

Applications:

Sensing current in wires or cables. (> 10 Amps).

Operation:

Secure the wire to be measured to the top of the IC with a tie wrap. Either wires or a connector block (shown) can be used to interface with the PCB assembly. The output voltage can be measured between A-OUT1 and CO-OUT1 for a differential output or between A-OUT1 and GND for single ended output. Current in the direction shown, will produce a positive going output. Current in the opposite direction will produce a negative going output. AC current will produce an AC analog output. Output sensitivity depends on the size of the wire and the thickness of the insulation.

$$V_{out\ diff} \approx \frac{0.056 * I}{(d + 0.3mm)}$$

d = distance (mm) from chip surface to center of wire
I = Current in conductor

Notes: See application note AN_102 for current sensing applications

