

**Title:**

Temperature Sensor

**Sensor/Indicator/Actuator:**

Sensor

**Features:**

Detects Heat in the Environment

**Connection:**

Analog

**Summary:**

The Temperature Sensor does what its name suggests, measures the temperature of the space it's in. It reports back the current temperature in Celsius but with a some simple code that can be changed to Fahrenheit or even Kelvin!

**Example Code**

```
#include <math.h>

#define tempSensorSocket A0

int temp;

const int B = 4275; // B value of the thermistor;
const int R0 = 100000; // R0 = 100k;

void setup()
{
  Serial.begin(9600);
}

void loop()
{
  temp = 1.0/(log(1023.0/analogRead(tempSensorSocket)-1.0)/B+1/298.15)-273.15;
  Serial.println(temp);
}
```