

CURRENT MEASUREMENT PROBES

DC/AC MICROPROBES AND CURRENT PROBES

MD SERIES & K SERIES

MD Series probes are rugged and designed for use on cables and bus bars. K Series small probes designed for high accuracy measuring low currents

MD SERIES

K SERIES



SPECIFICATIONS

MODELS	MD301	MD305
ELECTRICAL		
Nominal Range	500A _{AC}	600A _{AC}
Measurement Range	2 to 500A _{AC}	1 to 700A _{AC}
Transformation Ratio	Voltage output	1000:1
Output Signal	1mV/A (0.5V _{DC} @ 500A)	1mA/A (0.6A _{AC} @ 600A)
Accuracy	(500A Range) 25A 5% of Reading 100A 2% of Reading 250A 1% of Reading 500A 1% of Reading 600A -	(600A Range) 3% of Reading 1.5% of Reading 1% of Reading 1% of Reading 2% of Reading
Phase Shift	25A - 100A - 250A - 500A - 600A -	3° 1.5° 1° 1° 1°
Overload	700A for 10 min	
Frequency Range	48 to 1000Hz (error: add 2% to the ref.)	40 to 1000Hz (error: add 2% to the ref.)
Load Impedance	≥100kΩ	5Ω max non-inductive
Working/Common Voltage	600V _{rms}	
Output Termination	Double-insulated 5ft (1.5m) lead with two 4mm safety banana plugs	
MECHANICAL		
Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-40° to 185°F (-40° to 85°C)	
Jaw Opening	1.3" (33mm)	
Maximum Conductor Size	1.18" (30mm), Max Bus Bar size: 2.48 x 0.20" (63 x 5mm)	
Dimensions	2.6 x 7.68 x 1.34" (66 x 195 x 34mm)	
Weight	14.82 oz (420g)	
Material	Polycarbonate UL 94	
SAFETY		
Electrical	EN 61010-2-032 600V CAT III, Pollution: 2; 300V CAT IV, Pollution: 2	
Electromagnetic Compatibility	EN 50081-1 Class B; EN 50082-2 Electrostatic discharge IEC 1000-4-2; Radiated field IEC 1000-4-3; Fast transients IEC 1000-4-4; Magnetic field at 50/60Hz IEC 1000-4-8	
Double Insulation	Yes	
CE Mark	Yes	



SPECIFICATIONS

MODELS	K100	K110
Current Range	0 to ±4.5A _{DC} 0 to 3A _{rms}	0 to ±450mA _{DC} 0 to 300mA _{rms}
Output Signal	1mV/mA	10mV/mA
Resolution	DC: 50µA typical, AC: 100µA typical	DC: 50µA typical, AC: 100µA typical
Accuracy	DC: ±1% of Reading, ±200µA AC: ±2% of Reading, ±200µA	DC: ±0.5% of Reading, ±150µA AC: ±0.8% of Reading, ±200µA
Output Noise	<100µV, DC to 3kHz	<100µV, DC to 3kHz
Frequency Response	DC to 2kHz (@ -3dB sine)	DC to 1.5kHz (@ -3dB sine)
Output Termination	5ft (1.5m) lead with two 4mm safety banana plugs; standard ¾" (19mm) spacing	
Power Source	One 9V Alkaline battery (included)	
Battery Life	20 hours	

FEATURES

K SERIES

- Measures extremely low level DC from 100µA
- Outputs signal proportional to total current (DC + AC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with digital multimeters and oscilloscopes
- Accurate display of waveforms
- No range or mode (AC/DC) switching required
- Red LED indicates momentary or continuous overload
- Green LED indicates power and battery condition

MD SERIES

- 600A range with mA or mV output
- Unique hook-shaped jaws that enable the user to "pry" into or "hook" onto cables
- Maximum conductor size is 2 x 500kcmil
- Works as a traditional current transformer with ratio of 1000:1
- AC/DC outputs available

CATALOG NO.	DESCRIPTION
1200.67	DC/AC MicroProbe Model K100
2111.73	DC/AC MicroProbe Model K110
1201.07	AC Current Probe Model MD301
1201.36	AC Current Probe Model MD305
Accessories/Replacement - available on website store from www.aemc.com	
1017.45	Adapter - 4mm Non-insulated for Safety Leads
2118.46	Adapter - Banana (Female) - BNC (Male) (XM-BB) 600V CAT III