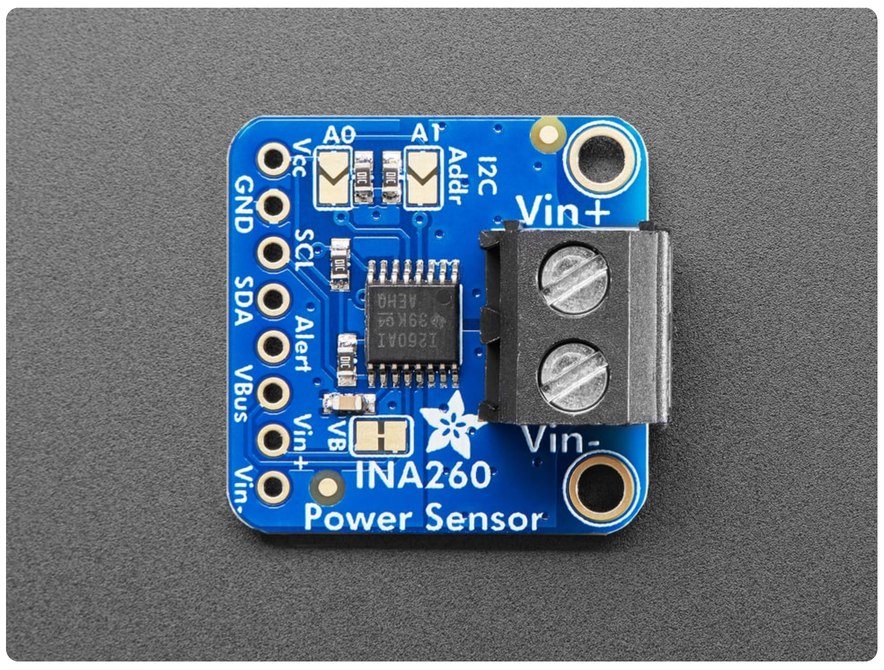
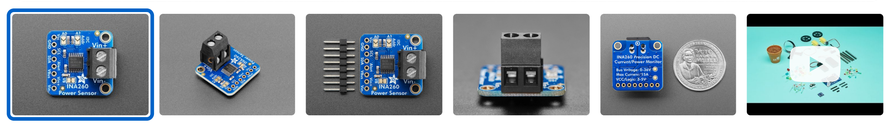
Orders may take an additional 2-3 days to ship due to winter weather

LED Sale Week is here!





Adafruit INA260 High or Low Side Voltage, Current, Power Sensor

Product ID: 4226

Description

This breakout board may well be the last current sensing solution you every need to buy. Not only can it do the work of two multimeters, but it can do it with amazing precision and flexibility. With it you can measure high or low side DC current, the bus voltage, and have it automatically calculate the power. It can do so over impressive voltage, current, and temperature ranges with better than 1% accuracy, all while delivering the data in an easy to use format over I2C.

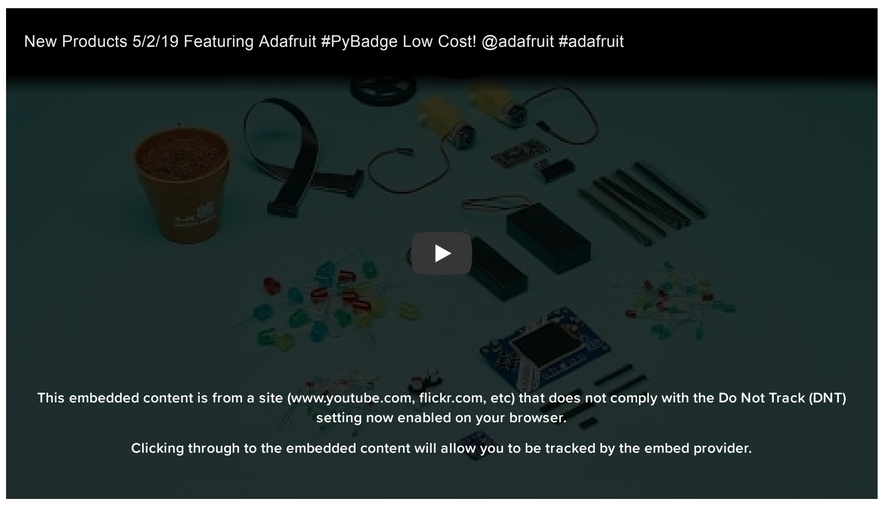
Works great with any microcontroller that is CircuitPython or Arduino compatible as well as single board computers such as the Raspberry Pi. It is compatible with 3V or 5V logic and can measure bus voltages up to +36VDC. Not for use with AC voltages.

Most current-measuring devices operate with some notable constraints that limit what they can be used for. Many are low-side only which can cause issues as the ground reference changes with current. Others like its little sister the INA219B avoid this by measuring on the high side but need to change their shunt resistor to measure different current ranges. The INA260 avoids these limitations, and with it's integrated precision shunt resistor it can be used to measure as much as **+36V** at up to **15A Continuous** on either the *high or low side*. Wow!

The voltage across the integrated *2 milliohm (.002 ohms!)*, 0.1% shunt resistor is measured by the internal 16 bit ADC, allowing for measurements over the impressive current range with a resolution of 1.5 mA. (The resistance of the resistor is so low that some multimeters will register it as a short!)

In a high side configuration the bus voltage measurement and power calculation can be retrieved accurately, however advanced hackers wanting to measure bus voltage in a low side configuration will need to cut the jumper connecting **V+** to **VBUS** and connect the **VBUS** pin to the voltage bus.

Comes as a fully assembled breakout board with a 5.08mm terminal block (extra chunky!) and header. Some light soldering is required to attach the header.



Technical Details

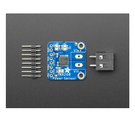
Revision History:

- **As of May 15, 2024** - This board now comes with a pre-soldered terminal block.
- **As of October 27, 2023** - we've updated this PCB with Adafruit Pinguin to make a lovely and legible silkscreen.

Product Dimensions: 22.9mm x 22.8mm x 2.7mm / 0.9" x 0.9" x 0.1"

Product Weight: 2.0g / 0.1oz

Learn



Adafruit INA260 Current + Voltage + Power Sensor Breakout

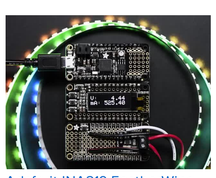
Measure high or low side current, voltage, and power with the integrated shunt resistor!

See All Guides

May We Also Suggest...

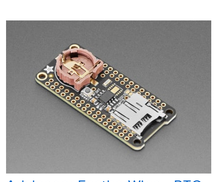
INA219 High Side DC Current Sensor Breakout - 26V ±3.2A Max - STEMMA QT - STEMMA QT

INA169 Analog DC Current Sensor Breakout - 60V 5A Max

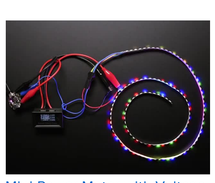


Adafruit INA219 FeatherWing

Adafruit Power Relay FfeatherWing



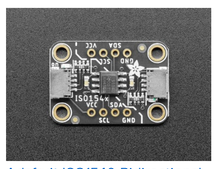
Adalogger FeatherWing - RTC + SD Add-on For All Feather Boards



Mini Power Meter with Voltage, Current, Watts, mAh & mWh Display

Pocket Autoranging Digital Multimeter

Power Distribution Bus - 7 x 6mm diameter solid brass



Adafruit ISO1540 Bidirectional I2C Isolator - STEMMA QT / Qwiic - STEMMA QT / Qwiic

Adafruit INA228 - I2C 85V, 20-bit High or Low Side Power Monitor - STEMMA QT / Qwiic - STEMMA QT / Qwiic

Adafruit INA3221 - Triple 0-26 VDC, ±3.2 Amp Power Monitor - STEMMA QT / Qwiic - STEMMA QT / Qwiic

Adafruit INA237 85V 10A 16-bit DC Current Voltage Power Monitor - STEMMA QT - STEMMA QT

Distributors

“ If you can't make a mistake, you can't make anything”

– Marva Collins