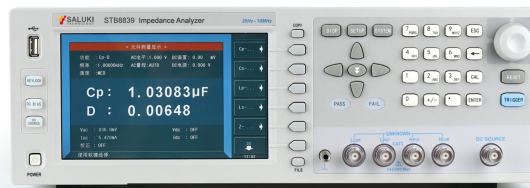


STB8839 Series Precision Impedance Analyzer



Features

- High accuracy: Auto-balance bridge technology, 4-terminal pair
- High stability and consistency: Up to 15 test ranges
- High speed: Up to 7.7ms
- High resolution: 7-inch, 800×600
- 201 Points List Sweep Function
- Multi-parameter Graphic Sweep Function
- Varactor diode automatic polarity function
- 10 bins sorting, sorting result with sound and light alarm
- Storage space: Internal: 40 groups of setting files
USB External: 500 groups of setting files, data log files and image files
- Simultaneous testing for Ls-R_{DC}
- High compatibility: Support SCPI commands, compatible with KEYSIGHT E4980A, E4980AL, HP4284A etc.



Dimension(mm): 400mm(W)x132mm(H)x425mm(D)
Weight: 15kg

Applications

- **Passive component:**
Impedance parameter estimation and performance analysis of capacitor, inductor, magnetic core, resistor, piezoelectric devices, transformers, chip components and network components
- **Semiconductor component**
Parasitic parameter test and analysis of LED driver integrated circuit C-VDC features of varactors
Parasitic parameter analysis of transistors or integrated circuit
- **Other components**
Impedance assessment of printed circuit boards, relays, switches, cables, batteries

- **Dielectric material**
Dielectric constant and loss angle evaluation of plastics, ceramics and other materials
- **Magnetic materials**
Magnetic permeability and loss angle assessment of ferrite, amorphous body and other magnetic materials
- **Semiconductor materials**
Dielectric constant, electrical conductivity and C-V characteristics of semiconductor materials
- **Liquid crystal cell**
Dielectric constant, elastic constant and C-V characteristics of liquid crystal cell

Specifications

Model	STB8839	STB8839A	
Display	7-inch TFT LCD display 800XRGBX600		
AC Test parameters	Cp/Cs、Lp/Ls、Rp/Rs、 Z 、 Y 、R、X、G、B、θ、D、Q、Vac、Iac		
DC Test parameters	Rdc、Vdc、Idc		
Test Frequency	Range	20Hz-10MHz	20Hz — 5MHz
	Highest resolution	1mHz	
Test level	AC voltage	20Hz — 2MHz: 5mV — 2Vrms 2MHz — 10MHz: 5mV — 1Vrms	20Hz — 2MHz: 5mV — 2Vrms 2MHz — 5MHz: 5mV — 1Vrms
	Resolution	100uV	
	AC current	20Hz — 2MHz: 50uA—20mArms 2MHz — 10MHz: 50uA—10mArms	20Hz — 2MHz: 50uA — 20mArms 2MHz — 5MHz: 50uA — 10mArms
	Resolution	1uA	
	DC Voltage	100mV — 2V	
DC bias	Resolution	100uV	
	Voltage	0V — ± 40V	
	Resolution	100uV	
	Current	0mA — ± 100mA	
DC voltage source	Resolution	1uA	
	Voltage range	-10V — 10V	
	Current range	-45mA — +45mA	
	Output impedance	100Ω	
Test terminal configuration	Four-terminal pair		
Output impedance	100Ω		
Typical measurement time (speed)	Fast: 7.7ms/time Medium: 120ms/time Slow: 230ms/time		

Model	STB8839	STB8839A
Highest accuracy	1kHz: 0.05% 1MHz: 0.05% 2MHz: 0.1% 5MHz: 0.5% 10MHz:1.0%	1kHz: 0.05% 1MHz: 0.05% 2MHz: 0.1% 5MHz: 0.5%
Cable length	0, 1, 2	
Graph sweep	Parameters	FREQ, ACV, ACV/I, DCV/I, DC voltage source
	Type	Logarithm, linearity
	Sweep points	51, 101, 201, 401 or 801
Equivalent circuit analysis	Purchase PC software	
Interface	USB HOST, USB DEVICE, LAN, HANDLER, RS232C, SCANNER, Temperature Input sensor Optional: GPIB	
Warm-up time	60 minutes	
Input voltage	Optional 100-120VAC/198-242VAC, 47-63Hz	
Power consumption	80VA	
Dimension(WxHxD)	400 x 132 x 425 mm	
Weight	15kg	

Standard accessories

Power cord

SBF0010 Gold-plated short circuit board

SBF0011BS 4-terminal pair Kelvin test clip leads

SBF0005C Four-terminal test fixture