

Features

- Four different parameters displayed simultaneously, flexible and comfortable combination
- AC and DC parameters can be measured simultaneously, without interference, self-degaussing
- High speed and efficiency measurement: the fastest 65 times / sec (including display)
- Built-in continuous DC bias: -5V - +5V, support current mode
- Independent and Low-noise DC source: -10V - +10V continuously adjustable, Resolution: 2.5mV
- Automatical DUT trigger function: Plug & Measure, results and discriminant single displayed
- Flexible limit comparator: tolerance mode, sequence mode and parameters exchange
- Multi-parameter comparison test function, quickly and easily distinguish devices pass/fail
- Powerful list sweep function: variety of different parameters and excitation sources can be mixed sweep test and displayed
- New graphics scanning and analyzing function: support frequency/level/DC bias/DC source
- Complete user correction function: 64 points frequency correction can be applied to multi-channel scanning
- RS232C/USB-CDC/USB-TMC/HANDLER/GPIB interface
- 500 groups of setting for storage/recall

Brief Introduction

U2818 precision LCR meter is a new generation impedance test instrument with high-precision, wide measurement range and six digit resolution. U2818 can be used for incoming inspection of components, quality control of product line and laboratory use over a wide range of frequency (20Hz to 300kHz), test signal level (5mV to 2V), built-in DC bias (-5V to 5V) and DC voltage source output (-10V to 10V). The RS232C, GPIB, Handler interfaces and perfect command system make it easy to build an automatic component test system, communicate with the computer and record the test results.

Specifications

Measurement Function		
Test Parameters	Z , C, L, R, X, Y , B, G, D, Q, θ , DCR	
Basic Accuracy	0.05%	
Measuring Speed	Fast: 65, Medium: 10, Slow: 5 (meas/sec)	
Equivalent Mode	Serial, Parallel	
Ranging Mode	Auto, Hold	
Trigger Mode	Internal, Manual, DUT, External, BUS	
Correction Function	Open/Short/Load, Full frequency correction, 64 points frequency correction	
Graphics scanning Function	Frequency, Level, Bias voltage/Current, DC Source	
List sweep	20 points frequency, level, DC bias, DC source	
Display type	480x272, 5-inch TFT LCD	
Memory	100 groups and 500 groups (USB disk)	
Test Signal		
Test Frequency	U2818	20Hz – 300kHz, Resolution: 1mHz
	U2819	20Hz – 200kHz, Resolution: 1mHz



U2818/U2819

Output Impedance	10 Ω , 30 Ω , 100 Ω	
Test Level	10mV – 2V, Resolution: 1mV 100 μ A – 100mA, Resolution: 1 μ A	
ALC Function	10mV – 1V	
Internal DC Bias	Voltage Mode -5V – +5V, Resolution: 1mV	
	Current Mode -50mA – 50mA, Resolution: 20 μ A	
Output DC Source	-10V – +10V, Resolution: 2.5mV	
Measurement Display Range		
Z , R, X	0.01m Ω – 99.9999M Ω	
Y , G, B	0.0001 μ S – 999.999S	
C	0.00001pF – 99.9999mF	
L	0.00001 μ H – 99.9999kH	
D	0.00001 – 9.99999	
θ (Deg)	-179.9° – 179.9°	
θ (Rad)	-3.14159 – 3.14159	
Q	0.01 – 99999.9	
Δ %	-999.99% – 999.99%	
DCR	1m Ω – 99.9999M Ω	
Comparator and Interface		
Comparator	10 bins, BIN0 - BIN9, NG, AUX PASS/FAIL LED displayed	
Interface	RS232C/USB-HOST/USB-CDC/USB-TMC/HANDLER/GPIB (Option) / SCANNER (Option)	
General Specifications		
Temperature & Humidity	0°C – 40°C, \leq 90%RH	
Power Supply	Voltage	99V – 242V
	Frequency	47.5Hz – 63Hz
Power Consumption	\leq 60 VA	
Dimensions (W×H×D)	350mm×120mm×360mm	
Weight	Approx. 3.5kg	

Order Information

U2818/U2819 Precision LCR meter

Instrument Accessories

- U26005 4 terminal test fixture
- U26011 4 terminal Kelvin test clip leads
- U26010 Gilded shorting plate

Options

- U26006 Axial component test fixture
- U26008 SMD test fixture
- U26009 SMD Kelvin test tweezers
- U10501 1A DC bias board
- U10503 DC source board, -10V - +10V
- U10301 GPIB interface
- U10601 SCANNER interface
- U10201 PC communication control software