

# STB8836 Series Precision LCR Meter

## Features

- High precision: using automatic balancing bridge technology, four-terminal pair test configuration
- High speed: the fastest test speed is 5.6ms
- High resolution: 7 inches, 800×480 resolution
- 10-point multi-parameter list sweep function
- Mathematical operation function
- Automatic polarity function of varactor diode
- One-key screenshot function
- One key recording function
- 10-level sorting function, sound and light alarm for sorting results
- Large storage space:
  - Built-in: 40 sets of setting files
  - Expansion: 500 sets of setting files, image files, and data recording files can be stored through USB memory
- High compatibility: support SCPI commands, compatible with KEYSIGHT E4980A, E4980AL, HP4284A



RS232	USB HOST	USB DEVICE	HANDER	LAN	GPIB
standard	standard	standard	standard	standard	option

## STB8836 Series

Dimension (mm): 400(W) x 132(H) x 425(D).  
 Net weight : 15kg

## Application

- Passive components:  
Capacitors, Inductors, Magnetic Cores, Resistors, Piezoelectric Devices, Transformers, Chipsets
- Impedance parameter evaluation and performance analysis of hardware and network components, etc.
- Semiconductor components:  
Test and analysis of parasitic parameters of LED drive integrated circuits; C-V DC characteristics of varactor diodes; analysis of parasitic parameters of transistors or integrated circuits
- Other components:  
Impedance evaluation of printed circuit boards, relays, switches, cables, batteries, etc.

- Dielectric material:  
Dielectric constant and loss angle evaluation of plastics, ceramics and other materials
- Magnetic material:  
Permeability and loss angle evaluation of ferrite, amorphous and other magnetic materials
- Semiconductor materials:  
Dielectric constant, conductivity and C-V characteristics of semiconductor materials
- LCD unit:  
C-V characteristics such as dielectric constant and elastic constant

## Specifications

Model	STB8836	
Display	7 inch TFT LCD Display 800×RGB×480	
AC Parameters	$C_p/C_s$ , $L_p/L_s$ , $R_p/R_s$ , $ Z $ , $ Y $ , R, X, G, B, $\theta$ , D, Q, Vac, Iac	
DC Parameters	$R_{dc}$ , $V_{dc}$ , $I_{dc}$	
Test Frequency	Range	4Hz-8.5MHz
	Resolution	1mHz
Test Electric Level	AC Voltage	4Hz-1MHz: 5mV-2Vrms 1MHz-8.5MHz: 5mV-1Vrms
	Resolution	100 $\mu$ V
	AC Current	4Hz-2MHz: 50 $\mu$ A-20mAmps 2MHz-8.5MHz: 50 $\mu$ A-10mAmps
	Resolution	1 $\mu$ A
	DC Voltage	100mV-2V
	Resolution	100 $\mu$ V

DC Bias	Voltage	0V-±10V
	Resolution	100µV
	Current	0mA-±100mA
	Resolution	1µA
Test terminal configuration		Four-terminal pair
Cable Length	0、1米	
Output Impedance	100Ω	
Typical Measurement Time (speed)	Fast: 5.6ms Medium: 120ms Slow: 230ms	
Highest accuracy	1kHz : 0.05% 1MHz: 0.05% 2MHz: 0.1% 5MHz: 0.5% 8.5MHz: 1.0%	
Display Range	a: $1 \times 10^{-18}$ ; E: $1 \times 10^{18}$	
Cs、Cp	$\pm 1.00000aF-999.999EF$	
Ls、Lp	$\pm 1.000000aH-999.999EH$	
D	$\pm 0.00001-9.99999$	
Q	$\pm 0.01-99999.9$	
R、Rs、Rp、X、Z、Rdc	$\pm 1.00000a\Omega-999.999E\Omega$	
G,B,Y	$\pm 1.00000aS-99.9999ES$	
Vdc	$\pm 1.000000aV-999.9999EV$	
Idc	$\pm 1.00000aA-999.999EA$	
θr	$\pm 1.00000rad-3.14159rad$	
θd	$\pm 0.0001deg-180.000deg$	
Δ%	$\pm 0.0001\%-999.999\%$	
Multifunction List Scan	10 dots. Parameter: Measurement parameter, test frequency, AcVoltage, AC current, DC Bias voltage and DC Bias current.	
Graph sweep	Optional	
Interface	USB HOST、USB DEVICE、HANDLER、RS232C Optional: GPIB	
Warm-up time	60 minutes	
Input voltage	100-120VAC/198-242VAC, 47-63Hz	
Power consumption	80VA	
Dimension (WxHxD) mm <sup>3</sup>	400x132x425	
Weight	15kg	