

Synthesized In-Circuit LCR/ESR Meter



885



**SMD Probe
(included)**

Models 885 and 886

Synthesized In-Circuit LCR/ESR Meter

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**
- **Infrared RS-232 interface capability**

Software Features:

- **Go-No Go testing (component sorting)**
- **Remote bin (component grading)**
- **Remote operation**

Digital Mode Specifications

model

885, 886

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

Measurement Range

Impedance (Z):	Frequency	Max.	Min.	Best Resolution
	DCR	20M Ω	0.1 Ω	0.001
	100Hz	20M Ω	0.1 Ω	0.001
	120Hz	20M Ω	0.1 Ω	0.001
	1kHz	20M Ω	0.1 Ω	0.001
	10kHz	20M Ω	0.1 Ω	0.001
	100kHz	20M Ω	0.1 Ω	0.001
Capacitance (C):	Frequency	Max.	Min.	Best Resolution
	100Hz	15.92mf	79.57pf	0.001
	120Hz	13.26mf	66.31pf	0.001
	1kHz	1592 μ f	7.957pf	0.001
	10kHz	159.2 μ f	0.795pf	0.001
	100kHz	15.92 μ f	0.795pf	0.001
Inductance (L):	Frequency	Max.	Min.	Best Resolution
	100Hz	9999H	159.2 μ H	0.001
	120Hz	9999H	132.6 μ H	0.001
	1kHz	3183H	15.92 μ H	0.001
	10kHz	318.3H	1.592 μ H	0.001
	100kHz	31.83H	0.159 μ 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	110VAC/60Hz
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)

RANGE	20M Ω	10M Ω	1M Ω	100k Ω	10 Ω	1 Ω
FREQ.	~10M Ω	~1M Ω	~100k Ω	~10 Ω	~1 Ω	~0.1 Ω
DCR						
100/120Hz	2% $\pm$ 1	1% $\pm$ 1				
1kHz			0.5% $\pm$ 1	0.2% $\pm$ 1	0.5% $\pm$ 1	1% $\pm$ 1
10kHz	5% $\pm$ 1	2% $\pm$ 1				
100kHz	NA	5% $\pm$ 1	2% $\pm$ 1	0.4% $\pm$ 1	2% $\pm$ 1	5% $\pm$ 1

Accessories

Two Year Warranty

SUPPLIED:	Instruction Manual, SMD Probe, Rechargeable Battery, AC Adapter
OPTIONAL:	TL-885B 4-wire test leads
	TL-08C 4-wire Kelvin test leads
	LC-29B Carrying Case