

# MR500 SERIES SPECIFICATIONS

The MR520 and MR521 are general purpose 1500AAC or DC current probes designed for use with DMMs, loggers or oscilloscopes and other instruments that have voltage inputs. The MR520 is a single range probe, while the MR521 has dual selectable range probes.

The MR520 and MR521 each have an integral 5 ft. (1.5m) lead terminated by shrouded banana plugs. The jaw design on these probes make them well suited for measuring current in both cable and bus bar type conductors.

ELECTRICAL SPECIFICATIONS						
		MR520			MR521	
<b>Nominal Range:</b>		1000AAC/1500Adc			100AAC/150Adc & 1000AAC/1500Adc	
<b>Measurement Range:</b>		1 to 1500A			0.2 to 1500A	
<b>Output Signal:</b>		1mV/A			10mV/Aon 150A range; 1mV/Aon 1500A range	
<b>Range: 1500A</b>	<b>Current*:</b>	1 to 100A	100 to 800A	800 to 1000A	1000 to 1500A DC only	
	<b>Accuracy*:</b>	1.5% R ±1A	2.5% R	4% R	4% R	
<b>Range: 45 to 65Hz</b>	<b>Current*:</b>	10 to 200A		200 to 1000A		
	<b>Phase Shift*:</b>	2.5°		1.5°		
<b>Range: 150A</b>	<b>Current*:</b>	-			0.5 to 20A	20 to 100A
	<b>Accuracy*:</b>	-			1.5% R ±0.5A	1.5% R
	<b>Current*:</b>	-			100 to 150A DC only	
	<b>Phase Shift*:</b>	-			45 to 65Hz 10 to 20A	20 to 100A
<b>Range: 1500A</b>	<b>Current*:</b>	-			0.5 to 100A	100 to 800A
	<b>Accuracy*:</b>	-			1.5% R ±1mV	2.5% R
	<b>Current*:</b>	-			45 to 65Hz 10 to 200A	200 to 1000A DC only
	<b>Phase Shift*:</b>	-			2°	1.5°
<b>Overload:</b>		3000Adc and 2000AAC continuous up to 1kHz			3000Adc and 2000AAC continuous up to 1kHz	
<b>Frequency Range:</b>		DC to 10kHz at -3dB			DC to 10kHz at -3dB	
<b>Load Impedance:</b>		>100k /100pF			>100k /100pF	
<b>Working/Common Mode Voltage:</b>		600Vrms			600Vrms	
<b>Battery:</b>		9V Alkaline (Approx. 120 hours life)			9V Alkaline (Approx. 50 hours life)	
<b>Overload Indication:</b>		-			Red LED indicates input > selected	
<b>Auto Off:</b>		-			10 min (may be disabled at power-up)	
		MR520			MR521	
<b>Output Termination:</b>		5 ft. Lead			5 ft. Lead	

\*Note: Reference conditions: 18°C to 28°C, 20 to 75% RH, external magnetic field <40A/m, no DC component, no external current carrying conductor, test sample centered, 1M 100pF load, zero adjustment [DC only] DC to 65Hz, battery voltage 9V ±0.1V

MECHANICAL SPECIFICATIONS	
<b>Operating Temperature:</b>	14° to 131°F (-10° to +55°C)
<b>Storage Temperature:</b>	-40° to 176°F (-40° to +70°C)
<b>Operating Relative Humidity:</b>	10 - 35°C 90% ±5% RH (without condensation), 40 - 55°C 70% ±5% RH (without condensation)
<b>Zero Adjustment:</b>	10 turn knob at base of case Automatic zero
<b>Jaw Opening:</b>	1.55" (40mm)
<b>Maximum Conductor Size:</b>	One 1.18" (30mm) or two 0.95" (24mm) or two bus bars 1.2 x 0.4" (31.5 x 10mm)
<b>Dimensions:</b>	8.8 x 3.82 x 1.73" (224 x 97 x 44mm)
<b>Weight:</b>	15oz (440oz)
<b>Polycarbonate Material:</b>	<b>Handles:</b> Polycarbonate +ABS, Gray, UL94V0, <b>Jaws:</b> Polycarbonate, Red, UL94V0

SAFETY SPECIFICATIONS	
<b>Electrical:</b>	IEC 1010-2-32; 600V, Category III, Pollution Degree 2; CE Marked
<b>Electromagnetic Compatibility:</b>	CE Marked

ORDERING INFORMATION	CATALOG NO.
MR520 AC/DC Current Probe MR520 (Lead - 1mV/A - 1500Amax)	Cat. # 1200.71
MR521 AC/DC Current Probe MR521 (Lead - 10mV/A - 150Amax & 1mV/A1500Amax)	Cat. # 1200.69
These probes are shipped with an instruction manual and a product warranty and registration card.	
<b>Accessories:</b>	Banana plug adapter (to nonrecessed plug) . . . . .Cat. # 1017.45