

# 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-100-V2
- MRM-10-V2
- MRM-200-V2
- MRM-10E-V2

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



Model MRM-10P



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



Model MRM-100-V2  
100 Amps



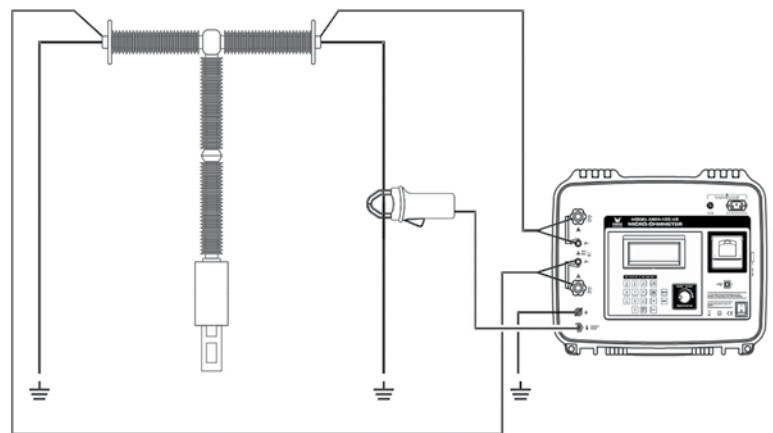
Model MRM-200-V2  
200 Amps



MODEL	MRM-10P	MRM-10-V2	MRM-10E-V2
TEST CURRENT	100 $\mu$ A - 10 A	1 mA - 10 A	
RESISTANCE RANGES	0.4 m $\Omega$ -60 m $\Omega$ @ 10 A 4 m $\Omega$ -600 $\Omega$ @ 1 A 0.04 $\Omega$ -6 $\Omega$ @ 100 mA 0.4 $\Omega$ -60 $\Omega$ @ 10 mA 4 $\Omega$ -600 $\Omega$ @ 1 mA 40 $\Omega$ -6000 $\Omega$ @ 100 $\mu$ A	0-200 m $\Omega$ @ 10 A 0-1000 m $\Omega$ @ 5 A 0-200 m $\Omega$ @ 1 A 0-2000 m $\Omega$ @ 100 mA 0-20 $\Omega$ @ 10 mA 0-2000 $\Omega$ @ 1 mA	
RESOLUTION	1 $\mu$ $\Omega$ @ 10 A	1 $\mu$ $\Omega$ @ 10 A	0.1 $\mu$ $\Omega$ @ 10A
INPUT	100-240 V, 50/60 Hz	100-240 V, 50/60 Hz	
BASIC ACCURACY	$\pm$ ( 0.25% of reading $\pm$ 25 $\mu$ $\Omega$ )	$\pm$ ( 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"> <li>Manual or Auto Range (6 ranges of current measurement, plus 3 ranges within each current range).</li> <li>Measurement of resistive and inductive materials (Two terminal measurement; Four terminal Kelvin measurement)</li> <li>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.</li> <li>Readings Hold function</li> <li>Communicate with PC via RS232C (to USB bridge cable).</li> </ul>	<ul style="list-style-type: none"> <li>Remote control via Android device</li> <li>Built-in memory for up to 30,000 measured values</li> <li>When measuring inductive loads, the bar graph display makes it easy to verify that the current has stabilized</li> <li>Built-in rechargeable battery</li> <li>Built-in printer</li> <li>Temperature compensation (<b>MRM-10E-V2</b> only)</li> </ul>	
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"> <li>Test leads, 1 set</li> <li>Kelvin Clips, 1 set</li> <li>RS232 to USB bridge cable</li> <li>Rechargeable lithium battery</li> <li>Software on USB stick</li> <li>User guide</li> <li>AC adaptor</li> <li>Power cord</li> <li>Nylon carrying bag</li> </ul>	<ul style="list-style-type: none"> <li>Temperature Sensor, 10' (3 m) (<b>model MRM-10E-V2 only</b>)</li> <li>Test Leads, 6' (1.8 m) (optional lengths available)</li> <li>Set of 2 (combined current and potential), (1 blue/red, 1 black/green) U terminal, Alligator Clip with jaw opening of 20 mm (optional connectors available)</li> <li>Ground Test Lead (green), 10' (3 m), U terminal, Alligator Clip with jaw opening of 20 mm</li> <li>Power Cord</li> <li>Auxiliary Power Cord, 10' (3 m), Connects to Cigarette lighter for charging the equipment</li> <li>Auxiliary Power Cord (12 V) and Test Cable, 16' (5 m), Connects to battery of a car</li> <li>USB Cable, 6' (1.8 m)</li> <li>Software license</li> <li>User guide</li> <li>Synthetic Bag for instrument and cables</li> </ul>	



MODEL	MRM-100-V2	MRM-200-V2
TEST CURRENT	5 A - 100 A (True DC)	5 A - 200 A (True DC)
RESISTANCE RANGES	0.1 $\mu\Omega$ to 2 m $\Omega$ , with 0.1 $\mu\Omega$ resolution 2 m $\Omega$ to 300 m $\Omega$ , with 10 $\mu\Omega$ resolution	0.1 $\mu\Omega$ to 2 m $\Omega$ , with 0.1 $\mu\Omega$ resolution 2 m $\Omega$ to 200 m $\Omega$ , with 10 $\mu\Omega$ resolution 200 m $\Omega$ to 1 $\Omega$ , with 1 m $\Omega$ resolution
RESOLUTION	up to 0.1 $\mu\Omega$	
INPUT	100-240 V, 50/60 Hz	
BASIC ACCURACY	$\pm 1\%$ of reading from 50 $\mu\Omega$ to 300 m $\Omega$	$\pm 1\%$ of reading from 50 $\mu\Omega$ to 1 $\Omega$
PROTECTION	Overcurrent, short-circuit and thermal	
OPERATING TEMPERATURE	32°F to 122° F (0°C to 50°C)	
STORAGE TEMPERATURE	14°F to 158° F (-10°C to 70°C)	
HUMIDITY	<95%, non-condensing	
ADVANCED FEATURES	<ul style="list-style-type: none"> <li>• Remote control via Android device</li> <li>• Programmable set-up test time 15-120 seconds</li> <li>• Built-in memory with capacity to store up to 4000 readings</li> <li>• Perform up to 30 consecutive tests (<b>MRM-200-V2</b> only)</li> <li>• Built-in Printer (<b>MRM-100-V2</b> only)</li> <li>• <b>BSG mode (Both Side Grounded) for substation testing</b></li> </ul>	
DIMENSIONS		
Length	20" (502 mm)	
Width	15.5" (394 mm)	
Height	7.5" (190 mm)	
EQUIPMENT Weight	24 lbs (11 kgs)	
CABLES Weight	22 lbs (10 kgs)	
ACCESSORIES Included	<ul style="list-style-type: none"> <li>• Test Leads, 19' (6 m), (optional lengths available) Set of 2 (combined current and potential), (1 red, 1 black) U terminal, C-clamp with opening of 80 mm (optional connectors available)</li> <li>• Ground Test Lead (green), 10' (3 m), U terminal, Alligator Clip with jaw opening of 20 mm</li> <li>• Power Cord</li> <li>• USB Cable, 6' (1.8 m)</li> <li>• Software license</li> <li>• User guide</li> <li>• Carrying Case for cables</li> </ul>	



**Double Ground Test Measurement Set-up  
for increased safety in substations**

## Optional Leads

### ► Model MRM-10-V2 and MRM-10E-V2

#### Hand Spikes with Spring Points and U Terminal

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

#### MAX CURRENT 10 A

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



### ► Model MRM100-V2 and MRM-200-V2

#### U Terminal and Clip

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

Clip length 170 mm with opening 41 mm max

#### MAX CURRENT 100 A

Optional lengths of 10, 20, 26, 32, 39, 49'

(3, 6, 8, 10, 12, 15 m)

#### MAX CURRENT 200 A

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



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Compliant