



Specification  
CM57  
AC Smart Clamp Multimeter



**ELECTRICAL**

All specified accuracies are at 23°C ± 5°C, <80% RH for 1 year.

**Temperature coefficient:** Add 0.1 x (specified accuracy) per °C. (0°C to 18°C, 28°C to 40°C).

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

**DC Voltage**

Range	Resolution	Input impedance	Accuracy
6V	0.001V	10MΩ	1.0% + 3
60V	0.01V		
600V	0.1V		

Overload protection: 660V DC or AC rms

**AC Voltage**

Range	Resolution	Input impedance	Accuracy (50 to 400Hz)
6V	0.001V	10 MΩ	1.2% + 5
60V	0.01V		
600V	0.1V		



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Minimum AC voltage measurement: 0.3V rms

Crest factor: <1.8

Overload protection: 660V DC or AC rms

**AC Current**

Range	Resolution	Accuracy	
		(50 to 60Hz)	(60 to 400Hz)
60A	0.01A	1.9% + 5	3.0% + 5
600A	0.1A		

Crest factor: <1.8

Overload protection: 660A DC or AC rms

**Resistance**

Range	Resolution	Open circuit voltage	Accuracy
600Ω	0.1Ω	-1.5V DC	1.2% + 3
6kΩ	0.001kΩ		
60kΩ	0.01kΩ		
600kΩ	0.1kΩ		
6MΩ	0.001MΩ		

Overload protection: 450V DC or AC rms

**Continuity**

Open circuit voltage	Audible indication
-1.5V DC	≤30Ω

Overload protection: 450V DC or AC rms



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**Frequency**

Measurement function	Range	Resolution	Sensitivity	Accuracy
AC current	6kHz	0.001kHz	3A rms	0.2% + 2
	10kHz	0.01kHz	5A rms	
AC voltage	6kHz	0.001kHz	5V rms	
	60kHz	0.01kHz		
	100kHz	0.1kHz		

**Capacitance**

Range	Resolution	Max. test voltage	Accuracy
6nF	0.001nF	-1.5V DC	3.0% + 30
60nF	0.01nF		3.0% + 10
600nF	0.1nF		
6μF	0.001μF		
60μF	0.01μF		
600μF	0.1μF		

Minimum capacitance measurement: 0.3nF

Overload protection: 450V DC or AC rms

**Non-Contact Voltage Indicator**

Range: 90V to 600V (50Hz to 60Hz).



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**Diode Test**

Resolution	Max test current	Test voltage
1mV	<1mA	<1.2V

Overload protection: 450V DC or AC rms

**GENERAL**

Display: Liquid crystal display with maximum reading 5999

Sample rate 2 times/sec

Polarity: automatic, positive implied, '-' for negative polarity indication

Overrange: (OL) is displayed

Power: 2 x 1.5V, AAA alkaline batteries (IEC LR03, NEDA 24A)

Battery life (alkaline): 160 hours typical

Low battery indication: symbol is displayed

Auto power off: after 10 minutes

Jaw opening capability: 25.4mm

Dimensions: 203 x 75 x 32mm

Weight: 270g approx, including batteries

Includes: carrying case, set of TL16 test leads, 2 x 1.5V AAA batteries, instructions

**ENVIRONMENTAL**

Temperature & Humidity

(Operating): 0°C to 40°C <80% R.H., non-condensing

(Storage): -10°C to 60°C < 70% R.H., batteries removed

Altitude: up to 2000m

Pollution degree: 2

**SAFETY**

Conforms to: BS EN 61010-1, BS EN 61010-2-032, CAT III 600V Class II, double insulation



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**EMC**

Conforms to BS EN 61326-1

**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 covers fitted)  
CAT II 1000V, 10A (Probe tip covers removed)

Class II, double insulation

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