Ambient Light Sensor (0klx - 200klx)

SEN0390

Product Overview

07/27/2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot Ambient Light Sensor (0klx-200klx) is packaged in a transparent semisphere case for better light-gathering power. This sensor supports I^{2}C communication and the 0klx to 200klx detection range. The spectral response of the on-chip photodiode is optimized to mimic the human eye's perception of ambient light and incorporates the UV and IR blocking capability. This light sensor is ideal for applications like vehicle smart lights, smartphones, and intelligent incubators.

Features

- 2.7V to 6V supply voltage range
- 7mA operating current
- 0klx to 200klx detection range
- 0.054lx accuracy
- I^{2}C communication
- -40°C to 85°C operating temperature range
- 22mm inner diameter, 26mm outer diameter, 28.5mm shell diameter, and 18mm semisphere height

Luminance data reference

- 0.001lx to 0.02lx evening
- 0.02lx to 0.3lx moonlit night
- 5lx to 50lx cloudy indoor
- 50lx to 500lx cloudy outdoor
- 100lx to 1000lx sunny indoor
- About 10lx x 6lx under summer noon light
- 50lx to 60lx illumination when reading books
- 1400lx home video standard illumination

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-ambient-light-sensor/