

## Data sheet

# Synthesized In-Circuit LCR/ESR Meters

## Models 885 & 886



885



SMD Probe  
(included)

The Model 885 and 886 Synthesized In-Circuit LCR/ESR Meters are the first handheld meter of this type on the market, with a wide range of test frequencies up to 10 kHz for model 885 and 100kHz for model 886 many measurement parameters including Z, L, C, DCR, ESR, D, Q, and  $\emptyset$  as well. The 885 and 886 are designed for both component evaluation on the production line and fundamental impedance testing for bench-top 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:

- Measurement parameters: Z, L, C, DCR, ESR, D, Q, and  $\emptyset$
- Test conditions: 100Hz, 120Hz, 1kHz, 10kHz, 100kHz(model 886 only), 1Vrms, 0.25Vrms, 0.05Vrms
- 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

models

885, 886

Frequency	100Hz, 120Hz, 1kHz, 10kHz, 100kHz(model 886 only)
Frequency Accuracy	±0.1%
Level	1Vrms, 0.25Vrms, 0.05Vrms, 1Vdc (for DCR)
level Accuracy	±5%
Output Impedance	100 $\Omega$ , ±5%

### Measurement Range

#### 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	20 M $\Omega$	0.1 $\Omega$	0.001

#### Capacitance (C)

Frequency	Maximum	Minimum	Best Resolution
100 Hz	15.92mf	79.57pf	0.001
120 Hz	13.26mf	66.31pf	0.001
1 kHz	1592 $\mu$ f	7.957pf	0.001
10 kHz	159.2 $\mu$ f	0.795pf	0.001
100 kHz	15.92 $\mu$ f	0.795pf	0.001

#### Inductance (L)

Frequency	Maximum	Minimum	Best Resolution
100 Hz	9999H	159.2 $\mu$ H	0.001
120 Hz	9999H	132.6 $\mu$ H	0.001
1 kHz	3183H	15.92 $\mu$ H	0.001
10 kHz	318.3H	1.592 $\mu$ H	0.001
100 kHz	31.83H	0.159 $\mu$ 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%
Battery Type	Ni-MH or Alkaline (2 x AA size)
Battery Charge	Constant current 150mA approximately
Battery Operating Life	2.5 hours typical
AC Operation	110V/220V AC, 60/50Hz with proper adapter
Low Power Warning	under 2.2V
Dimensions (LxWxH)	6.9 x 3.4 x 1.9" (175 x 86 x 48mm)
Weight	1.1 lbs (470g)

**Two Year Warranty**

### Accessories

Supplied: Instruction Manual, SMD Probe, Rechargeable Battery, AC Adapter