

CURRENT MEASUREMENT PROBES

MN SERIES AC CURRENT PROBES

MN SERIES



Model MN103



Model MN185

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
ELECTRICAL				
Nominal Range	10, 100Aac	150Aac	10Aac	120Aac
Measurement Range	1mA to 10Aac 1A to 100Aac	2 to 150Aac	1mA to 10Aac	50mA to 120Aac
Transformation Ratio	Voltage output	1000:1	Voltage output	1000:1
Output Signal	1mV/mA, 1mV/A (10V _{ac} @ 10A, 100mV _{ac} @ 100A)	1mA/A (150mA _{ac} @ 150A)	100mV/A (1V _{ac} @ 10A)	1mA/A (120mA _{ac} @ 120A)
Accuracy	(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
Phase Shift	-	2 to 120A, 50 to 60Hz: ≤10°	10A to 100A, 45 to 65Hz: ≤8°	1 to 100A, 50 to 60Hz: ≤3.5°
Overload	-	170A continuous	20A continuous	170A continuous
Frequency Range	45 to 500Hz	45Hz to 1kHz	30Hz to 5kHz	30Hz to 10kHz
Load Impedance	≥100 kΩ	≤5Ω non-inductive	≥100kΩ	≤5Ω non-inductive
Working/Common Mode Voltage	250V _{ac} /250V _{ac}			250V _{ac} /30V _{ac}
Output Termination	5ft (1.5m) lead with 4mm safety banana plugs			Two 4mm banana jacks
MECHANICAL				
Operating Temperature	14° to 122°F (-10° to 50°C)		-13° to 122°F (-25° to 50°C)	
Storage Temperature	-40° to 176°F (-40° to 80°C)			
Jaw Opening	0.78" (20mm)			
Maximum Conductor Size	0.47"Ø max (12mm)			
Dimensions	1.26 x 4.53 x 0.87" (32 x 115 x 22mm)			
Weight	5.6 oz (160g)			
Material	Polycarbonate UL 94			
SAFETY				
Electrical	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