# LIGHT SKU:U021





## Description

**LIGHT** is a light intensity sensor unit with an adjustable photoresistor.

A photoresistor is a light-controlled variable resistor. The resistance of a photoresistor decreases with increasing incident light intensity and vice versa. The sensor exhibits photoconductivity which make it possible to detect the light varies based on voltage and use an AD (Analog to digital converter) to convert the digital data.

We added some extra work to strengthen the circuit, a Dual Differential Comparators

LM393, compares the differential voltage between the photoresistor and the varistor. It

could offer larger and accuracy range of light intensity.

## Product Features

- 10K adjustable resistor
- Software Development Platform: Arduino, UIFlow(Blocky, Python)
- Two Lego-compatible holes

### Include

- 1x LIGHT Unit
- 1x Grove Cable

## Specification

Resources

Parameter

Adjustable resistance

10K

Net weight	<b>4</b> g
Gross weight	17g
Product Size	32*24*8*mm
Package Size	67*53*12mm

### EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

#### **Download Windows Version Easyloader**

#### **Download MacOS Version**

Easyloader

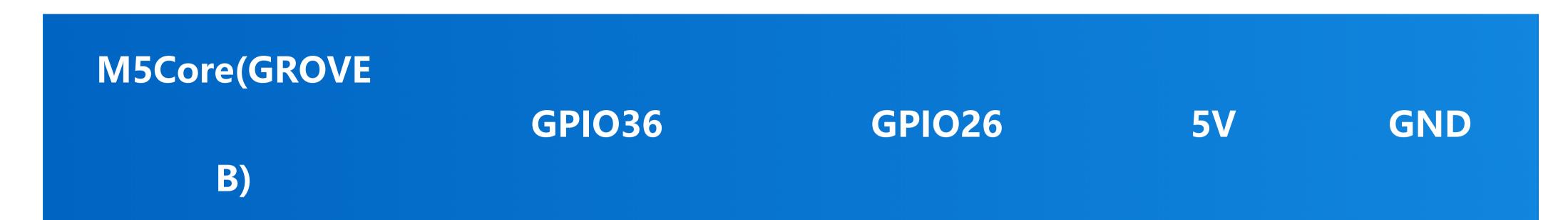
#### **Description:**

The screen displays the current ambient light value.

### Schematic



#### PinMap



	AnalogSignal	DigitalSignal		
LIGHT Unit			5V	GND
	Pin	Pin		

### Learn



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Building a smart planting system using M5Stack to monitor the lights, humidity, temperature, watering your plant automatically.



#### Arduino

The code below is incomplete. To complete code, please click here



#### UIFlow

**Feature Introduction** 

**Return light measurement** 

- Get Analog value Return analog value
- Get Digital value Return numeric value



#### Click here to download the UIFlow example



### Video

LIGHT - Tutorial

Last updated: 2020-12-14