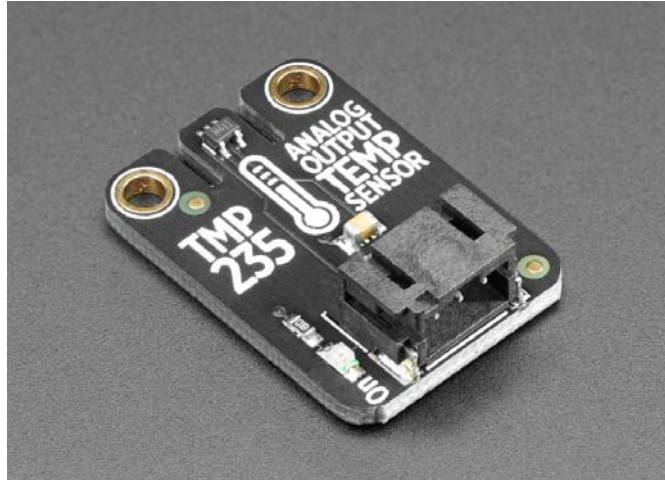




# Adafruit TMP235 – Plug-and-Play STEMMA Analog Temperature Sensor – TMP235

PRODUCT ID: 4686



## DESCRIPTION

For fans of the [TMP36](#), we now have a very similar analog temperature sensor with a 3-pin JST connector (we call these STEMMA connectors). Unlike many of our temperature sensors, this one is analog output, not I2C, so its best used by a microcontroller with an analog input, as most microcontrollers do.

These sensors are very simple to use, no libraries or complex configurations required. [Plug this board into any of our 3-pin JST PH cables](#) (we have ones with header ends, alligator clips, etc) Red goes to 3V to 5V DC power, black wire connects to ground, and white wire connects to an analog input. The voltage out is 0V at  $-50^{\circ}\text{C}$  and 1.75V at  $125^{\circ}\text{C}$ . You can easily calculate the temperature from the voltage in millivolts:  $\text{Temp } ^{\circ}\text{C} = 100 * (\text{reading in V}) - 50$

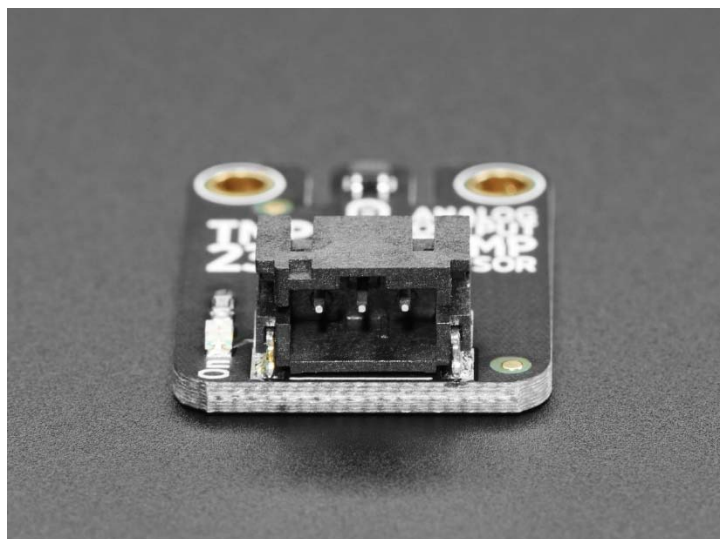
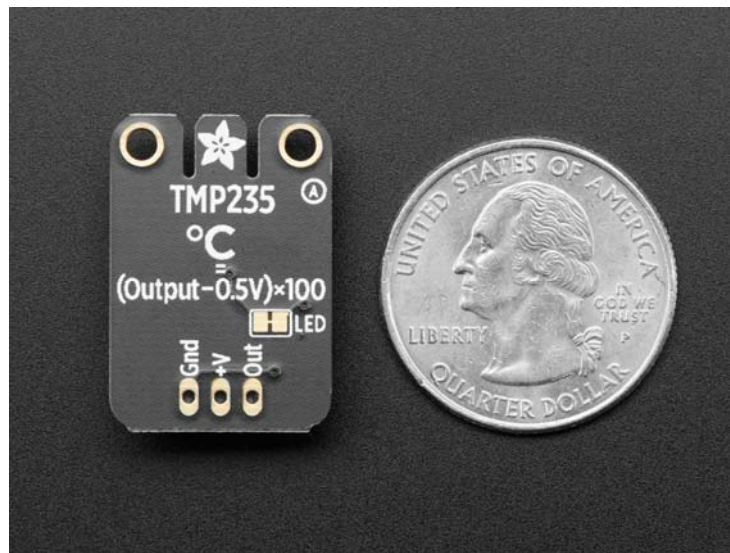
[Like with the TMP36, you'll get the best readings out of an Arduino UNO or compatible if you set the analog reference voltage to external, then connect AREF to 3.3V for a stable analog reference.](#)

Please note, [a JST PH 3-pin cable is not included but we stock a wide variety with alligator clips, headers, etc.](#)

# TECHNICAL DETAILS

Product Dimensions: 25.5mm x 17.7mm x 7.2mm / 1.0" x 0.7" x 0.3"

Product Weight: 2.0g / 0.1oz



<https://www.adafruit.com/product/4686/8-12-20>