000 Hz	
20 Ω	± (1% + 5d)	$\pm (1\% + 5d)$	After Short CAL
200 Ω	$\pm (0.5\% + 5d)$	± (0.5% + 5d)	
2 ΚΩ	$\pm (0.5\% + 5d)$	$\pm (0.5\% + 5d)$	
20 ΚΩ	$\pm (0.5\% + 5d)$	± (0.5% + 5d)	
200 ΚΩ	± (0.5% + 5d)	± (0.5% + 5d)	
2 ΜΩ	± (1% + 5d)	$\pm (1\% + 5d)$	After Open CAL.
20 ΜΩ	± (1% + 5d)	± (2% + 5d)	After Open CAL
200 ΜΩ	± (2% + 5d)	± (5% + 5d)	After Open CAL

Range	Accuracy	Accuracy	Remark
	10 KHz	100 KHz	
20 Ω	$\pm (1\% + 5d)$	$\pm (2\% + 5d)$	After Short CAL.
200 Ω	$\pm (0.5\% + 5d)$	± (0.5% + 5d)	
2 ΚΩ	$\pm (0.5\% + 5d)$	$\pm (0.5\% + 5d)$	
20 ΚΩ	$\pm (0.5\% + 5d)$	± (0.5% + 5d)	
200 ΚΩ	$\pm (0.5\% + 5d)$	± (0.5% + 5d)	
2 ΜΩ	± (1% + 5d)	$\pm (2\% + 5d)$	After Open CAL.
20 ΜΩ	$\pm (2\% + 5d)$		After Open CAL.

Capacitance (Cp/Cs) : D ≤ 0.1

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

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

Inductance (Lp/Ls) : D \leq 0.1

Range	Accuracy	Accuracy	Remark
	100 Hz/120 Hz	1000 Hz	
20 uH	± (1% + 5d)	$\pm (1\% + 5d)$	After Short CAL
200 uH	± (1% + 5d)	± (1% + 5d)	After Short CAL
2000 uH	$\pm (0.8\% + 5d)$	$\pm (0.8\% + 5d)$	
20 mH	± (0.5% + 5d)	± (0.5% + 5d)	
200 mH	$\pm (0.5\% + 5d)$	$\pm (0.5\% + 5d)$	
2000 mH	± (0.5% + 5d)	$\pm (0.5\% + 5d)$	
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	Accuracy	Remark
1000	10 KHz	100 KHz	
20 uH	± (1% + 5d)	± (1% + 5d)	After Short CAL.
200 uH	$\pm (0.8\% + 5d)$	$\pm (0.8\% + 5d)$	After Short CAL.
2000 uH	$\pm (0.5\% + 5d)$	$\pm (0.5\% + 5d)$	
20 mH	$\pm (0.5\% + 5d)$	$\pm (0.5\% + 5d)$	
200 mH	$\pm (0.5\% + 5d)$		
2000 mH	$\pm (0.5\% + 5d)$		

Model : LCR-9183

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

^{*} Appearance and specifications listed in this brochure are subject to change without notice.