The YUANXING *iProbe* Series of yoke style, split-core Rogowski Coil current sensors are designed for fast and easy installation on existing primary conductors/ BUS bars. The split design permits the non-contact AC current or DC current pulse measurement without requiring that the primary conductor be taken offline and disconnected for the current sensor installation. This method provides for the safe, easy, and portable measurement of current.

A current sensor that is based upon the Rogowski Coil sensor principle offers significant advantages over the standard magnetic core current transformer products.

- The sensor does not incorporate a magnetic core which can saturate when the primary conductor current significantly exceeds the rated primary current of the sensor. Magnetic core saturation is the point at which the incremental increase in magnetic flux is not reflected in a proportional increase in secondary signal output.
- Lacking a magnetic core, energy is not stored in the sensor. Opening the sensor while the primary conductor is live will not result in the release of stored energy.

### Features:

- 60mm/ 2.36” and 80mm/ 3.15” Opening.
- Wide AC measurement operating range and DC pulse measurement.
- Wide frequency response range.

### Specifications:

- **Measurement Range:** 0.1A to 300kA
- **Frequency:** 10 Hz to 20MHz
- **Operating Voltage:** 600VRMS maximum
- **Dielectric Withstand:** 5,000VRMS (coil)
- **Operating Temperature:** -25°C to +70°C

#### Construction:

- Coil – 7.3mm/ 0.3” OD, Thermoplastic rubber coating
- Coupling – PA6, polyamide (Black), flame retardant rating UL 94 V-0

#### Output Cable:

- 2.0m (6.6FT), 600V

- PVC insulated reinforced coaxial cable
- PVC insulated jacket cable with shielding.

### Cable Termination:

- BNC connector or Stripped & tinned

**IP66**

**CAT III, 600V**

**Safety Standards:** EN61010-1, EN61010-2-032

**RoHS Compliant.**

### Performance:

- **Sensor Output:** 0.041mV/ A @ 50Hz
  0.049m V/ A @ 60Hz
- **Accuracy:** 1%
- **Linearity:** 0.2%
- **Primary Conductor Position:** ± 1.5%
- **Temperature Drift:** ± 0.08%/ °C maximum
  (-25 °C to +70 °C)
Available Models:

<table>
<thead>
<tr>
<th>Model</th>
<th>Coil OD</th>
<th>iProbe Opening</th>
<th>Secondary Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>iProbe-Y-R2080</td>
<td>7.3mm</td>
<td>80mm/3.15”</td>
<td>0.041mV/Ampere</td>
</tr>
<tr>
<td>iProbe-Y-RD2080</td>
<td>7.8mm (double coil)</td>
<td>80mm/3.15”</td>
<td>0.092mV/Ampere</td>
</tr>
<tr>
<td>iProbe-Y-R2180</td>
<td>7.3mm</td>
<td>180mm/7.09”</td>
<td>0.088mV/Ampere</td>
</tr>
<tr>
<td>iProbe-Y-RD2180</td>
<td>7.8mm (double coil)</td>
<td>180mm/7.09”</td>
<td>0.092mV/Ampere</td>
</tr>
</tbody>
</table>

Custom opening sizes can be designed and manufactured to meet the specific application requirements. Please provide the specific application requirements to Application Engineering at engineering@tichenassociates.com or at the address below.

Installation:

The cable supporting rod is adjusted to center the primary conductor for best sensor performance.

Options:

- Double coil configuration option which minimizes external interference and provides higher secondary output voltage. Coil outside diameter 7.8mm/0.3”.
- Voltage integrator option with various supply voltage options.

Technical Support: For a no obligation technical evaluation of specific performance requirements, please provide the specific requirements to ApplicationEngineering@tichenassociates.com or the address below.