RB-Phi-125

25A AC Current Sensor

Product Description

The i-Snail-VC is a self powered AC current transducer that provides a 0-5V dc analog signal proportional to the AC current flowing through the device wire window (sine wave RMS calibrated).

The i-Snail-VC is ideal for load monitoring without the need for an external power supply. Factory calibrated, fixed ranges ensure superior accuracy and eliminate configuration and adjustments in the field, saving time and avoiding confusion. Color coded labels allow for easy identification of full scale range.

The 14.5mm (0.570") wire window accommodates a conductor up to AWG #2. Multiple turns of the primary wire may be used to alter the input range. Output voltage is clamped at 6.5V, and the unit delivers a linear output up to 120% overload (6V).

Note: The i-Snail current transducer measures the current in a single AC wire (either the positive or the negative). If you put the whole cable through the window the + and - wires will cancel each other out and the sensor will read a null current value.

Formula

The formula for converting SensorValue into AC Amps (RMS) is:

AC Amps (RMS) = SensorValue/40

Product Specifications

Power	Self powered by line current
CT Wire	13.7mm (0.54")

Window	
Range	0-25A
Output	0-5 VDC, proportional to RMS input current (sine wave)
	Clamped at approx 6.5V
	Linear to 120% overload (continuous)
	200A overload (temporary)
Accuracy	Better than 0.5% of full scale
	Ripple less than 0.1% of output
Resolution	25mA
Enclosure	L=2.5", W=1.6", H=0.9" (including terminal block)
	UL94V-0 ABS Plastic
Dielectric Withstand	2.5kVRMS for one minute

Comes packaged with:

- Mounting Hardware for flexible surface mounting

This sensor connects to an Analog Input on the:

- 1018 - PhidgetInterfaceKit 8/8/8
- 1019 - PhidgetInterfaceKit 8/8/8 w/6 Port Hub
- 1203 - PhidgetTextLCD

- 1070 - PhidgetSBC

You can use the 3002 - Sensor Cable 60cm or the 3004 -Sensor Cable 350cm to connect the i-snail sensor to your Phidget. Just snip off the connector from one end of the sensor cable and connect the white wire to the + terminal and the black wire to the - terminal. The red wire is not used.