



# Current Probes for WaveBooks™

## General Information & Specifications

### General Overview

Clamp-on current probes are an ideal non-invasive method of measuring AC or DC currents in a circuit. There is no need to open the circuit to insert a shunt. Simply clamp onto the wire of interest and attach the other end to the WaveBook™. The voltage measured is proportional to the current in the wire. It's that simple.

IOtech offers a wide variety of current probes allowing users to connect either AC or DC amperage to their data acquisition system. In order to accommodate a wide array of applications, IOtech provides probes in a variety of current ranges. Each probe ships with all of the required adapters for direct BNC connection to IOtech's WaveBook system\*.



Current Probe family

### Probe/AC/1000



AC current probe is ideal for making highly accurate measurements of industrial power quality

### Electrical Specifications

**Output & Current Range:**  
1 mV/A: 1A to 1000A AC, continuous cycle  
**Termination Resistance:** 1 Ohm  
**Accuracy and Phase Shift\*\*:**

Primary Current	50A	200A	1000A
Accuracy %			
of Reading	0.9%	0.55%	0.5%
Phase Shift	1.5°	0.5°	0.5°

**Frequency Range:** 30 Hz to 10 kHz, current derating above 5 kHz for continuous use  
**Working Voltage:** 600V AC  
**Common Mode Voltage:** 600V AC

### Mechanical Specifications

**Jaw Opening:** 2.13 in. (54 mm) max  
**Maximum Conductor Size:** 2.09 in. (53 mm)  
**Polycarbonate Material:**  
**Handles:** 10% fiberglass charged polycarbonate UL 94 V0  
**Dimensions:** 206 mm W x 48 mm D x 105 mm H (8.11" x 1.89" 4.13" x)  
**Weight:** 1.43 lbs (650 g)  
**Output:** Double insulated 5 ft. (1.5 m) lead with safety banana plug with BNC adapter

Current Probe Application Matrix			
Probe	Available Ranges	Current Range	Sensitivity
Probe/AC/1000	1	1A to 1000A	1 mV/A (1V @ 1000A)
Probe/SR661	3	100 mA to 20A peak 500 mA to 200A peak 5A to 2000A peak	100 mV/A 10 mV/A 1 mV/A

### Probe/SR661



The Probe/SR661 handles the broadest range of AC currents

### Electrical Specifications

**Output & Current Ranges**  
100 mV/A: 100 mA to 20A peak  
10 mV/A: 500 mA to 200A peak  
1 mV/A: 5A to 2000A peak  
**Accuracy\*\***  
100 mA to 20A peak: 3% reading ± 10 mV  
500 mA to 200A peak: 2% reading  
5A to 2000A peak: 2% reading  
**Frequency Range:** 5 Hz to 50 kHz

### Mechanical

**Maximum Jaw Size:** 2.13 in. (54 mm)  
**Handle:** Polycarbonate UL 94 V0  
**Dimensions:** 105 mm W x 206 mm D x 48 mm H (4.13" x 8.11" x 1.89")  
**Output:** 6.5 ft. (2m) coaxial cable with insulated BNC connector

### Ordering Information

Description	Part No.
Clamp-on probe, 1000A AC with BNC connector	Probe/AC/1000
Clamp-on probe, 2000A AC with BNC connector	Probe/SR661

For complete information on accessories and cables, visit [www.iotech.com/acc](http://www.iotech.com/acc)

### Related Products

WaveBook Series	p. 17
WBK10A	p. 35

\* The probes also connect to IOtech's DaqBook, DaqBoard, Daq PC-Cards, LogBook, or ADC488 series data acquisition systems when configured with BNC-equipped options

\*\* Reference conditions: 23°C ± 3°C, 20 to 75% RH, 48 to 65 Hz, external magnetic field < 40 A/m, no DC component, no external current carrying conductor, test sample centered, load impedance 1M Ohm.