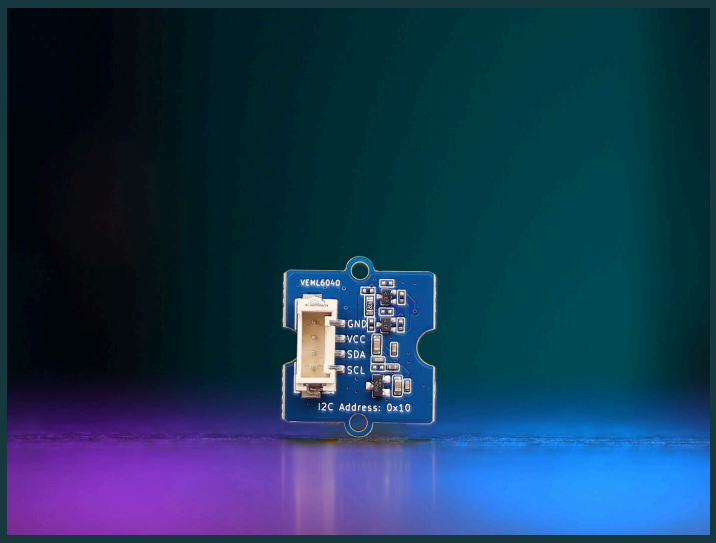
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INDUSTRIAL PRODUCT DATASHEET

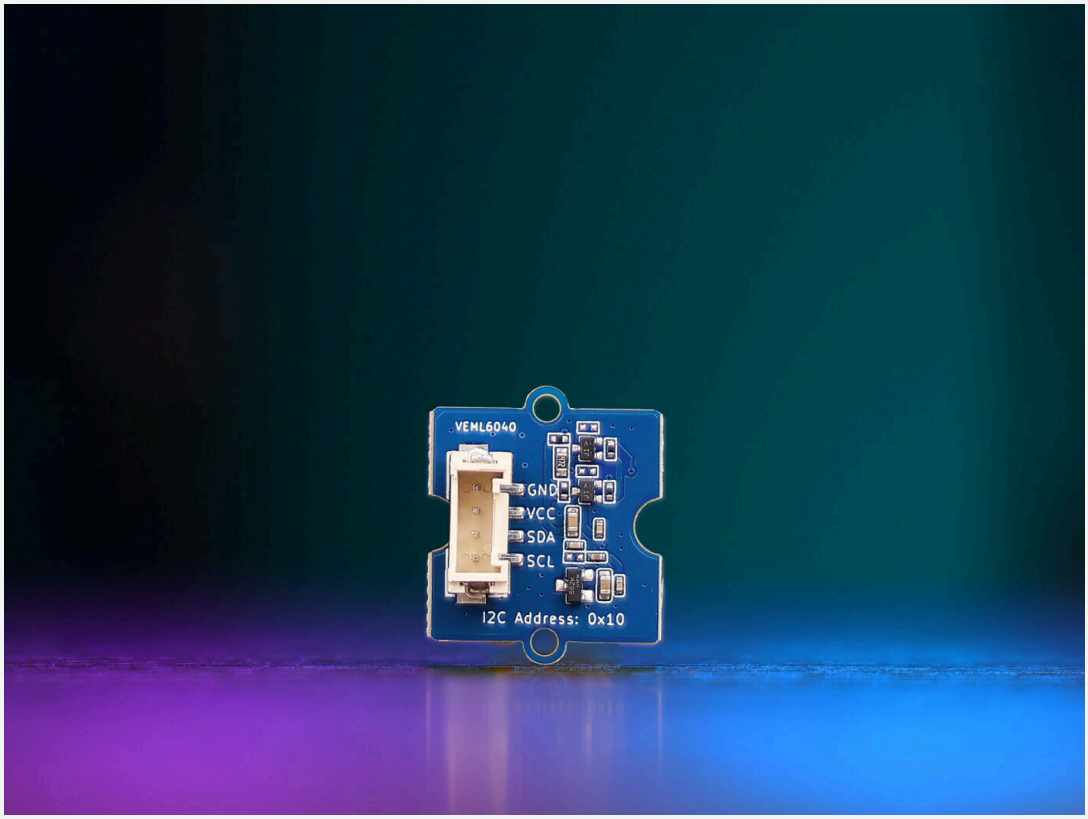
Grove - Color Sensor V3.0 - I2C interface - VEML6040 based

It is a sensor to measure the color chromaticity of ambient light or the color of objects.

SKU	UPDATED	PRICE
101021133	2026-11-20 23:17:56	$3.90(Excl. VAT)



Overview



It is a sensor to measure the color chromaticity of ambient light or the color of objects. With the synchronization input pin, an external pulsed light source can provide precise synchronous conversion control.

Key Features

01 **Color Detection**

Measures red, green, blue, and white light components.

02 **I2C Interface**

Easy integration with microcontrollers via I2C for data access.

03 **Supply Voltage**

Operates at 3.3V or 5V.

04 **Synchronization**

Can work with an external pulsed light source for accurate readings.

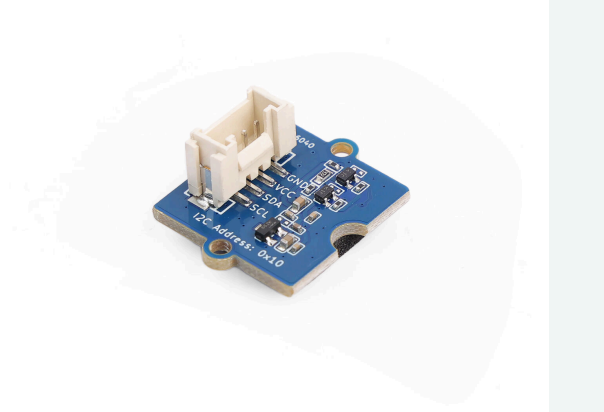
05 **Compact Design**

Small form factor for easy integration into various projects.

06 **Low Power Consumption**

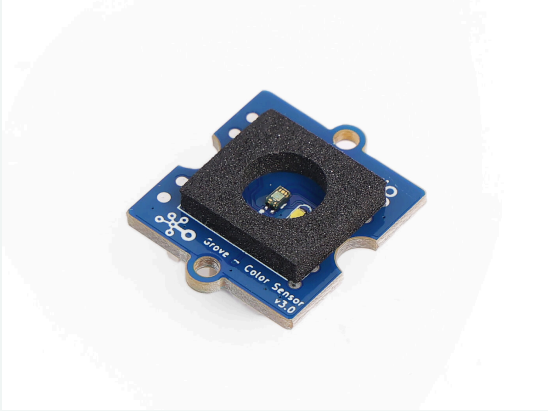
Ideal for battery-operated devices.

Product Gallery

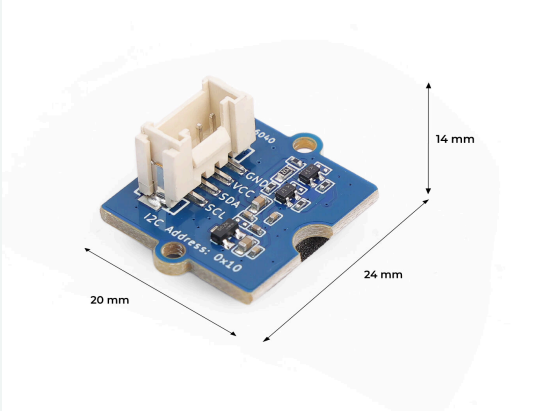




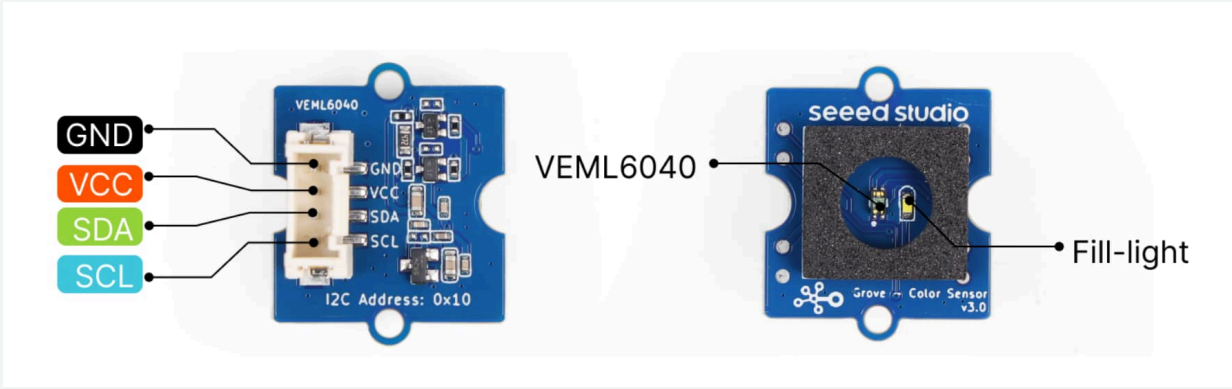








Hardware Overview



Applications

- **Ambient Light Sensing: Adjusting display brightness based on surrounding light conditions.**
- **Color Recognition: Identifying and classifying colors in objects for robotics or automation.**
- **Smart Home Devices: Integrating into lighting systems for color matching and ambient adjustments.**
- **Photography Equipment: Providing accurate color temperature readings for cameras.**
- **Wearable Technology: Monitoring environmental light levels for fitness or health tracking.:** Selectable maximum detection range:4, 1031, 2062, 4124, 8248, or 16 496 lux with highest sensitivity 0.007865 lux/step.

Resource Links

- https://www.seeedstudio.com/Grove-Color-Sensor-V3-0-p-5993.html
- 314020801_VISHAY_VEML6040A3OG_Datasheet.pdf
- Grove - Color Sensor v3.0_SCH_PDF_240428.pdf

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