

LCR-1000 Series Specifications

All specification apply at $23 \pm 5 \text{ }^\circ\text{C}$, unless otherwise stated, and 30 minutes after the instrument has been turned on



LCR-1100



LCR-1010

SPECIFICATION		
	LCR-1100	LCR-1010
TEST FREQUENCY		
	50Hz/100Hz/120Hz/1k/2k/10k/50k/100kHz selectable	50Hz/100Hz/120Hz/1k/2k/10kHz Selectable
FULL SCALE		
Main Display	50,000 counts	
Sub Display	50,000 counts	
CAPACITANCE (C) and DISSIPATION (D)		
C Display Range	1pF ~ 50mF depends on the selected test frequency	
C Best Accuracy	$\pm(0.2\% \text{ rdg} + 2 \text{ counts}) \sim \pm(3.0\% \text{ rdg} + 10 \text{ counts})$	
C Resolution	0.001pF ~ 0.001mF depends on selected range	
D Accuracy (De)	0.002 ~ 0.03 depends on the selected test frequency & range	
INDUCTANCE (L) and QUALITY FACTOR (Q)		
L Display Range	0.5 μ H ~ 1000H depends on the selected test frequency	
L Best Accuracy	$\pm(0.2\% \text{ rdg} + 2 \text{ counts}) \sim \pm(2.5\% \text{ rdg} + 10 \text{ counts})$	
L Resolution	0.001 μ H ~ 0.1H depends on selected range	
Q Accuracy (Qe)	0.002 ~ 0.08 depends on the selected test frequency & range	
IMPEDANCE (Z) and PHASE ANGLE (θ)		
Z Display Range	0.05 Ω ~ 10M Ω depends on the selected test frequency	
Z Best Accuracy	$\pm(0.2\% \text{ rdg} + 2 \text{ counts}) \sim \pm(3.0\% \text{ rdg} + 20 \text{ counts})$	
Z Resolution	0.0001 Ω ~ 0.001M Ω depends on selected range	
θ Accuracy (θ_e)	0.2 $^\circ$ ~ 2 $^\circ$ depends on the selected test frequency & range	
ESR and ϕ		
	ESR is equal to the series equivalent resistance (Rs)	
Accuracy Formula	$R_{se} = \pm X_x * \phi_e$; $X_x = 2\pi f L_x$ or $1/2\pi f C_x$; $\phi_e = \theta_e * \pi/180$	
	Parallel equivalent resistance	
Accuracy Formula	$R_{pe} = \pm R_p * \phi_e / D_e \mp \phi_e$	

DC RESISTANCE	
Display Range	0.05Ω ~ 10MΩ
Best Accuracy	±(0.2% rdg+ 2 counts) ~ ±(3.0% rdg + 5 counts)
Resolution	0.0001Ω ~ 0.001MΩ depends on selected range
MEASUREMENT CIRCUIT	
	Parallel or Series selectable
AUTO LCZ MODE	
	Automatically identifies and measures the DUT when the meter is switch on
SORTING MODE	
	±1%,±5%,±10%,±20%, Input%
OTHER FUNCTIONS	
	Auto range, Backlight, Data hold, Zero, Auto power off
DISPLAY	
	2.8 Color LCD display (touch operation available)
INTERFACE	
	USB (type C)
POWER SOURCE	
	Rechargeable lithium battery(7.4V)
DIMENSIONS & WEIGHT	
	90(W) × 195(H) × 41(D) mm, Approx. 380g