

# CURRENT MEASUREMENT PROBES

## MN SERIES AC CURRENT PROBES

### MN SERIES



Compact sized probes ideal for measuring low currents and leakage currents. Standard millivolt or milli-amp outputs are compatible with multimeters, data loggers and oscilloscopes

### SPECIFICATIONS

MODELS	MN103	MN106	MN114	MN185
<b>ELECTRICAL</b>				
<b>Nominal Range</b>	10, 100AAC	150AAC	10AAC	120AAC
<b>Measurement Range</b>	1mA to 10AAC 1A to 100AAC	2 to 150AAC	1mA to 10AAC	50mA to 120AAC
<b>Transformation Ratio</b>	Voltage output	1000:1	Voltage output	1000:1
<b>Output Signal</b>	1mV/mA, 1mV/A (10V <sub>AC</sub> @ 10A, 100mV <sub>AC</sub> @ 100A)	1mA/A (150mA <sub>AC</sub> @ 150A)	100mV/A (1V <sub>AC</sub> @ 10A)	1mA/A (120mA <sub>AC</sub> @ 120A)
<b>Accuracy</b>	(10A Range) 45 to 65Hz: ±3% of Reading ± 1mA 65 to 500Hz: -2, +6% of Reading ± 1mA (100A Range) 45 to 65Hz: ±2% of Reading ± 0.1A 65 to 500Hz: -2, +3% of Reading ± 0.1A	45 to 65Hz: ±2.5% of Reading ± 0.15 A 65 to 1000Hz: ±4.5% of Reading ± 0.15 A	1mA to 10A: 2% of Reading ± 2mA 40Hz to 3 kHz: 3.5% of Reading ± 2mA	50mA to 100A: 1% of Reading ± 0.01A (with non-inductive load) 100 to 120A: 1.5% of Reading ± 0.01 A
<b>Phase Shift</b>	-	2 to 120A, 50 to 60Hz: ≤10°	10A to 100A, 45 to 65Hz: ≤8°	1 to 100A, 50 to 60Hz: ≤3.5°
<b>Overload</b>	-	170A continuous	20A continuous	170A continuous
<b>Frequency Range</b>	45 to 500Hz	45Hz to 1kHz	30Hz to 5kHz	30Hz to 10kHz
<b>Load Impedance</b>	≥100 kΩ	≤5Ω non-inductive	≥100kΩ	≤5Ω non-inductive
<b>Working/Common Mode Voltage</b>	250V <sub>AC</sub> /250V <sub>AC</sub>			250V <sub>AC</sub> /30V <sub>AC</sub>
<b>Output Termination</b>	5ft (1.5m) lead with 4mm safety banana plugs			Two 4mm banana jacks
<b>MECHANICAL</b>				
<b>Operating Temperature</b>	14° to 122°F (-10° to 50°C)		-13° to 122°F (-25° to 50°C)	
<b>Storage Temperature</b>	-40° to 176°F (-40° to 80°C)			
<b>Jaw Opening</b>	0.78" (20mm)			
<b>Maximum Conductor Size</b>	0.47"Ø max (12mm)			
<b>Dimensions</b>	1.26 x 4.53 x 0.87" (32 x 115 x 22mm)			
<b>Weight</b>	5.6 oz (160g)			
<b>Material</b>	Polycarbonate UL 94			
<b>SAFETY</b>				
<b>Electrical</b>	3kV 50/60Hz dielectric for 1min			

### FEATURES

- Measurement range of 1mA to 150AAC
- Jaw opening of 0.78"
- Accommodates conductors up to 0.47" in diameter
- Ergonomic design and easy operation
- Compact size accommodates hard to reach locations
- Low phase shift for power measurements
- Available with mV or mA output signals
- Constructed with UL94VO flame retardant material
- Designed for DMMs, recorders, loggers and oscilloscopes

CATALOG NO.	DESCRIPTION
1031.02	AC Current Probe Model MN103
1031.17	AC Current Probe Model MN106
2110.71	AC Current Probe Model MN114
100.185	AC Current Probe Model MN185

