

Light Sensor Module

The Light sensor module comes with the basic components for light detection. The light sensor module is used to detect brightness and light intensity surrounding. The threshold (sensitivity) of digital output may be adjust by tuning the on board variable resistor (potentiometer).

On board it provide a LDR, high sensitivity and commonly being used for light detection. The module comes with power LED and status LED as indicator. It can be interface with any microcontroller with digital input such as PIC, SK40C, SK28A, SKds40A, Arduino series and Relay module for light detection capability.

Technical Specifications

Operating Voltage: 3.3–5 V

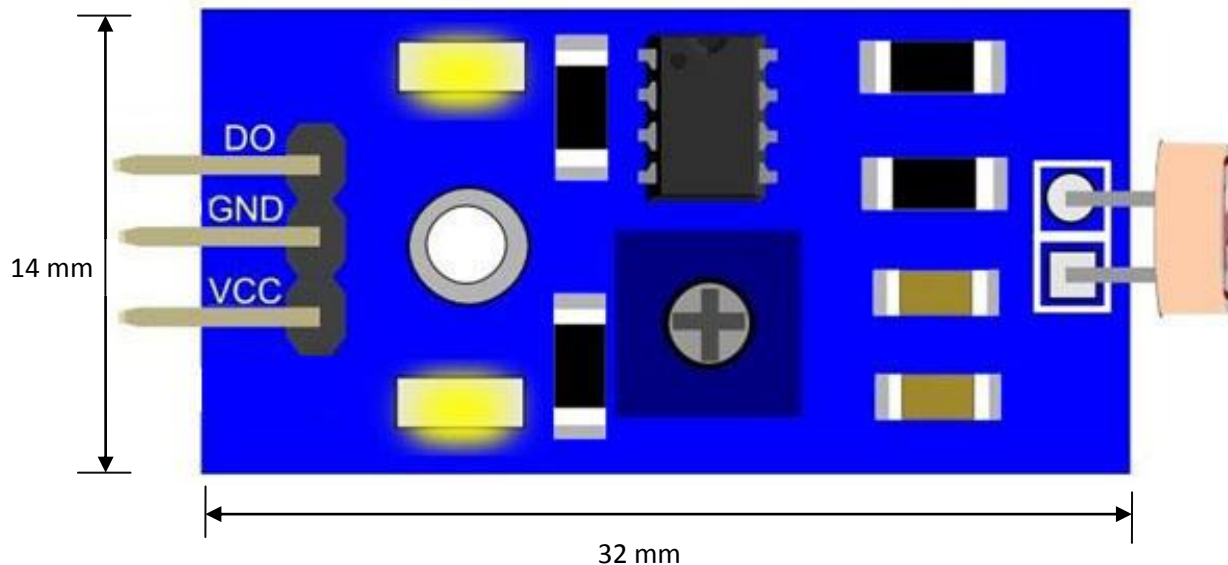
Potentiometer Adjustment Direction: clockwise (light intensity decrease), counterclockwise (light intensity increase)

Dimensions: 32mm L×14mm W ×6mm H

Weight: 0.18 oz (5 g)

Dimensions and Pin-out

Product dimensions:



Pin definitions and ratings:

Pin	Name	Function
VCC	Supply Voltage	Connects to V _{CC}
DO	Digital Output	Connects to digital output interface (0 and 1)
GND	Ground	Connects to Ground



SYNACORP TRADING & SERVICES

No.9, 1st Floor, Lorong 1/SS2, Bandar Tasek Mutiara, 14120 Simpang Ampat, S.Prai (S), Penang
Tel : +604.502.1726 Hunting Line : 012.403.3474 Fax : +604.502.1726
(Website) <http://www.synacorp.my> (Email) sales@synacorp.com.my

Mechanism

- Light sensor module is most sensitive to ambient light, generally used to detect the brightness of ambient light.
- Through the adjustment of the potentiometer, detecting the light threshold can be changed. Clockwise will decrease the light intensity while counterclockwise will increase the light intensity.
- When DO output high level below than the set light intensity value, the output goes high. Green LED will remain turn **OFF**.
- When DO output high level higher than the set light intensity value, the output goes low. Green LED will turn **ON**.
- DO output of the microcontroller directly connected through the microcontroller to detect high and low, to detect changes in environmental light intensity.
- DO output terminal can be directly driven by relay module, for light detection capability that can control equipment to work in a suitable environment.

Applications

- 1) Automatic light turn on when it is getting dark
- 2) Control the intensity of light source based on the surrounding light conditions
- 3) Tracking of solar panels to the sun direction for best solar power generation efficiency