

# Data Sheet

## Bench LCR/ESR Meter with Component Tester

Model 889B



The B&K Precision 889B synthesized in-circuit bench LCR/ESR meter is a high accuracy test instrument used for measuring inductors, capacitors and resistors with a basic accuracy of 0.1%. Also, with the built-in functions of DC/AC Voltage/Current measurements and Diode/Audible Continuity checks, the 889B can not only help engineers and students to understand the characteristics of electronics components, but also being an essential tool on any service bench.

### Features:

- Measurement parameters: Z, L, C, DCR, ESR, D, Q, ACV, DCV, ACA, DCA and  $\emptyset$
- Test conditions: 100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz, 200 kHz, 1 Vrms, 0.25 Vrms, 0.05 Vrms
- 0.1% basic accuracy
- Dual LCD display
- Very quick response, user-friendly
- Fully auto/manual selection
- DC resistance measurement
- USB interface

Specifications	889B			
Test Frequencies	100Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz, 200 kHz			
Frequency Accuracy	±0.1%			
Test Levels	1 Vrms, 0.25 Vrms, 0.05 Vrms, 1 Vdc (for DCR)			
Level Accuracy	±10%			
Output Impedance	100 $\Omega$ , ±5%			
Measurement Range				
<b>Impedance (Z)</b>	Frequency	Maximum	Minimum	Best Resolution
	DCR	20 M $\Omega$	0.1 $\Omega$	0.001
	100 Hz	20 M $\Omega$	0.1 $\Omega$	0.001
	120 Hz	20 M $\Omega$	0.1 $\Omega$	0.001
	1 kHz	20 M $\Omega$	0.1 $\Omega$	0.001
	10 kHz	20 M $\Omega$	0.1 $\Omega$	0.001
	100 kHz	10 M $\Omega$	0.1 $\Omega$	0.001
<b>Capacitance (C)</b>	Frequency	Maximum	Minimum	Best Resolution
	100 Hz	15.91 mF	79.57 pF	0.001
	120 Hz	13.26 mF	66.31 pF	0.001
	1 kHz	1.591 mF	7.957 pF	0.001
	10 kHz	159.1 $\mu$ F	0.795 pF	0.001
	100 kHz	15.91 $\mu$ F	0.159 pF	0.001
<b>Inductance (L)</b>	Frequency	Maximum	Minimum	Best Resolution
	100 Hz	31.83 kH	159.1 $\mu$ H	0.001
	120 Hz	26.52 kH	132.6 $\mu$ H	0.001
	1 kHz	3.183 kH	15.91 $\mu$ H	0.001
	10 kHz	318.3 H	1.591 $\mu$ H	0.001
	100 kHz	31.83 H	0.159 $\mu$ H	0.001
200 kHz	15.91 H	0.079 $\mu$ H	0.001	
General				
Operating Temperature	32° to 104°F (0° to 40°C)			
Storage Temperature	-4° to 158°F (-20° to 70°C)			
Relative Humidity	up to 85%			
AC Input	110 V/220 V AC, 60/50 Hz			
Dimensions (LxWxH)	11.8 x 8.7 x 5.9" (300 x 220 x 150 mm)			
Weight	10 lbs (4.5 kg)			
Three-Year Warranty				
Included Accessories	User manual, Kelvin probe, DMM test leads, and power cord			