

## Clamp-on Current Probe – Three Ranges

The **CTC1536** clamp-on current probe is designed for applications that are limited to intermittent current measurements where wide AC input current and frequency range are highly desirable features. Three (3) switch selectable ranges offers maximum USER measurement flexibility. With a maximum operating voltage of 600 volts and a high impact resistant housing, the CTC1536 offers superior operator protection and safety.

### Specifications:

**Input/ Output** (a three position switch enables the operator to select the input/ output range):

Continuous Working Current	Output	Accuracy Class
0.1A to 10A	100mV/ A	3% ± 10mV
0.1A to 100A	10mV/ A	2% ± 5mV
1A to 1,000A	1mV/ A	1% ± 1mV

**Frequency:** 10 to 1,000,000 Hz

**Maximum Non-destructive Input Current:** 2,000 A

**Working Voltage:** 600V<sub>AC RMS</sub>

### Output:

**Ambient Temperature Influence:**

< 0.1% per °C for temperatures from  
-10°C to 18°C and from 28°C to 50°C

**Rise/ Fall Time:** < 400ms

**Burden Resistance:** ≥ 100 KOhms

### Operating:

**Operating Temperature:**

-10°C to +50°C (14°F - 122°F):  
100mA - 800 A<sub>AC RMS</sub> continuous  
800 - 1000 A<sub>AC RMS</sub> 5 minutes On,  
15 minutes Off

-10°C to +30°C (14°F - 86°F)  
100 mA - 1000 A<sub>AC RMS</sub> continuous

**Storage Temperature:**

-40°C to +70°C (-40°F - +160°F)



**Relative Humidity:** 0% - 85% (10°C - 30°C)  
0% - 75% (30°C - 40°C)  
0% - 45% (40°C - 50°C)

**Note:** Accurate and linear measurements are obtained when the Ampere – Second product (average current amplitude times duration of the current pulse) is below 1.0 A-S. A-S pulses greater than 1.0 A-S might result in core saturation and reduced transformation accuracy.

Clamp-on Current Probe – 3 Switch Selectable Ranges

**Physical:**

<b>Safety:</b>	<b>CAT III 600V</b>
<b>Opening:</b>	50mm (2.05")
<b>Dimensions:</b>	216mm (8.5") x 111mm (4.4") x 45mm (1.8")
<b>Weight:</b>	0.65 kg (1.4lbs)
<b>Output Cable:</b>	1.5m (60") PVC insulated reinforced coaxial cable

**Cable Termination Options:**

BNC connector  
Ø 4mm RED/ BLACK banana plugs

**Case:** PC UL 94 V-0 rated.

Designed to IEC 61010-1, IEC61010-2-032 and EN 61010-1 - Protection Class II, double or reinforced insulation requirement

**Protection – IP30 (IEC 529)**

**Drop Test – IEC 68-2-32, 1 meter**

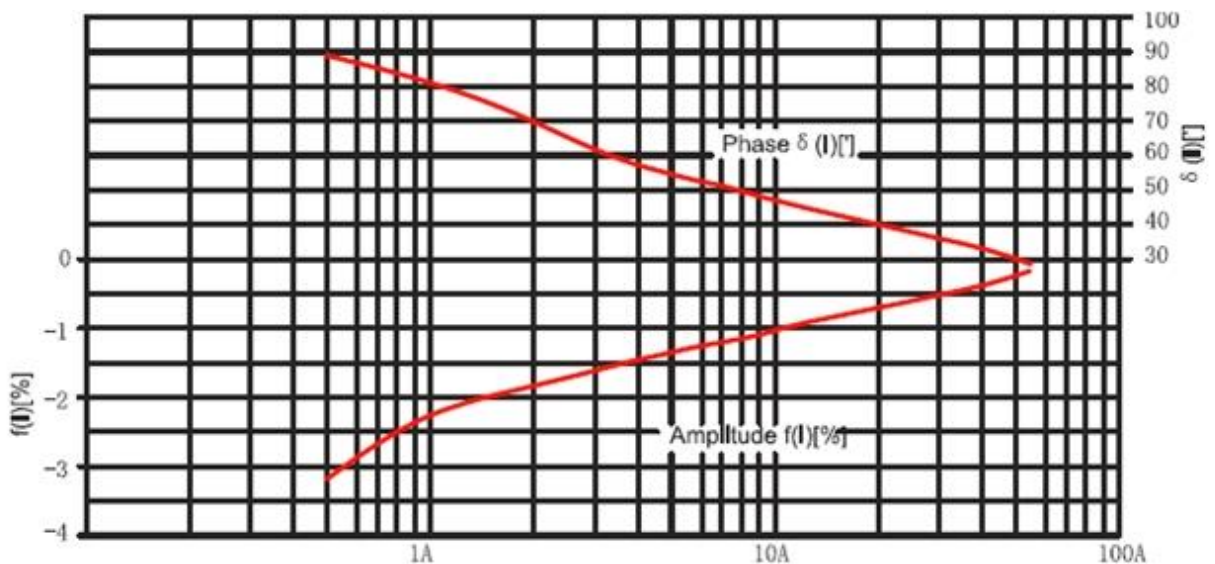
**Mechanical Shock – IEC 68-2-27, 100G**

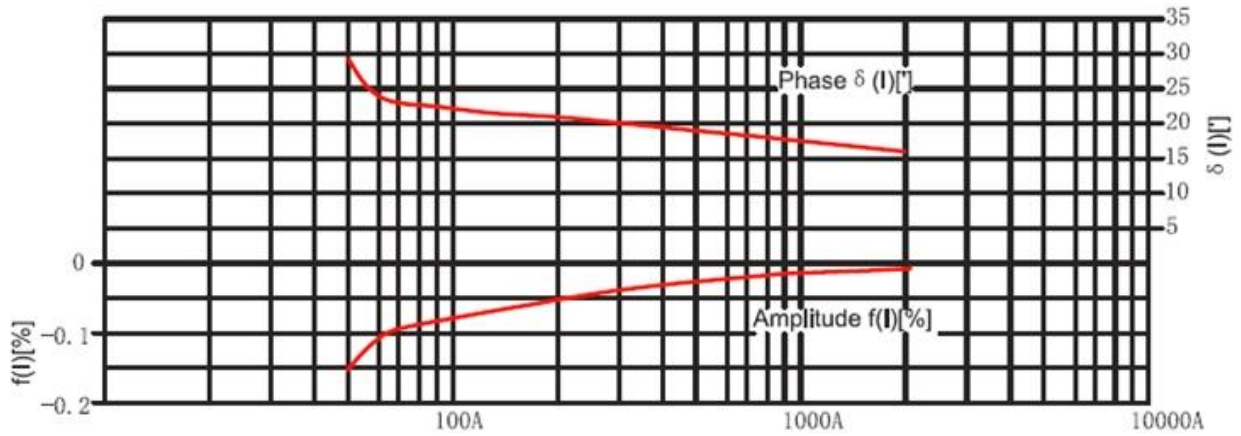
RoHS compliant.



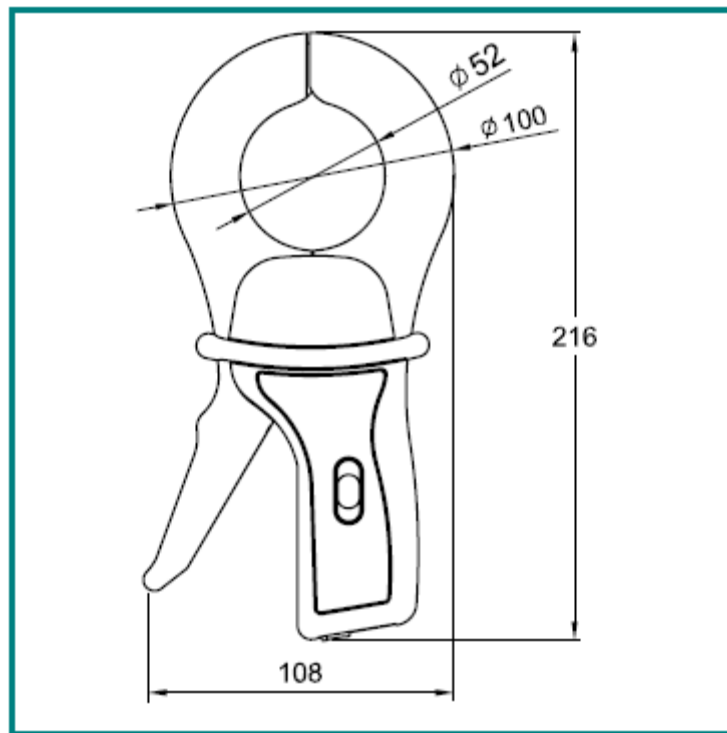
**Typical Performance:**

Ratio 1:1000, Frequency 50Hz. Burden 1 ohm, Ambient Temperature 25° C





**Outline Drawing:**



Custom clamp-on current probe designs are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or the address below.

83 East Road  
 Tacoma, Washington 98406-7630  
 USA

[sales@tichenassociates.com](mailto:sales@tichenassociates.com)

Telephone: 253.678.2661  
 FAX: 206.350.6482  
[www.TIChenAssociates.com](http://www.TIChenAssociates.com)