

# Data Sheet

## Synthesized In-Circuit LCR/ESR Meters

### Models 885 & 886



Model 885



SMD Probe  
(included)

The B&K Precision models 885 and 886 synthesized in-circuit LCR/ESR meters are the first handheld meters of this type on the market, with a wide range of test frequencies up to 10 kHz for model 885 and 100 kHz for model 886, many measurement parameters including Z, L, C, DCR, ESR, D, Q, and  $\theta$  as well. The 885 and 886 are designed for both component evaluation on the production line and fundamental impedance testing for benchtop applications. With a built-in direct test fixture, you can test the lead components very easily. The optional 4-wire test clip can give a convenient connection to larger components and assemblies with the accuracy of 4-wire testing. The LCR meters offer fast, reliable, and versatile testing at low cost, making the 885 and 886 the most advanced handheld LCR meters available on the market today.

#### Features & Benefits

- Measurement parameters: Z, L, C, DCR, ESR, D, Q, and  $\theta$
- Test conditions: 100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz (model 886 only), 1 Vrms, 0.25 Vrms, 0.05 Vrms
- 0.5% basic accuracy
- Dual LCD display
- SMD surface mount tweezer probe included
- Very quick response, user-friendly
- Fully auto/manual selection
- DC resistance measurement
- Rechargeable battery / AC powered

Specifications		885 & 886			
Test Frequencies	100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz (model 886 only)				
Frequency Accuracy	± 0.1%				
Test Levels	1 Vrms, 0.25 Vrms, 0.05 Vrms, 1 Vdc (for DCR)				
Level Accuracy	± 5%				
Output Impedance	100 $\Omega$ , ± 5%				
Impedance (Z)	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	
Capacitance (C)	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	
Inductance (L)	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	31.83 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	
<b>General</b>					
Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)				
Storage Temperature	-4 °F to 158 °F (-20 °C to 70 °C)				
Relative Humidity	up to 85%				
Battery Type	Ni-MH or Alkaline (2 x AA size)				
Battery Charge	Constant current 150 mA approximately				
Battery Operating Life	2.5 hours typical				
AC Operation	110 V/220 VAC, 60/50 Hz with proper adapter*				
Low Power Warning	under 2.2 V				
Dimensions (LxWxH)	6.9" x 3.4" x 1.9" (174 x 86 x 48mm)				
Weight	1.1 lbs (470 g)				
<b>Three-Year Warranty</b>					
Standard Accessories	User manual, SMD probe, rechargeable battery, shorting bar, and AC adapter*				
Optional Accessories	Carrying case, TL08C Kelvin clip, TL885B 4-wire test clip, BC 885 110 V AC adapter, and BC 885 EXD 220 V AC adapter				

\* The 885 and 886 include a 110 V AC adapter. For a 220 V AC adapter, order model 885 EXD or 886 EXD.