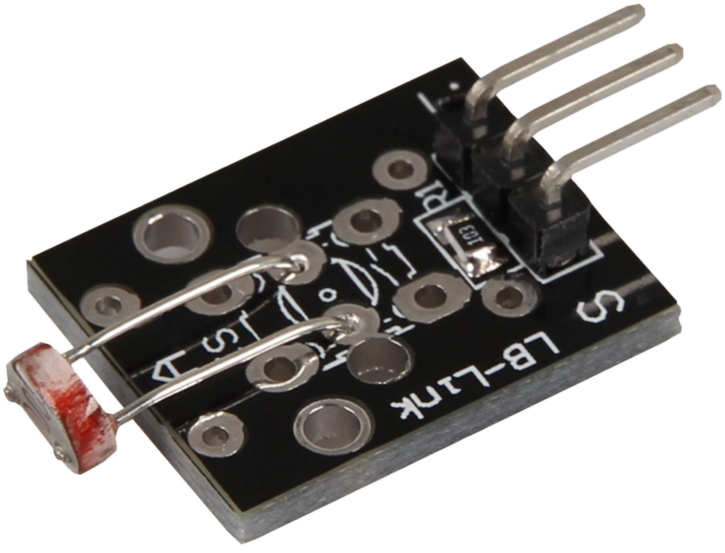
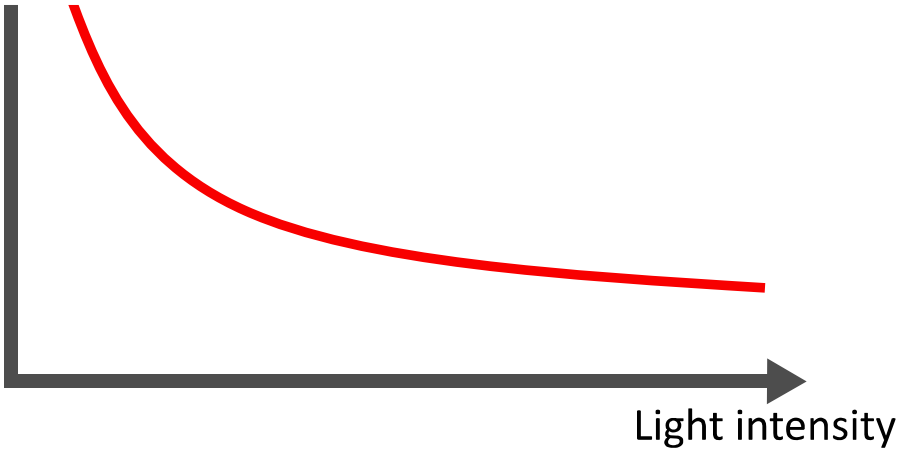
KY-018 PHOTORESISTOR

Contains an LDR resistor whose resistance value decreases with brighter environment.

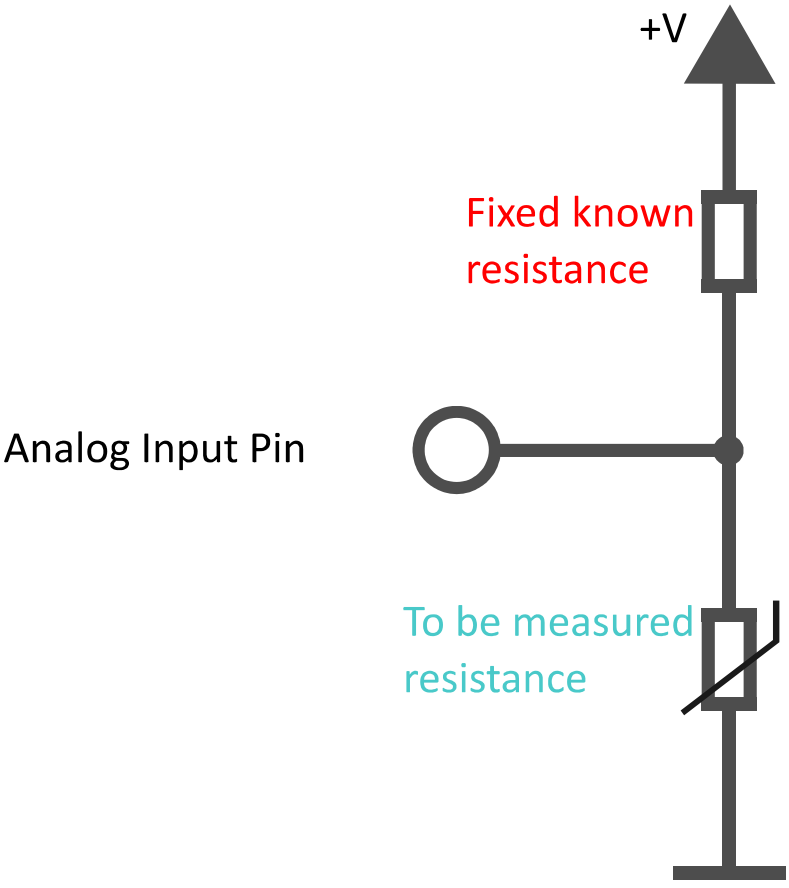
Arduino **Raspberry Pi** **Micro:Bit**



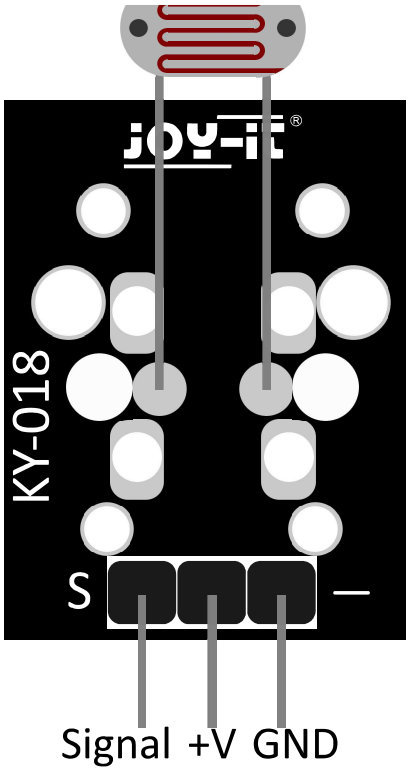
This module contains an LDR resistor whose resistance value decreases with brighter surroundings.



This resistance can be determined using a voltage divider, where a known voltage is divided across a known (10 kΩ) and an unknown (variable) resistance. Using this measured voltage, the resistance can then be calculated - the exact calculation is included in the code examples below.

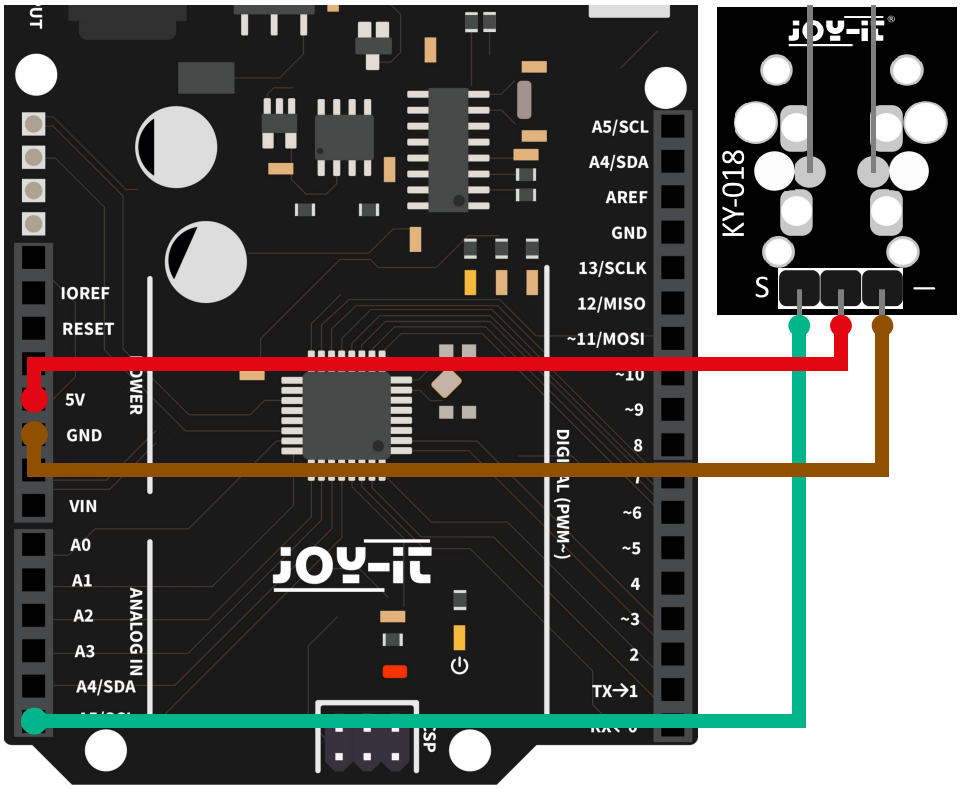


Operating voltage	3,3 V - 5 V
Fixed known resistance	10 kΩ
Dimensions	21 x 15 x 6 mm



CODE EXAMPLE ARDUINO

PIN ASSIGNMENT ARDUINO



ARDUINO	SENSOR
Pin A5	signal
5 V	+V
GND	GND

The program measures the current voltage value at the sensor, calculates the current resistance value of the sensor from this and the known series resistance and outputs the results via the serial output.

```
int sensorPin = A5; // Declare the input pin here

// Serial output in 9600 baud
void setup()
{
    Serial.begin(9600);
}

// The program measures the current voltage value at the sensor,
```