

AT3810A DCR MEASURE DIGITAL LCR METER

CONTINUOUS TESTING FREQUENCY 10Hz~20kHz

AT3810 is a precision LCR digital bridge, a micro desktop instrument controlled by a high-performance 32-bit ARM microprocessor for fully automatic real-time detection. The instrument can choose any testing frequency between **10Hz ~20kHz**, and can choose a testing signal level between 0.01V and 2.00V in steps of 0.01V. It has built-in -2.5V~+2.5V programmable DC bias to automatically measure inductance L, capacitance C, resistance R, complex impedance Z, quality factor Q, loss angle tangent D, and phase angle θ (degree), phase θ (radians) and DC resistance DCR.

The main and auxiliary parameters are all displayed in 6 digits, with two monitoring displays that can simultaneously display Z, D, Q θ R θ d. R, X, G, B, Y, Vac, Iac Δ , $\Delta\%$ A type of.

CHINESE/ENGLISH
OPERATION

264 (W) * 107 (H) * 350 (D)
UNIT: mm

Weight: 4kg



Power Voltage: 90V-260VAC Frequency: 50Hz~60Hz
Max power: 30VA

With an accuracy of up to 0.05%, this instrument can meet the requirements of various component manufacturers, schools, research institutes, and metrology and quality inspection departments for precise testing and mass production.

MODEL AT3810A

Parameters	Cs-Rs,Cs-D,Cp-Rp,Cp-D,Lp-Rp,Lp-Q,LS-Rs,LS-Q,RS-Q,R-X,Z- θ rad,Z- θ deg DCR
Monitor Parameters	Z, D, Q, θ r, θ d, R, X, G, B, Y, Vac, Iac, Δ , $\Delta\%$
Accuracy	0.05% \pm 5dgt
Frequency	10Hz ~ 20kHz (continuous frequency, resolution 0.001Hz)
Range	Auto, Manual & Nominal, 9 ranges
Display	L: 0.00001 μ H-9999.99H C: 0.00001pF-9999.99mF R,Z: 0.00001 Ω - 99.9999M Ω D:0.00001-9.99999 Q: 0.00001 - 99999.9 $\Delta\%$:-999999% -999999% θ (deg): -179.999 $^\circ$ -179.999 $^\circ$ θ (rad):-3.14159 -3.14159 DCR: 0.00001Ω ~ 99.9999MΩ
Signal level	0.01V ~ 2.00V (10mV step) With ALC function
Test speed	40t/s 10t/s 3t/s (with average)
DC Bias	-2.5V~+2.5V (0.5%+0.005V)
Max display	6 digital principle parameter, sub parameter, monitor parameter: 999999
Source Resistance	30 Ω , 50 Ω & 100 Ω
Comparator	14-bin sorting, 10- bin GD, 1 -bin NG, 1-bin AUX, 2 -bin principle parameter NG ;
List test	10 groups frequency and level scanning test
Calibration	Open/short frequency correction, 3 point frequency and load correction
Interface	RS232C, ExHandler, Standard USB disc interface (article 10000 data)
Files	10 groups files to save user's setting, 1 group to save system data real-time
Others	LCR auto selection, key lock, SCPI instruction set
Accessories	ATL501E Test cable, ATL601 Test Fixture, ATL600 short -circuit slice, ATL108A Communication cable, ATL103 USB cable
Optional	ATL608 SMD patch test fixture ATL508 SMD patch test fixture ATL508A SMD Patch Test Fixture