

## Clamp-on Current Transformers

The YUANXING iProbe Series of clamp-on style current transformers are designed for fast and easy installation. The clamp-on core design permits non-contact current measurements through magnetic field induction without requiring that the primary conductor be taken offline and disconnected for current measurement.



Featuring high accuracy and low phase shift, the iProbe is especially well suited for Class A meter current measurement and harmonic analysis.

### Specifications:

- **Frequency:** 45 Hz to 60Hz
- **Maximum Operating Voltage:** 600VAC
- **Dielectric Withstand Voltage:** 3,536 V<sub>RMS</sub>
- **Dielectric Resistance:** 1,000 MΩ @ 500 VDC
- **Secondary Burden Resistance:** ≥ 100K Ohm
- **Operating Temperature:** -15°C to +50°C.
- **Relative Humidity:** 80%, non-condensing
- **Output Cable:** 3.00m (9.8FT) PVC insulated reinforced coaxial cable.
- **Cable Termination Options:** BNC connector  
∅ 4mm RED/ BLACK banana plugs
- **CAT II** (iProbe005 and iProbe100)
- **CAT III** (iProbe200)
- RoHS Compliant.



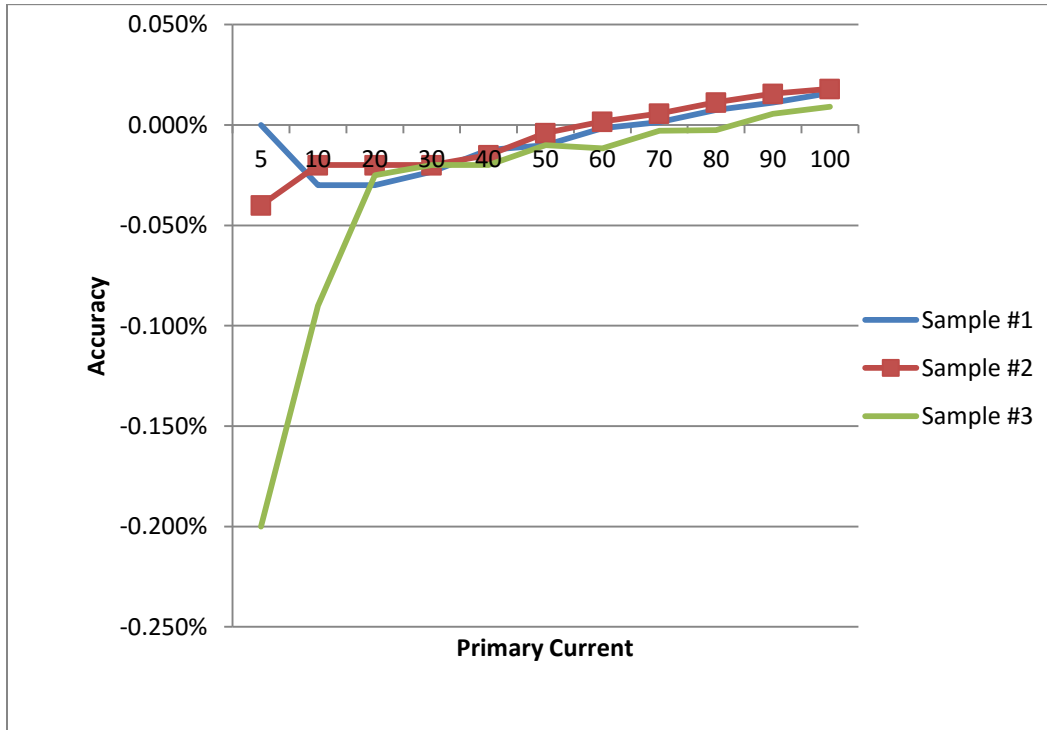
### Models:

Part Number	Rated (Amp)	Max (Amp)	Output	ID (mm)	Accuracy	Phase shift	Working Voltage
<b>iProbe 005</b>	5A	50A	10mV/ A	Φ15	± 0.3% (45 – 60HZ)	± 2° (45 to 5kHz)	<b>CAT II 600V</b>
<b>iProbe 100</b>	100A	120A	1mV/ A	Φ15	± 0.3% (45 – 60HZ)	± 1° (45 to 5kHz)	<b>CAT II 600V</b>
<b>iProbe 200 #1</b>	20A	30A	10mV/ A	Φ24	± 0.3% (45 – 60HZ)	± 0.5° (45 to 5kHz)	<b>CAT III 600V</b>
	200A	260A	1mV/ A				

- NOTES:**
- #1** Two operating ranges, switch selectable
  - #2** **Application Notes** are available by contacting Application Engineering at [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or at the address below.

**Typical Performance iProbe-100:**

**Accuracy**



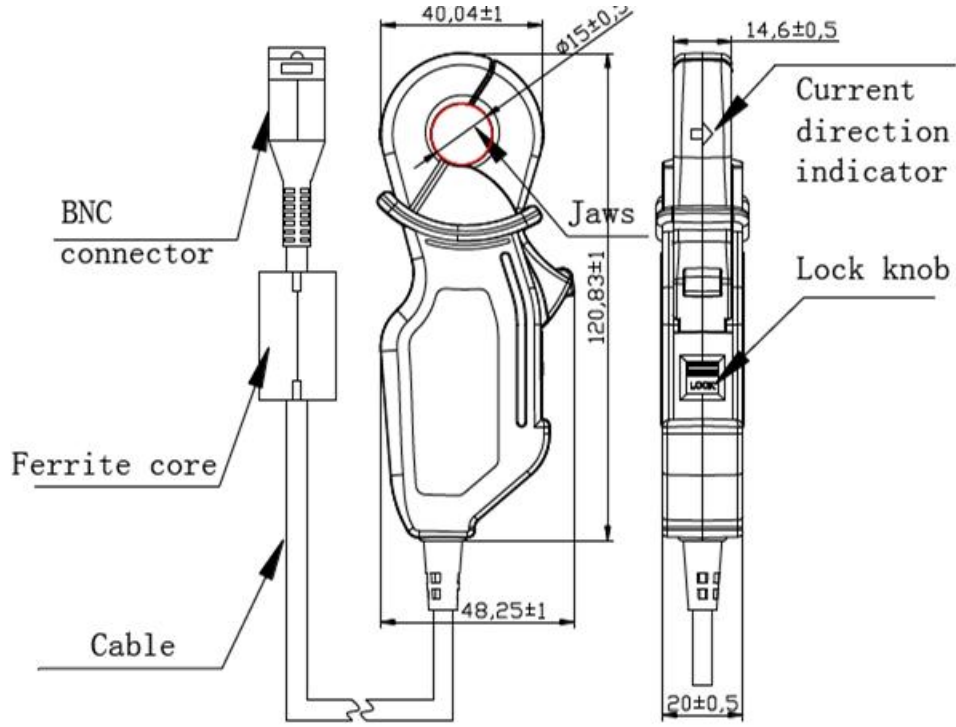
**Phase Shift**

Input	Sample #1	Sample #2	Sample #3
0 °@100A	0.473	0.420	0.478
45 °@100A	45.474	45.421	45.479
90 °@100A	90.474	90.421	90.480
150 °@100A	150.473	150.420	150.479
270 °@100A	270.472	270.418	270.477

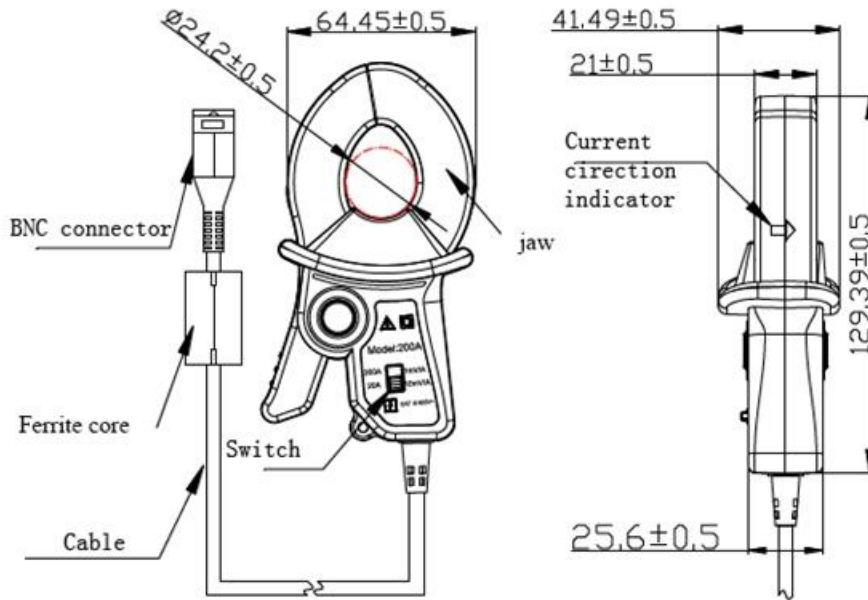
**Harmonics**

Harmonic	Sample #1		Sample #2		Sample #3	
	Accuracy (%)	Phase Shift (°)	Accuracy (%)	Phase Shift (°)	Accuracy (%)	Phase Shift (°)
3 <sup>rd</sup>	1.0280	47.231	1.024	47.057	1.020	46.817
5 <sup>th</sup>	1.007	45.181	1.006	45.200	1.005	45.168
25 <sup>th</sup>	0.999	45.056	1.000	45.088	1.001	45.061
49 <sup>th</sup>	0.998	45.031	0.998	44.974	0.998	44.994

**Outline Drawing and Dimension**



iProbe005 and iProbe100



iProbe200