

AT3817A DIGITAL LCR METER

CONTINUOUS TESTING FREQUENCY

10Hz~100kHz

ENHANCED HANDLER INTERFACE

**CHINESE/ENGLISH
OPERATION**

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

Weight: 4kg

AT3817A is a precision LCR digital bridge, 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 ~ 100kHz**, and can choose a testing signal level between 0.01V~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. 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.



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

MODEL AT3817A

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| Parameters | Cs-Rs,Cs-D,Cp-Rp,Cp-D,Lp-Rp,Lp-Q,LS-Rs,LS-Q,G-B,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%±5dgt ; |
| Frequency | 10Hz ~ 100kHz (continuous, resolution 0.001Hz) |
| Range | Auto, Manual & Nominal, 9 ranges |
| Display | L: 0.00001 μ H-9999.99H C: 0.00001pF - 9999.99mF R,X,Z: 0.00001 Ω - 99.9999M Ω D:0.00001 - 9.99999 Q: 0.00001 - 99999.9 $\Delta\%$: -999999% - 999999% θ (deg):-179.999° -179.999° θ (rad):-3.14159 - 3.14159 DCR: 0.00001Ω ~ 99.9999MΩ |
| Signal level | 0.01V ~ 2.00V (10mV step) |
| Test speed | 40t/S,10t/S,3t/S (1-256 times average) |
| DC Bias | -2.5V~+2.5V (0.5%+0.005V) |
| Max display | All 6 bit Primary parameter, secondary parameter, monitoring 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 measurement |
| Calibration | open/short circle sweep frequency correction, 3 points frequency and load correction |
| Interface | RS232C, Handler, USB disc |
| Others | LCR auto selection, Option RS-485, build in SCPI & Modbus 999 sets of LCD storage, Trigger delay, (ALC) |
| Files | 10 group files to save user's setting, 1 group to save system data real-time |
| Accessories | ATL501E Test cable, ATL601 Test Fixture, ATL600 short -circuit slice, ATL108A Communication cable, ATL103 USB cable |