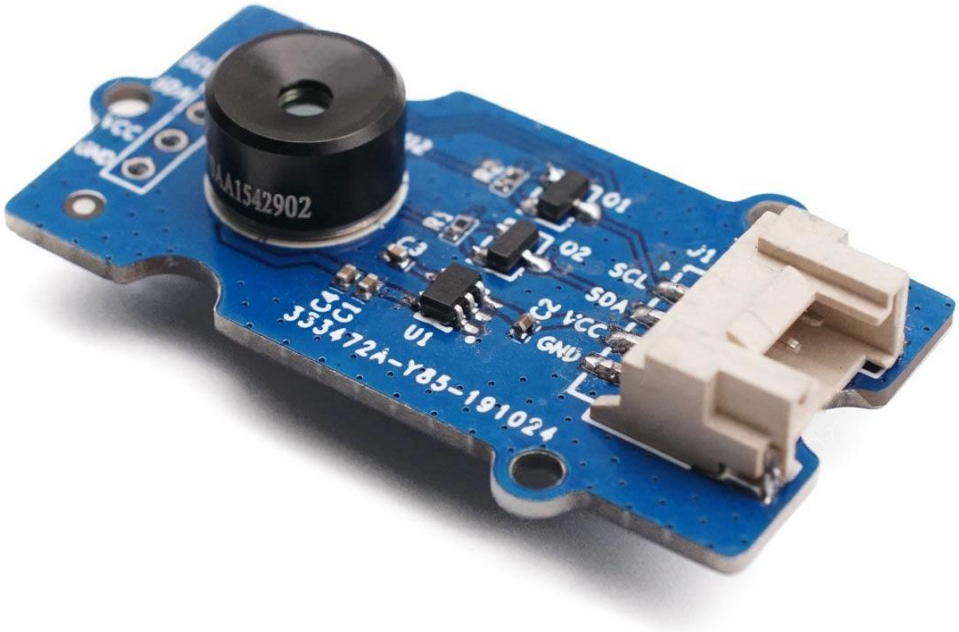


Grove - Thermal Imaging Camera / IR Array MLX90640 110 degree

SKU 114020142

Grove - Thermal Imaging Camera is a thermal sensor which carries MLX90640 IR Array. The camera can present dynamic thermal images and detect the surrounding temperature from -40℃~300℃. The camera with wide-angle has an FOV of 110°x75 °.

Note

If you would like to use a narrow-angle of IR thermal camera, please take a look at Grove - Thermal Imaging Camera / IR Array MLX90640 55 degree.

Key Features

- IR Thermal Sensor Array 32X24(MLX90640)
- 110°x75° FOV(field of view)
- Temperature measurement range:-40℃~300℃
- I2C Grove interface

Description

Looking for a thermal sensor which can detect your surround temperature? This IR thermal camera can not only measure the value of temperature around you but also display the thermal imaging figure. So it must be your best choice to monitor the temperature change from this tiny camera.

The IR thermal camera carries a 32x24 array of thermal sensors (MLX90640), it can detect the temperature of objects from feet away with the accuracy of ±1.5℃. In order to obtain the thermal image easily, I2C protocol is used to get the low-resolution image from the camera. The FOV(Field of View) of this camera is 110°x75°, and the temperature measurement range is -40℃~300℃.

This module connects the MCU with the I2C interface. However, it needs an MCU which has over 20000 bytes of RAM to drive the camera. As a matter of fact, Dev board like Arduino Uno can not be used with this Sensor camera due to its lower ability of calculation. We recommend you to choose Arch Mix as an MCU to control the camera because it really has a good performance to process the complex data from the IR sensor camera.

Specification

Items	Values
Operating Voltage	3V-3.6V
Current Consumption	~18mA
Field of View	110°x 75°
Measurement Range	-40°C-300°C
Resolution	±1.5°C
Refresh Rate	0.5Hz-64Hz
Interface	I2C Grove interface
I2C Address	0x33

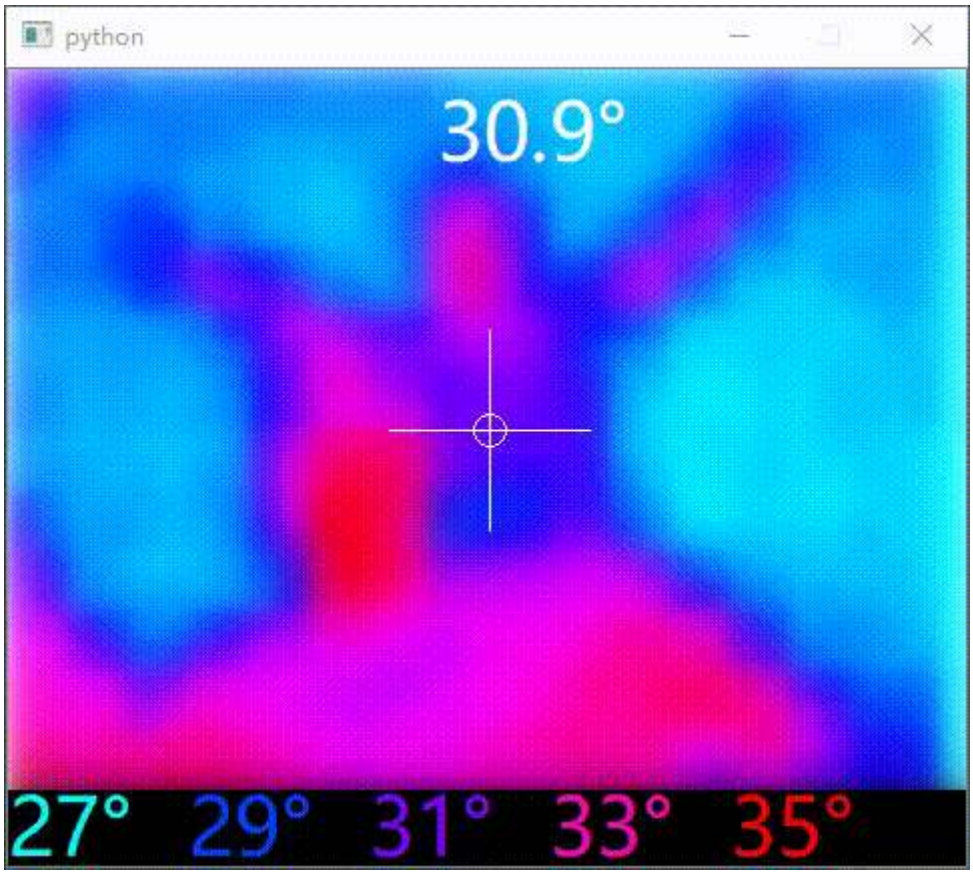
Part List

- 1*Grove - Thermal Imaging Camera / IR Array MLX90640 110 degree

Note

This product has a Grove interface which needs Grove Cable to connect with.

Demo



ECCN/HTS

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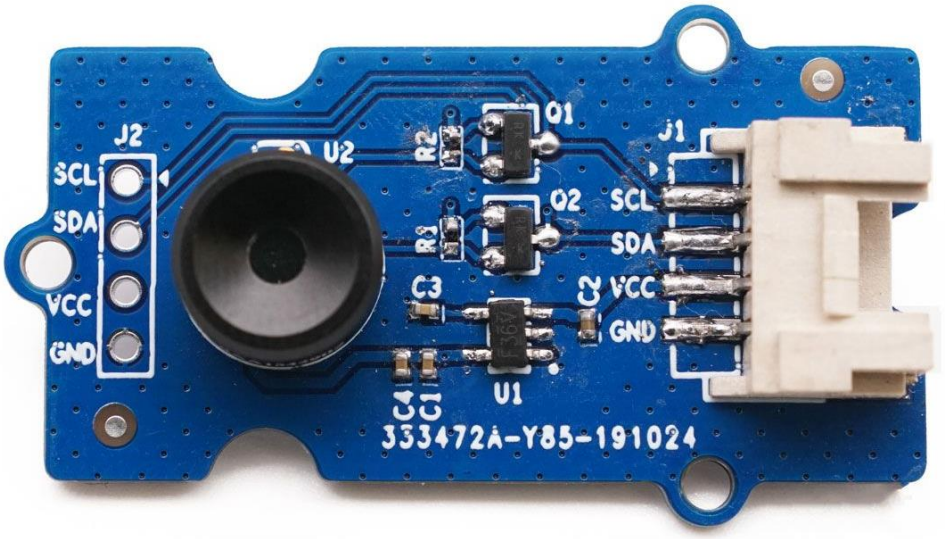

https://www.seeedstudio.com/Grove-Thermal-Imaging-Camera-IR-Array-MLX90640-110-degree-p-4334.html/12-9-19