

MarMonix MCA 212

Clamp Meter

Data Sheet



Quick Spec Highlights

- **Measurement Range:** Up to 1000 V DC, 750 V AC, 1200 A AC/DC
- **Accuracy:** $\pm(0.5\% + 3 \text{ digits})$ for DC Voltage, $\pm(1.0\% + 3 \text{ digits})$ for AC Voltage
- **Display:** 6000 counts LCD with backlight

Key Features

- **Wide Measurement Capability:** Measures AC/DC voltage up to 1000 V, current up to 1200 A, resistance up to 60 M Ω , capacitance up to 9.999 mF, and frequency up to 9.999 MHz.
- **True RMS Accuracy:** Ensures precise readings even in distorted or non-linear waveforms, essential for modern electrical systems.
- **Temperature Measurement:** Supports both $^{\circ}\text{C}$ (-20 to 1000) and $^{\circ}\text{F}$ (-4 to 1832)
- **Data Management Functions:** Includes data hold, max/min capture, relative measurement, and peak hold.
- **Integrated Safety Functions:** Overload protection, auto power-off, and low battery alerts enhance operational safety.
- **Durable Build:** ABS housing, ergonomic clamp jaws, and a compact design (240 × 90 × 45 mm, 288 g) optimized for field portability.

Ordering Info

- **Part Number :** 7603341
- **GTIN:** 6298043998086

Package Contents

- 1 × MCA 212 (main unit)
- 1 × Premium Test Lead
- 1 × Carrying Case
- 1 × Thermocouple (Type-K Probe)
- 2 × 1.5V AA Battery
- 1 × user manual
- 1 × Certificate of Conformity
- 1 × Warranty card

Warranty

This device is covered by a 2-year warranty from the date of purchase, ensuring reliability and long-term support. The warranty applies to defects in materials and workmanship under normal use. It excludes consumables (fuses, disposable batteries) and damage caused by accident, misuse, modification, contamination, or operation outside specified conditions.

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Specifications

Electrical Specifications				
Function	Range	Resolution	Accuracy	Max. Value / Notes
DC Voltage	600.0 mV	0.1 mV	$\pm(0.5\% + 3)$	1000 V
	6.000 V	0.001 V		
	60.00 V	0.01 V		
	600.0 V	0.1 V		
	1000V	1V		
AC Voltage	600.0 mV	0.1 mV	$\pm(1.0\% + 3)$	750 V (40 Hz – 1 kHz)
	6.000 V	0.001 V		
	60.00 V	0.01 V		
	600.0 V	0.1 V		
	750V	1V		
DC Current	600.0 μ A	0.1 μ A	$\pm(1.2\% + 3)$	6000 μ A
	6000 μ A	1 μ A	$\pm(2.0\% + 30)$	1200 A
	60.00 A	0.01 A		
	600.0 A	0.1 A		
	1200A	1A		
AC Current	600.0 μ A	0.1 μ A	$\pm(1.5\% + 3)$	6000 μ A (40 Hz – 1 kHz)
	6000 μ A	1 μ A	$\pm(2.0\% + 30)$	1200 A (40 Hz – 1 kHz)
	60.00 A	0.01 A		
	600.0 A	0.1 A		
	1200A	1A		
Resistance	600.0 Ω	0.1 Ω	$\pm(0.5\% + 3)$	60 M Ω
	6.000 k Ω	0.001 k Ω		
	60.00 k Ω	0.01 k Ω		
	600.0 k Ω	0.1 k Ω		
	6.000 M Ω	0.001 M Ω		
	60.00 M Ω	0.01 M Ω	$\pm(1.5\% + 3)$	

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Specifications

Electrical Specifications

Capacitance	9.999 nF	0.001 nF	$\pm(5.0\% + 20)$	9.999 mF
	99.99 nF	0.01 nF	$\pm(2.0\% + 5)$	
	999.9 nF	0.1 nF		
	9.999 μ F	0.001 μ F		
	99.99 μ F	0.01 μ F		
	999.9 μ F	0.1 μ F		
	9.999mF	0.001mF	$\pm(5.0\%+5)$	
Frequency	99.99 Hz	0.01 Hz	$\pm(0.1\% + 2)$	9.999 MHz
	999.9 Hz	0.1 Hz		
	9.999 kHz	0.001 kHz		
	99.99 kHz	0.01 kHz		
	999.9 kHz	0.1 kHz		
	9.999MHz	0.001MHz		
Duty Cycle	1% ~ 99%	0.1%	$\pm(0.1\% + 2)$	
Diode	Yes			
Continuity	Yes			
Temperature	-20 °C ~ 1000 °C / -4 °F ~ 1832 °F	1 °C / 1 °F	$\pm(2.5\% + 5)$	1000 °C / 1832 °F

General Specifications

Display (LCD)	6000 counts
Ranging	Auto / Manual
Material	ABS
Update Rate	3 times / second
True RMS	Yes
Data Hold	Yes
Backlight	Yes
Low Battery Alert	Yes
Auto Power Off	Yes

Mechanical Specifications

Dimension	240 × 90 × 45 mm
Weight	288 g
Battery Type	9V 6F22 Battery × 1
Warranty	2 year

Environmental Specifications

Operating Temperature	0 ~ 40 °C
Operating Humidity	< 75% RH
Storage Temperature	-20 ~ 60 °C
Storage Humidity	< 80% RH

Disclaimer

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