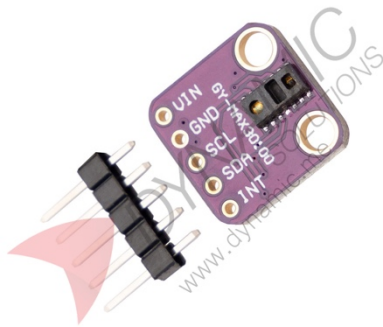


# Heart Rate Pulse Oxygen Sensor Module GY-MAX30100



## **Features:**

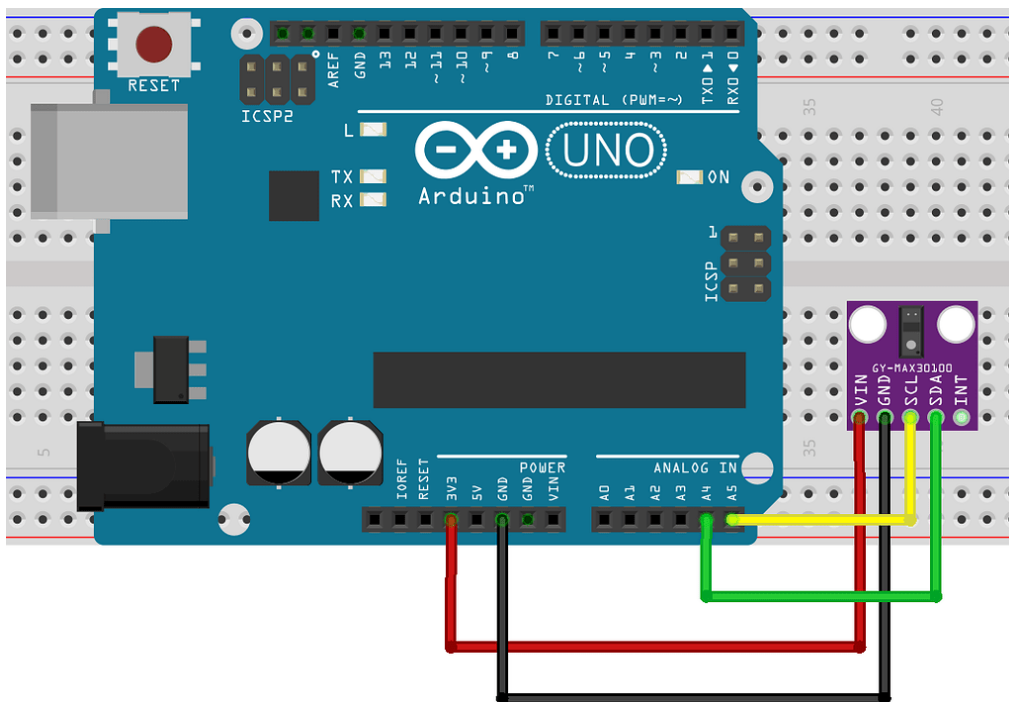
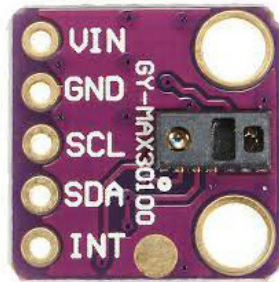
The GY-MAX30100 Heart Rate and Pulse Oximeter Module is a compact sensor that integrates a pulse oximeter and heart-rate monitor into one breakout board. It combines two LEDs, a photodetector, and low-noise analog signal processing to deliver accurate pulse and SpO<sub>2</sub> measurements. Compatible with Arduino, ESP32, and Raspberry Pi, this module is ideal for wearable, medical, and fitness applications.

Specifications	
<b>Model</b>	GY-MAX30100 Heart Rate & Pulse Oximeter Module
<b>Sensor Chip</b>	MAX30100
<b>Supply Voltage</b>	1.8V – 5V DC
<b>Interface</b>	I <sup>2</sup> C (SCL, SDA)
<b>Standby Current</b>	~0.7 μA (typical)
<b>Package Size (Sensor IC)</b>	5.6 × 2.8 × 1.2 mm (14-pin SiP)
<b>Module Dimensions</b>	13 × 13 mm
<b>Operating Temperature</b>	-40°C to +85°C
<b>Storage Temperature</b>	-40°C to +105°C
<b>Short Circuit Current</b>	Continuous
<b>Input Current (max)</b>	±20 mA
<b>Continuous Power Dissipation</b>	464 mW @ +70°C
<b>Features</b>	Integrated LEDs, photodetector, ambient light cancellation, high SNR
<b>Applications</b>	Wearables, fitness devices, medical monitoring, IoT health projects

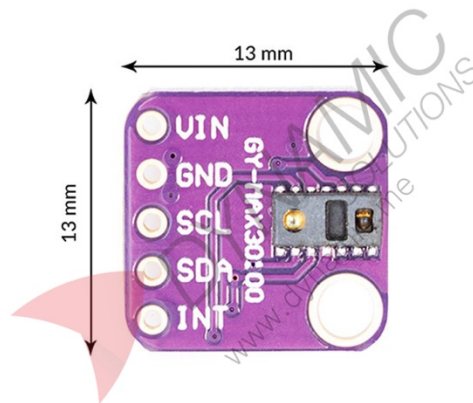
### Pinouts:

Pin Name	Type	Description
VIN	Power	Input voltage supply (1.8V – 5V DC)
GND	Ground	Common ground
SCL	I <sup>2</sup> C Clock	Serial Clock Line for I <sup>2</sup> C communication
SDA	I <sup>2</sup> C Data	Serial Data Line for I <sup>2</sup> C communication
INT	Interrupt	Interrupt output pin, signals new data availability to the controller

1.8V ~ 5.0V DC (+)  
Ground (-)  
I<sup>2</sup>C  
I<sup>2</sup>C



### Product Dimensions:



### Product Pictures:

