

Bench LCR Meter

10kHz / 30kHz / 100kHz / 200kHz / 300kHz / 500kHz



LCR7000 / A SERIES



FEATURES

- 32bit core processor
- 5 digits 4.3-inch TFT LCD display (LCR7000)
- 6 digits 4.3-inch TFT LCD display (LCR7000A)
- 2 signal source output impedance: 30 Ω , 100 Ω (LCR7000)
- 4 signal source output impedance: 30 Ω , 100 Ω , 10/100, 10/CC (LCR7000A)
- 100 sets memories for internal storage/save
- 500 memories for U disk storage/save, supports FAT16 and FAT32 files
- Save the last parameter settings before power off
- Standard RS-232 interface for PC remote control
- Standard USB Host interface for external save & recall
- Standard HANDLER interface (not available on LCR-7010)
- Standard EAR PHONE and PEDAL interface (LCR7000A)
- Optional GPIB interface (LCR7000A)

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SPECIFICATIONS

Model	LCR-7010	LCR-7030	LCR-7200	LCR-7100A	LCR-7200A	LCR-7300A	LCR-7500A
Measurement function							
Test parameter	Z , Y , C, L, X, B, R, G, D, Q, θ			Z , Y , C, L, X, B, R, G, D, Q, θ , DCR			
Test signal frequency	LCR-7010:	100Hz, 120Hz, 1kHz, 10kHz					
	LCR-7030:	100Hz, 120Hz, 1kHz, 10kHz, 20kHz, 30kHz					
	LCR-7200: (38 points)	40Hz, 50Hz, 60Hz, 75Hz, 100Hz, 120Hz, 150Hz, 200Hz, 250Hz, 300Hz, 400Hz, 500Hz, 600Hz, 750Hz, 800Hz, 1kHz, 1.5kHz, 2kHz, 2.5kHz, 3kHz, 4kHz, 5kHz, 6kHz, 7.5kHz, 10kHz, 12kHz, 15kHz, 15.7kHz, 16.2kHz, 20kHz, 25kHz, 30kHz, 40kHz, 50kHz, 60kHz, 66.6kHz, 75kHz, 100kHz, 120kHz, 150kHz, 200kHz					
	LCR-7000A:	12Hz~100kHz / 200kHz / 300kHz / 500kHz continuously adjustable with min. step 0.1mHz					
Basic accuracy	0.15%	0.1%	0.1%	0.05%	0.05%	0.05%	0.05%
Equivalent circuit	Series, Parallel						
Mathematical function	Absolute Deviation and Percentage Deviation						
Range mode	Auto, Hold, Manual Selection						
Trigger mode	Internal, Manual, External, BUS						
Measurement speed (≥ 1 kHz)	Fast: max.30; Medium: 10; Slow: 3 (times/second)			Fast: max.75, Medium: 12, Slow: 3 (times/second)			
Average times	1-255						
Delay time	0-60s, step 1ms						
Calibration function	Open circuit, Short circuit, Load						
Measurement terminal	5 terminals						
Display mode	Direct, Δ , $\Delta\%$, V/I (monitoring test voltage and current)						
Display	5 digits 4.3-in LCD display			6 digits 4.3-in LCD display			
List scan	N/A			10 points list scan			
Measurement signal							
Output impedance	30 Ω , 100 Ω			30 Ω , 100 Ω , 10/100, 10/CC			
Test level	0.1V, 0.3V, 1V accuracy 5%	0.1V, 0.3V, 1V accuracy 5%	0.05V~1V accuracy 5%	Normal: 5mV~2V, accuracy 10%, Min step 1mV, Max. test current 20mA Constant level: 10mV~1V, accuracy 5%, Min step 1mV			
DC bias source	N/A			0V, 1.5V, 2V, accuracy 1%			
Measurement display range							
Z , R, X	0.01m Ω ~99.999 M Ω			0.01m Ω ~99.9999 M Ω			
DCR	NA			0.001m Ω ~99.999 M Ω			
Y , G, B	0.0001 μ s~99.999s			0.00001 μ s~99.9999s			
C	0.0001pF~9.9999F			0.00001pF~9.99999F			
L	0.0001 μ H~999.99H			0.0001 μ H~9999.99H			
D	0.0001~9.9999			0.00001~9.99999			
Q	0.0001~9999.9			0.00001~9999.99			
θ (DEG)	-179.99°~179.99°			-179.999°~179.999°			
θ (RAD)	-3.14159~3.14159			-3.14159~3.14159			
$\Delta\%$	-999.99%~999.99%			NA			
Comparator and interface							
Comparator	N/A	4 bins	5 bins	10 bins (9 pass / 1 fail) and 1 AUX bin			
Memory	100 sets memories for internal parameter settings storage/save						
	500 sets for U disk parameter settings storage/save						
Standard interface	RS-232, USB HOST HANDLER (for LCR-7200 only)			RS-232, USB HOST, HANDLER, EAR PHONE, PEDAL			
Optional interface	N/A			GPIB			
General							
Operating environment	0°C~40°C, $\leq 80\%$ RH						
Power source	AC 110/220V $\pm 10\%$ selectable, 50/60Hz, Max. 30VA						
Accessories	Power cord x1, Operation manual x1, RS-232 cable x1, 4-terminal Kelvin test clip leads x1						
Dimensions (WxHxD)	265x100x340mm						
Weight	Approx. 3.5kg			Approx. 4.5kg			