

Micro-Ohm Meters

MRM Series, 10-200 Amp



Testing Applications

Accurately measure very low contact resistances of switches and circuit breaker contacts, transformer and motor windings, wire and cable samples, joints in busbars, or any application where low resistance current is required.

Safety and Design Features

- Microprocessor controlled
- 4-wire Kelvin measurement
- Easy to read digital screen display
- IEC safety compliant
- ISO 17025 Calibrated (all models except MRM-10P)

Models Available

- MRM-10P
- MRM-100A
- MRM-10-V2
- MRM-200
- MRM-10E-V2

- **Lightweight** and **ruggedly constructed**
- **Reliable** and **accurate** measurements in the **laboratory** or in the **field**
- **User-friendly** software, **report generator**



Model MRM-10P



Model MRM-10E-V2
10 Amps with enhanced accuracy



Model MRM-100A
100 Amps



Model MRM-200
200 Amps



Specifications are subject to change without notice.

Brochure No. **110105**

MODEL	MRM-10P	MRM-10-V2	MRM-10E-V2
TEST CURRENT	100 μ A - 10 A	1 mA - 10 A	
RESISTANCE RANGES	0.4 m Ω -60 m Ω @ 10 A 4 m Ω -600 Ω @ 1 A 0.04 Ω -6 Ω @ 100 mA 0.4 Ω -60 Ω @ 10 mA 4 Ω -600 Ω @ 1 mA 40 Ω -6000 Ω @ 100 μ A	0-200 m Ω @ 10 A 0-1000 m Ω @ 5 A 0-200 m Ω @ 1 A 0-2000 m Ω @ 100 mA 0-20 Ω @ 10 mA 0-2000 Ω @ 1 mA	
RESOLUTION	1 μ Ω @ 10 A	1 μ Ω @ 10 A	0.1 μ Ω @ 10A
INPUT	100-240 V, 50/60 Hz	100-240 V, 50/60 Hz	
BASIC ACCURACY	\pm (0.25% of reading \pm 25 μ Ω)	\pm (0.2% of reading \pm 2 digits)	\pm (0.10% of reading + 3 LSD)
PROTECTION	Overcurrent, short-circuit and thermal	Overcurrent, short-circuit and thermal	
OPERATING TEMPERATURE	14°F to 122° F (-10°C to 50°C)	23°F to 122° F (-5°C to 50°C)	
STORAGE TEMPERATURE	-4°F to 140° F (-20°C to 00°C)	-13°F to 158° F (-25°C to 70°C)	
HUMIDITY	<95%, non-condensing	<95%, non-condensing	
ADVANCED FEATURES	<ul style="list-style-type: none"> Manual or Auto Range (6 ranges of current measurement, plus 3 ranges within each current range). Measurement of resistive and inductive materials (Two terminal measurement; Four terminal Kelvin measurement) Programmable Hi-Lo alarm with memory of 20 data. Auto-judgments of Hi (readings higher than Hi-Limit), Lo (readings lower than Lo-Limit) and Pass (readings between Hi-Lo Limits). Alarm (beeper) for Hi and Lo. Readings Hold function Communicate with PC via RS232C (to USB bridge cable). 	<ul style="list-style-type: none"> Remote control via Android device Built-in memory for up to 30,000 measured values When measuring inductive loads, the bar graph display makes it easy to verify that the current has stabilized Built-in rechargeable battery Built-in printer Temperature compensation (MRM-10E-V2 only) 	
DIMENSIONS			
Length	6" (152 mm)	15" (378 mm)	15" (378 mm)
Width	2.5" (64 mm)	12" (308 mm)	12" (308 mm)
Height	11" (279 mm)	7" (175 mm)	7" (175 mm)
WEIGHT	3 lbs (1.4 kgs)	14 lbs (6.5 kgs)	14 lbs (6.5 kgs)
ACCESSORIES Included	<ul style="list-style-type: none"> Test leads, 1 set Kelvin Clips, 1 set RS232 to USB bridge cable Rechargeable lithium battery Software on USB stick User guide AC adaptor Power cord Nylon carrying bag 	<ul style="list-style-type: none"> Temperature Sensor (model MRM-10E-V2 only) Test Leads, 6' (1.8 m), set of 2 (combined current and potential), with Alligator Clip, and U terminal (optional connectors and lengths available) Ground Test Lead, 10' (3 m), with Alligator Clip and U terminal Power Cord Auxiliary Power Cable, 6' (1.8 m) Auxiliary Power and Test Cable, 16' (5 m) USB Cable, 6' (1.8 m) Software license User guide Synthetic Bag for instrument and cables 	



MODEL	MRM-100A	MRM-200
TEST CURRENT	up to 100 A (True DC)	5 A - 200 A (True DC)
RESISTANCE RANGES	0.1 $\mu\Omega$ to 300 m Ω	0.1 $\mu\Omega$ to 2 m Ω , with 0.1 $\mu\Omega$ resolution 2 m Ω to 200 m Ω , with 10 $\mu\Omega$ resolution 200 m Ω to 1 Ω , with 1 m Ω resolution
RESOLUTION	up to 0.1 $\mu\Omega$	
INPUT	100-240 V, 50/60 Hz	
BASIC ACCURACY	$\pm(1\%$ of reading ± 1 digit)	$\pm 1\%$ of measured value
PROTECTION	Overcurrent, short-circuit and thermal	
OPERATING TEMPERATURE	23°F to 122° F (-5°C to 50°C)	
STORAGE TEMPERATURE	14°F to 140° F (-10°C to 60°C)	
HUMIDITY	<95%, non-condensing	
ADVANCED FEATURES	<ul style="list-style-type: none"> • Programmable set-up test time 5-120 seconds • Built-in memory with capacity to store 50 registers with 80 readings each • Built-in Printer (MRM-100A only) 	
DIMENSIONS		
Length	20" (502 mm)	20" (502 mm)
Width	15.5" (394 mm)	15.5" (394 mm)
Height	7.5" (190 mm)	7.5" (190 mm)
WEIGHT	45 lbs (20.5 kgs)	45 lbs (20.5 kgs)
ACCESSORIES Included	<ul style="list-style-type: none"> • Test Leads, 19' (6 m), set of 2 (combined current and potential), with C-clamp, and U terminal (optional lengths available) • Ground Test Lead, 10' (3 m), with Alligator Clip and U terminal • Power Cord • USB Cable, 6' (1.8 m) • Software license • User guide • Carrying Case for cables 	



Optional Leads

Hand Spikes with Spring Points and In-line Plugs

Set of 2 (combined current & potential) (1 red, 1 black)

Optional lengths of 6, 10, or 16' (1.8, 3, or 5 m)

Model PM3/4 PB MAX CURRENT 10 A

Hand Spikes with Spring Points and U Terminal

Set of 2 (combined current & potential) (1 red, 1 black)

Optional lengths of 6, 10, or 16' (1.8, 3, or 5 m)

Model PM3/4 FQ, MAX CURRENT 10 A

In-line Plugs with Rigid Insulating Sleeve and Alligator Clip with jaw opening of 20 mm

Set of 2 (combined current & potential) (1 blue/red, 1 black/green)

Optional lengths of 6' (1.8 m) or (49') 15 m

Model PM5/6 PB, MAX CURRENT 1 A

In-line plugs and Alligator Clip with jaw opening of 20 mm

Set of 2 (combined current & potential) (1 blue/red, 1 black/green)

Optional lengths of 16, 20, or 32' (5, 6, or 10 m)

Model PM5/6 PB, MAX CURRENT 10 A

U Terminal and Alligator Clip with jaw opening of 20 mm

Set of 2 (combined current & potential) (1 blue/red, 1 black/green)

Optional lengths of 6, 10, 16, 32, 39, or 49' (1.8, 3, 5, 10, 12, or 15 m)

Model PM5/6 FQ, MAX CURRENT 10 A

U Terminal and C-Clamp with opening of 80 mm

Set of 2 (combined current & potential) (1 red, 1 black),

Model PM12/13 FQ/FQ, MAX CURRENT 100 A

Optional lengths of 10, 20, 26, 32, 39, or 49' (3, 6, 8, 10, 12, or 15 m)

OR

Model PM12/13 FQ/FQ, MAX CURRENT 200 A

Optional lengths of 20, 26, 32, 39, or 49' (6, 8, 10, 12, or 15 m)

Ground, 10' (3 m)

U terminal and Alligator Clip with jaw opening of 20 mm



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