

# DC/AC MicroProbe Model K110



The Model K110 has exceptional AC/DC current measurement capabilities. Very small and compact, this microprobe is designed for accurate measurement of very low currents with  $50\mu\text{A}$  DC sensitivity.

Its very small size and “clip” shape make it ideal for probing and measuring in tight wiring areas such as circuit boards, 4 to 20mA process loops or automotive electronic circuitry. Model K110 is an excellent companion to all DMMs and instruments that will benefit from the probe’s high sensitivity, dynamic range and waveform displaying characteristics.

The Model K110 provides higher sensitivity and better accuracy with an output of 10mV/mA. It provides AC + DC output signal proportional to the total current under test, without the need of probe ranging or signal filtering. True RMS measurements with total AC + DC components are possible.

## Features

- Measures extremely low level DC from  $100\mu\text{A}$
- Outputs signal proportional to total current (AC + DC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with DMMs and oscilloscopes
- Accurate display of wave forms
- No range or mode (AD/DC) switching required
- Extended battery life
- Red LED indicates momentary or continuous overload
- Green LED indicates power and battery condition
- Double Insulation
- CE Mark

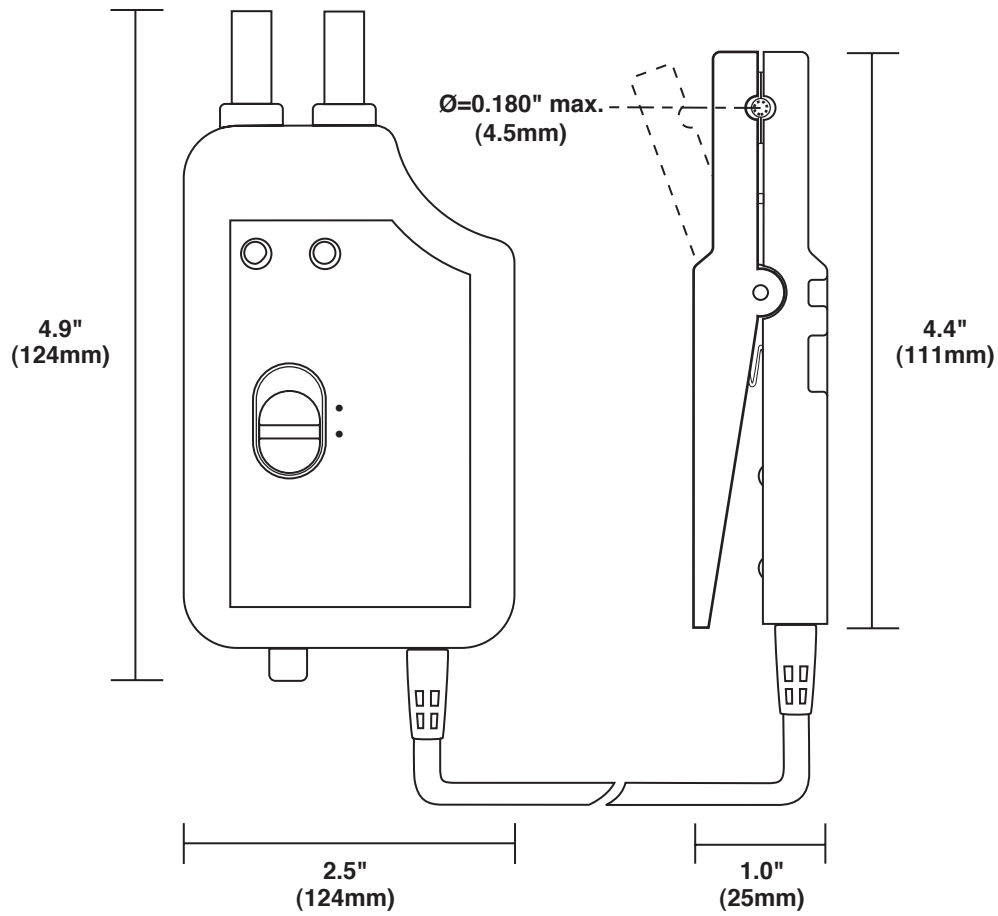
## Applications

- Industrial process controls (4 to 20mA current loops)
- Electronic circuit design, testing and repair
- Automobile wiring and engine control systems
- Avionics systems maintenance and repair
- Shipboard maintenance and repair
- Fault and signal location in complex networks
- Ground and leakage current measurement
- Pre-deployment testing of power-conscious equipment

# Specifications

MODELS	K110
<b>ELECTRICAL</b>	
Nominal Range	0 to 300mArms/0 to ±450mA <sub>DC</sub>
Measurement Range	0 to ±450mA
Output Signal	10mV/mA
Accuracy (450mA Range)	
AC	±0.8% of Reading ± 200µA
DC	±0.5% of Reading ± 150µA
Overload	Red LED indicates momentary or continuous overload
Frequency Range	DC to 1.5kHz (@ -3dB sine)
Load Impedance	200Ω
Working/Common Mode Voltage	300V, EN 61010-1, Cat. II
Battery	9V Alkaline, NEDA 1604, 6LR61 or IEC 6 LF22 (Approx. 20 hours life)
Output Termination	4mm Safety Banana Jacks
<b>MECHANICAL</b>	
Operating Temperature	-14° to 131°F (-10° to 55°C)
Storage Temperature	-40° to 176°F (-40° to 80°C)
Operating Relative Humidity	<95% @ ≤ 35°C, 75% @ 55°C
Zero Adjustment	±25mA approx. by 10 turn knob at base of case
Maximum Conductor Size	3/16", 0.180" (4.5mm)
Dimensions	Probe: 4.4 x 0.6 x 1.0" (111 x 15 x 25mm); Electronic Module: 4.9 x 2.5 x 1.1" (124 x 64 x 28mm)
Weight	9 oz (250g)
<b>SAFETY</b>	
Electrical	EN 61010-2-32
Double Insulation <input type="checkbox"/>	Yes
CE Mark	Yes

Note: Reference conditions: 23°C ±3°C, 20 to 75%RH, battery voltage 9V ±0.1V; earth's magnetic field <40A/m; absence of AC fields; input impedance of display device ≥ 1MΩ/100pF; DC or sinusoidal AC current 45 to 65Hz.



**Shrouded Banana Plugs:**  
Two 4mm safety banana jacks; standard 3/4" (19mm) spacing