AT3816A/B DIGITAL LCR METER

AT 2816A/B

CHINESE/ENGLISH OPERATION

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

Weight: 4kg

Continuous testing frequency
10Hz~200kHz



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

The AT3816 series is a precision LCR Meter, a fully automatic real-time detection micro desktop instrument controlled by a high-performance 32-bit ARM microprocessor. The instrument can choose any testing frequency between **10Hz~ 200kHz**, 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, automatic measurement of inductance L, capacitance C, resistance R, complex impedance Z, quality factor Q, loss angle tangent D, phase angle θ (degree), phase θ (radians) and DC Resistance.

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、Δ% A type of. 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	AT3816A	AT3816B	AT2816A	AT2816B
Parameters	Cs-Rs,Cs-D,Cp-Rp,Cp-D,Lp-Rp,Lp-Q,Ls-Rs,Ls-Q,G-B,R-X,Z-θrad,Z-θdeg **DCR Only for AT3816A / B**			
Monitor Parameters	Z, D, Q, θr, θd, R, X, G, B, Y, Vac, Iac, Δ, Δ%			
Accuracy	0.05% ±5dgt	0.1%±5dgt	0.05% ±5dgt	0.1%±5dgt
Frequency	10Hz ~ 200kHz **(continuous frequency point, resolution 0.001Hz)**	50Hz ~ 200kHz (37points)	50Hz ~ 200kHz **(continuous frequency point, resolution 0.001Hz)**	50Hz ~ 200kHz (37points)
Range	Auto、Manual and Nominal, 9 ranges			
Display	L: 0.00001μH-9999.99H C: 0.00001pF - 9999.99mF R,Z: 0.00001Ω - 99.9999MΩ D: 0.00001 – 9.99999 Q: 0.00001 – 99999.9 Δ%:-999999% - 999999% θ(rad):-3.14159 –3.14159 θ(deg): -179.999° -179.999° **DCR: 0.00001Ω ~ 99.9999MΩ (only for AT3816 series)**			
Signal level	0.01V ~ 2.00V（10mV step）**with ALC function**		0.01V ~ 2.00V（10mV step）	
Test speed	40t/s 10t/s 3 t/s (With averaging function)		30t/s 10t/s 3 t/s (With averaging function)	
DC Bias	**-2.5V~+2.5V(0.5%+0.005V)**		\	
Max display	Full 6-digit display for main parameter, secondary parameter, and monitor parameter: 999999			
Source Resistance	30Ω, 50Ω and 100Ω			
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 measurement			
Calibration	Open/short frequency correction, 3 point frequency and load correction			
Interface	RS232C, Handler、standard USB disc interface（ stores up to 10,000 data records)			
Others	LCR auto selection, Key lock, SCPI command set, save 999 sets of LCD, trigger delay, build in SCPI and Modbus protocols			
Files	10 groups files to save user's setting, 1 group to save system data real-time			
Accessories	ATL501E Test cable; ATL601 Test Fixture ; ATL600 Short-circuit plate; ATL108A communication cable; ATL103 USB cable （**ATL508A SMD patch test clip: AT3816A and AT2816A only**）			