

CURRENT MEASUREMENT PROBES

MR SERIES AC/DC CURRENT PROBES

MODELS MR417 / 527

Hall Effect AC/DC current probes for Oscilloscopes and other instruments with waveform displays

SPECIFICATIONS

MODEL	MR417	MR527
ELECTRICAL		
Current Range	0.5 to 40A _{AC} , 60A _{DC} 0.5 to 400A _{AC} , 600A _{DC}	0.5 to 100A _{AC} , 150A _{DC} 0.5 to 1000A _{AC} , 1400A _{DC}
Output Signal	10mV/A, 1mV/A	
Frequency Range	DC to 30kHz (-3dB) (depending of current value)	
Phase Shift At 50/60Hz	≤2°@ 40A ≤1.5° @ 400A	≤2.2°@ 100A ≤1.5° @ 1000A
Load Impedance	>1MΩ and ≤100pF	
Overload	3000A _{DC} or 1000A _{AC} continuous for < 1kHz	
Zero Adjust	Automatic on both ranges	
Power Supply	9V alkaline Battery (NEDA 1060A, 6LR61) or 5V DC Micro-USB type B	
Battery Life	50H typical	
Low Battery Indication	Green LED blinking	
Overload Indication	Red LED on when measurement > than selected range	
Output Termination	6.5 ft (2 m) coaxial cable with insulated BNC terminal	
MECHANICAL		
Maximum Conductor Size	Cables: (1) 0.18" (30mm) or (2) .94" (24mm) Bus Bar: (1) 1.97 x 0.39" (50 x 10mm) or (2) 1.23 x 0.39" (31.5 x 10mm) or (3) 0.98 x 0.31" (25 x 8mm)	Cables: (1) 1.5" (39mm) or (2) 1" (25.4mm) Bus Bar : (1) 1.97 x 0.49" (50 x 12.5mm) or (2) 0.98 x 0.2" (25 x 5mm); (1) 1.24 x 0.30" (31.5 x 10mm) or (3) 0.98 x 0.31" (25 x 8mm)
Dimensions (H x W x D)	8.82 x 3.82 x 1.73" (224 x 97 x 44mm)	9.31 x 3.82 x 1.73" (236.5 x 97 x 44mm)
Weight (with Battery)	0.98lbs (440g)	1.15lbs (520g)
ENVIRONMENTAL		
Operating Temperature	14° to +131°F (-10 to +55°C)	
Storage Temperature	-40° to +176°F (-40 to +80°C)	
Relative Humidity	Up to 85% @ 35°C	
SAFETY		
Ingress Protection	IP 40	
EMC	EN 61326-1	
Safety Rating	IEC 61010-1, EN 61010-2-32, Pollution Degree 2, 600V CAT III	



MR417

MR527



FEATURES

- The jaw shape enables users to clamp on to cables or small bus bars
- Powered by battery or standard external 5V power supply via micro-USB connector
- Measures up to 1000A_{AC} and 1400A_{DC} (model dependent)
- Equipped with a Zero DC reset function
- Auto Power Off enable/disable function
- LED overload and low battery indicators
- Millivolt output compatible with most equipment and instruments
- Equipped with a coaxial lead and isolated BNC connectors for direct connection to an oscilloscope
- Battery life up to 50 hours
- Safety rating 600V CAT III



CATALOG NO.	DESCRIPTION
1200.84	AC/DC Current Probe Model MR417 (40A _{AC} , 60A _{DC} , 10mV/A & 400A _{AC} , 600A _{DC} , 1mV/A, BNC Output) Replaces MR461
1200.85	AC/DC Current Probe Model MR527 (100A _{AC} , 150A _{DC} , 10mV/A & 1000A _{AC} , 1400A _{DC} , 1mV/A, BNC Output) Replaces MR561