



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



Specification
CM82/CM84
Clamp meters

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



Specification
CM82/CM84
Clamp meters

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



Specification
CM82/CM84
Clamp meters

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



Specification
CM82/CM84
Clamp meters

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



Specification
CM82/CM84
Clamp meters

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

Check out what else you can get from Martindale:

- 17th Edition Testers
- Accessories
- Calibration Equipment
- Continuity Testers
- Electricians' Kits
- Environmental Products
- Full Calibration & Repair Service
- Fuse Finders
- Digital Clamp Meters
- Digital Multimeters
- Labels
- Microwave Leakage Detectors
- Motor Maintenance Equipment
- Multifunction Testers
- Non-trip Loop Testers
- Pat Testers & Accessories
- Phase Rotation Testers
- Proving Units
- Socket Testers
- Thermometers & Probes
- Test Leads
- Voltage Indicators
- Specialist Metrohm Testers (4 & 5kV)
- Specialist Drummond Testers



Martindale Electric Company Limited
Metrohm House, Imperial Park, Imperial Way, Watford, Hertfordshire, WD24 4PP, UK
Tel: +44(0)1923 441717 Fax: +44 (0)1923 446900
E-mail: sales@martindale-electric.co.uk
Website: www.martindale-electric.co.uk

© 2014 Martindale Electric Company Ltd.

Registered in England No. 3387451. E. & O.E. LITCM82/CM84 Rev1