

# Temperatuursensor KY-013



## Code

```
#include <math.h>
```

```
int sensorPin = A5;    // selecteer de input pin voor de temperatuursensor
```

```
double Thermistor(int RawADC)
```

```
{  
  double Temp;  
  Temp = log(10000.0*((1024.0/RawADC-1)));  
  Temp = 1 / (0.001129148 + (0.000234125 + (0.0000000876741 * Temp * Temp )) * Temp );  
  Temp = Temp - 273.15;    // Converteer Kelvin naar Celcius  
  return Temp;  
}
```

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

```
void loop() {  
  int readVal=analogRead(sensorPin);  
  double temp = Thermistor(readVal);  
  
  Serial.println(temp);    // display temperatuur  
  //Serial.println(readVal); // display temperature  
  
  delay(500);  
}
```