Toroidal, AC Leakage Current Sensor

The Zibo Yuanxing Electronics **ALS50** series of AC Leakage current sensors provide highly accurate non-contact AC leakage current measurement over a broad frequency range.
The ALS series uses a "zero flux" technique to measure AC currents on the micro ampere level. Shielding and primary to secondary isolation provide a "noise free" secondary output signal proportional to the primary AC current.
.

Features:

- Capable of micro ampere level measurement.
- Suitable for harsh operating environments.

Specifications:

- Frequency Range: 50 to 400 Hz.
- Output: 5 VAC @ rated primary current.
- Dielectric Resistance: 1,000 M ohms @ 500 VDC
- Isolation Voltage: 2500 V_{RMS} for 1 minute, 0.5mA
- Surge withstand potential: 5,000V (1.2/50µs standard shock wave)
- Rated Load Resistance: ≥ 10k Ohms.
- Operating Temperature: -40ºC to +85ºC
- Opening: 50mm (1.98")
- Construction:
  - Metal case.
  - Water proof, suitable for outdoor installation.
- Power Supply Requirements:
  - ± 12VDC to 15VDC.
  - < 10mA consumption.
- RoHS compliant

Performance:

- Accuracy: ± 0.05% of rated input.
- Linearity: < 0.02% from 10% to 120% of Rated Current
- Offset Voltage: < ± 1mV @ rated primary current (+25°C).
- Temperature Drift: 0.05% per °C of rated primary current (-40ºC to +85ºC).

Custom AC Leakage current sensor 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 or the address below.

83 East Road
Tacoma, Washington 98406-7630
USA

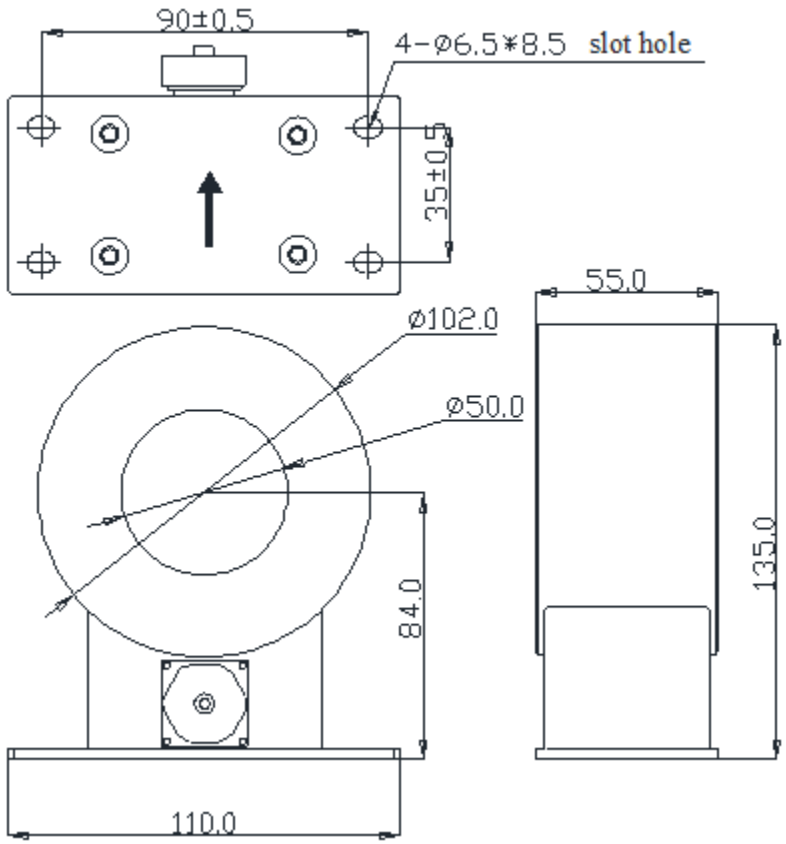
sales@tichenassociates.com

Telephone: 253.678.2661
FAX: 206.350.6482
www.TIChenAssociates.com

Models:

Part Number	Rated Primary Current	Measurement Range
ALS50-2mA/ 5V	2mA	0.002mA to 2.4mAA
ALS50-50mA/ 3.53V	50mA	0.010mA to 100mA

Outline Drawing:



Connection:

- Pin #1 – Power supply **+** input
- Pin #2 - Power supply **–** input
- Pin #3 – Ground
- Pin #4 – Secondary DC voltage signal output.