



# 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. It exhibits photoconductivity which make it possible to detect the varies based on Voltage, and use a AD to convert the digital data.

We add 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

Product Size : 32.2mm x 24.2mm x 8.5mm

Product weight : 8.8g

## Include

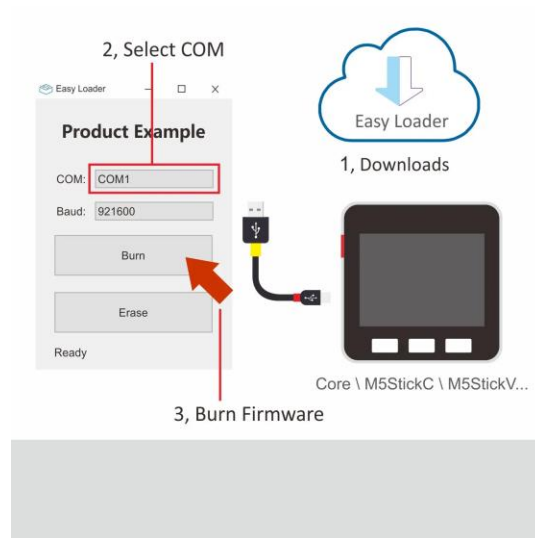
1x LIGHT Unit

1x Grove Cable



## 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. Please install the corresponding driver according to the device type. M5Core host Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)



Windows

MacOS

## Example

### 1. Arduino IDE

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

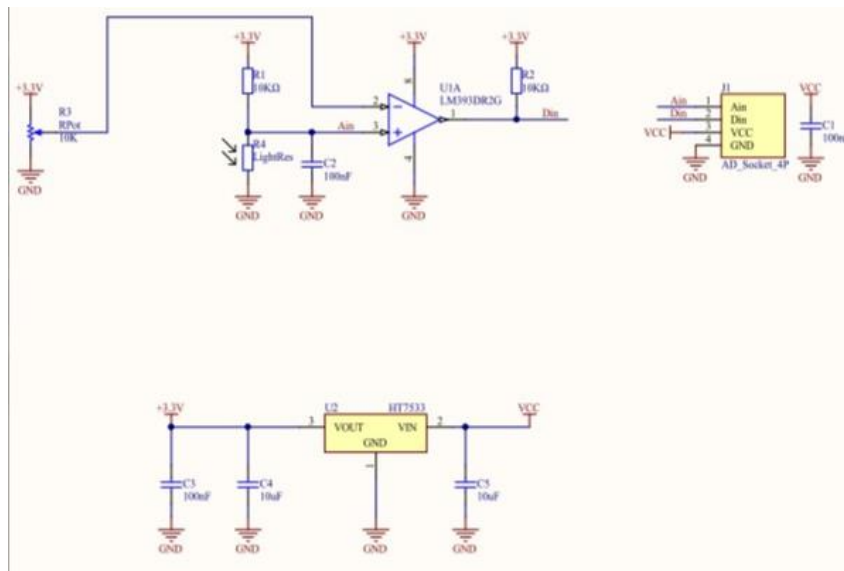


## 2. UIFlow

To get complete code, please click [here](#)



## Schematic



## PinMap

M5Core(GROVE B) GPIO36          GPIO26          5V          GND

LIGHT Unit          AnalogSignal Pin          DigitalSignal Pin          5V          GND

<https://docs.m5stack.com/#/en/unit/light/4-10-20>