



Specification  
CM82/CM84  
Clamp meters



All specified accuracies are at 23°C ± 5°C, <70% RH for 1 year  
**Temperature Coefficient:** 0.1 x (specified accuracy) per °C  
(0°C to 18°C, 28°C to 50°C)

All accuracies below are expressed as ± (percentage of reading + digits)

**DC Voltage**

Range	Resolution	Input impedance	Accuracy
400mV	0.1mV	>100MΩ	0.5% + 2
4V	0.001V	10MΩ	
40V	0.01V	9.1MΩ	
400V	0.1V		
1000V	1V		

Overload Protection: 1000V DC or 750V AC rms



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**AC Voltage**

Range	Resolution	Input impedance	Accuracy (50Hz to 500Hz)
400mV	0.1mV	>100MΩ	Not Specified
4V	0.001V	10MΩ	1.5% + 5
40V	0.01V	9.1MΩ	
400V	0.1V		
750V	1V		

Overload Protection: 1000V DC or 750V AC rms

**AC Current**

Range	Resolution	Accuracy	
		50Hz to 60Hz	60Hz to 400Hz
40A *	0.01A	2.0% + 6	3.0% + 6
400A	0.1A		3.0% + 6 (≤600A)
1000A	1A	2.5% + 6 (>600A)	3.5% + 6 (>600A)

\* CM82 only

Overload Protection: 1000A AC rms

**DC Current (CM 84 only)**

Range	Resolution	Accuracy
400A	0.1A	2.0% + 5
1000A	1A	2.0% + 5 (≤600A) 3.0% + 5 (>600A)

Overload Protection: 1000A DC



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**Resistance**

Range	Resolution	Open circuit voltage	Accuracy
400Ω	0.1Ω	-1.2V dc	1.0% + 5
4kΩ	0.001kΩ	-0.45V dc	
40kΩ	0.01kΩ		
400kΩ	0.1kΩ		
4MΩ	0.001MΩ		
40MΩ	0.01MΩ		2.0% + 5
			3.5% + 5

Overload Protection: 600V DC or AC rms

**Capacitance (CM82 only)**

Range	Resolution	Accuracy
4nF	0.001nF	Not specified
40nF	0.01nF	
400nF	0.1nF	
4μF	0.001μF	3.0% + 15
40μF	0.01μF	3.0% + 10
400μF	0.1μF	
4mF	0.001mF	5.0% + 10

Overload Protection: 600V DC or AC rms



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**Frequency**

Range	Resolution	Accuracy
4kHz	0.001kHz	0.1% + 3
40kHz	0.01kHz	
400kHz	0.1kHz	
1MHz	0.001MHz	

Sensitivity (10Hz to 1 MHz): >3.5V AC rms

Minimum input frequency: 10Hz

Minimum pulse width: >1μs

Duty cycle limits: >30% and <70%

Overload protection: 600V DC or AC rms

**Continuity**

Range	Resolution	Response time	Open circuit voltage	Audible indication
400Ω	1Ω	Approx. 500ms	-1.2V dc	< 25Ω

Overload protection: 600V DC or AC rms

**Diode Test**

Range	Resolution	Test current	Open circuit voltage	Audible indication	Accuracy
2V	10mV	0.8mA	3.2V dc typical	< 0.25V	1.5% + 5

Overload protection: 600V DC or AC rms



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**GENERAL**

Display: Liquid crystal display  
Digital, 4000 counts, updates 2/sec  
Polarity: automatic, positive implied, '-' for negative polarity indication  
Overrange: (OL) or (-OL) is displayed

Power: 9V, PP3 carbon-zinc battery (IEC 6F22, NEDA 1604D)  
Battery life: 150 hours (CM82), 75 hours (CM84), typical with carbon zinc  
Low battery indication: symbol displayed  
Auto power off: after 10 minutes

Jaw opening capability: conductor diameter 51mm (CM82), 57mm (CM84)  
bus bar: 70 x 18mm

Dimensions: 279 x 103 x 53mm (CM82), 281 x 108 x 53mm (CM84)  
Weight: approx. 515g (CM82), 570g (CM84), including battery

Includes: carrying case, set of TL16 test leads, 9V PP3 battery (installed), instructions

**ENVIRONMENTAL**

Temperature & Humidity: (Operating): 0°C to 50°C <70% R.H.  
(Storage): -20°C to 60°C < 80% R.H.

Altitude: up to 2000m  
Pollution degree 2, indoor use

**SAFETY**

Conforms to BS EN 61010-1 & 61010-2-032, CAT IV 600V, CAT III 1000V  
Class II, Double insulation

**EMC**

Conforms to BS EN 61326-1



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**SPECIFICATION FOR TL16 TEST LEADS**

Maximum voltage: 1000V AC/DC  
Maximum current: 10A continuous  
Connector: 4mm banana plug with fixed shroud

**Environmental**

Temperature (Operating & Storage): 0°C to 40°C  
Altitude: up to 2000m  
Pollution degree 2

**Safety**

Conforms to BS EN 61010-031,  
CAT IV 600V, CAT III 1000V, 10A (Probe tip caps fitted)  
CAT II 1000V, 10A (Probe tip caps removed)  
Class II, Double insulation

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