Light Sensor 70



The 1143 Light sensor can measure ambient light up to 70 kilolux (roughly equivalent to the brightness of direct sunlight). Each sensor has been individually calibrated, and a label has been applied to the back of the board with a calibration value which can be used in your calculations to increase measurement accuracy. The sensor's output is logarithmic, so it will be more accurate at low light levels.

Some light sensors report drastically different values depending on the type of light being detected. The 1143 light sensor, however, only differs by a factor of 1.2 when measuring fluorescent light versus incandescent.

If you want greater resolution with a smaller measurement range, take a look at the $\frac{1142 - \text{Light Sensor } 1000 \text{ lux}}{1000 \text{ lux}}$.

Comes Packaged with

• 3002 - 60cm Phidget Cable

Product Specifications

Sensor Properties

Sensor Type Light

Controlled By Voltage Input (0-5V)

Sensor Output Type Non-Ratiometric

Light Sensor

Response Time Max 0.5 ms
Peak Sensitivity Wavelength 560 nm
Light Level Min 3 lx

| Light | Level Max (5V) | 70 klx |
|-------|----------------|--------|
| Light | Current Ratio | 1.2 |

Electrical Properties

Current Consumption Max 500 μ A Output Impedance 0 Ω Supply Voltage Min 4 V DC Supply Voltage Max 5.5 V DC

Physical Properties

Operating Temperature Min $-40~^{\circ}\text{C}$ Operating Temperature Max $85~^{\circ}\text{C}$