

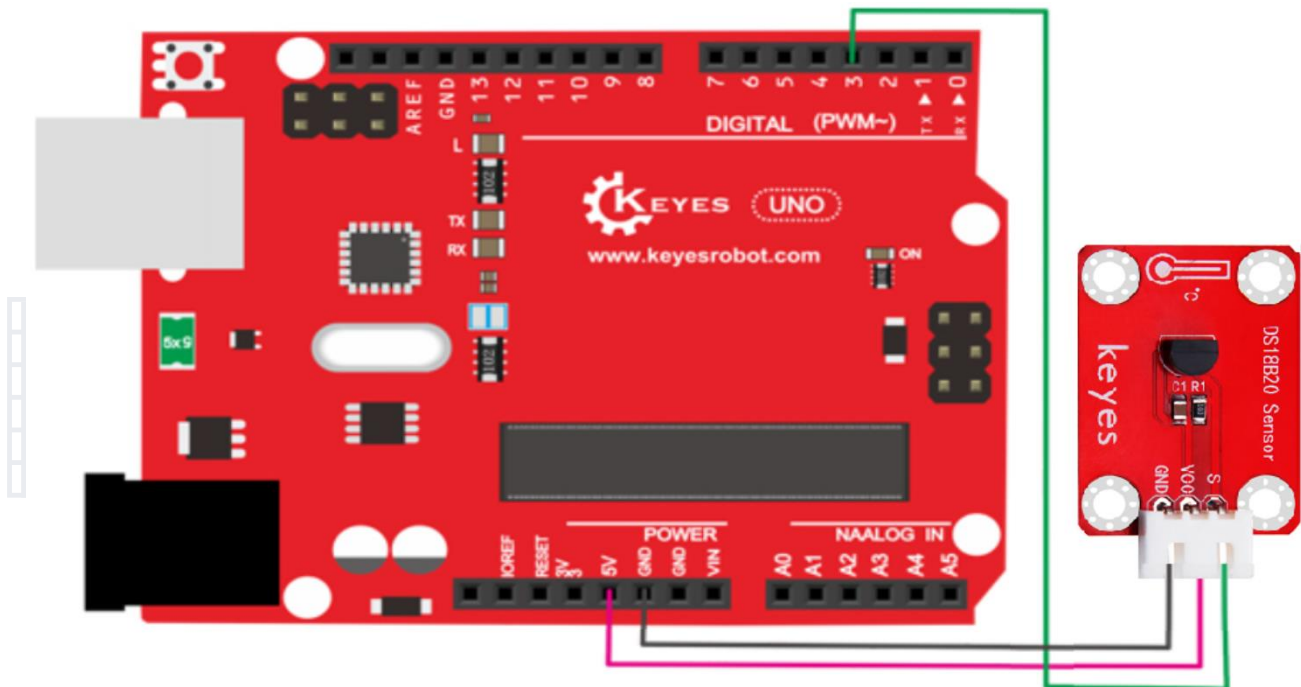
## KE2025 KEYES 8B20 temperature sensor module

### Parameters:

Working Voltage: 3.3 ~ 5VDC  
Temp Range: -55 ~ 125°C ±0.5°C  
Colour: Red  
Size: 34x22x9mm.



### PINOUT Instruction:



### Sample Code:

```
#include <OneWire.h>
int DS18S20_Pin = 2; //DS18S20 Signal pin on digital pin 2
//Temperature chip i/o
OneWire ds(DS18S20_Pin); // on digital pin 2
void setup(void) {
  Serial.begin(9600);
}
void loop(void) {
  float temperature = getTemp();
  Serial.println(temperature);
  delay(100); //to slow down the output so it is easier to read
}
float getTemp(){
  //returns the temperature from one DS18S20 in DEG Celsius
  byte data[12];
  byte addr[8];
  if ( !ds.search(addr) ) {
    //no more sensors on chain, reset search
    ds.reset_search();
    return -1000;
  }
  if ( OneWire::crc8( addr, 7) != addr[7] ) {
    Serial.println("CRC is not valid!");
    return -1000;
  }
  if ( addr[0] != 0x10 && addr[0] != 0x28 ) {
    Serial.print("Device is not recognized");
    return -1000;
  }
  ds.reset();
  ds.select(addr);
  ds.write(0x44,1); // start conversion, with parasite power on at the end
  byte present = ds.reset();
  ds.select(addr);
  ds.write(0xBE); // Read Scratchpad
  for (int i = 0; i < 9; i++) { // we need 9 bytes
    data[i] = ds.read();
  }
  ds.reset_search();
  byte MSB = data[1];
  byte LSB = data[0];
  float tempRead = ((MSB << 8) | LSB); //using two's compliment
  float TemperatureSum = tempRead / 16;
  return TemperatureSum;
}
```

### Result:

You can use this keyestudio 18B20 Temperature Sensor to detect the temperture of current environment,