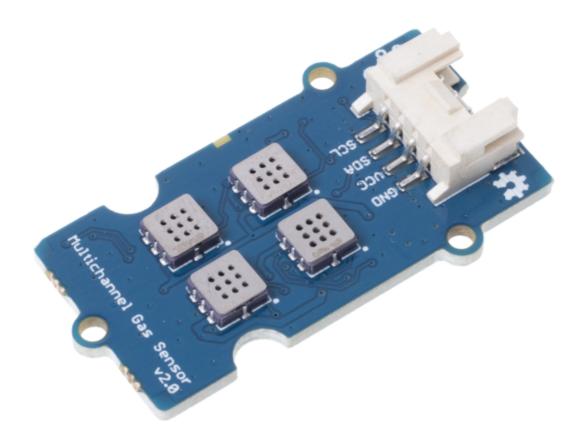
# Grove - Multichannel Gas Sensor v2



### **PRODUCT DETAILS**

### **Features**

- Four fully independent sensor elements on one package.
- The ability to detect a variety of gases, besides Carbon monoxide (CO), Nitrogen dioxide (NO2), Ethyl alcohol(C2H5CH), Volatile Organic Compounds (VOC) and etc.
- Qualitative detecting, rather than quantitative.
- Compact size for easy deployment.

# Description

Worried about not recognizing the gas around your workplace or other surroundings and environment? Here comes the excellent solutions we offer! Grove - Multichannel Gas Sensor V2 has 4 measuring units, each of them is sensitive to various kinds of gases, which means you are able to get four sets of data at the same time. And different sorts of gases can also be judged by these four sets of data. The gas sensor used in this module is

based on MEMS technology and has the advantage of being in a small size with considerable measurement stability and is more suitable for qualitative than quantitative measurement.

# **Specifications**

MCU	STM32F030
Interface	0x55
I2C address	3.3V~5V
Onboard Gas Sensors	GM-102B; GM-302B; GM-502B; GM-702B

#### Note

Before using it, the sensor needs to be preheated to achieve the internal chemical balance. The preheat voltage is consistent with its heating voltage VH. And the storage time and corresponding warm-up time are recommended as follows:

# How Does Storage Time Affect The Recommended Warm-Up Time of This Sensor?

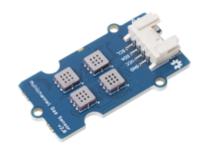
Storage time	Recommended warm-up time
Less than 1 month	No less than 24 hrs
1-6 months	No less than 48 hrs
Over 6 months	No less than 72 hrs

## **How Does This Differ From Our Previous Multichannel Gas Sensor?**

Details	Grove Multichannel Gas Sensor V1	Grove Multichannel Gas Sensor V2
Sensors	One package with three elements	Four independent sensors
MCU	Atmel 8-bit Micro-controller	32-bit Value-line ARM®
Price	\$39.9	\$34.9

#### **Image**





## **Cautions**

- The module should avoid being placed in the volatile silicon compound steam, or it will cause the sensitivity to be reduced and irrecoverable.
- The module should avoid being exposed to high concentrations of corrosive gases (such as H2S, SOX, Cl2, HCl, etc.), otherwise, it will be irreversibly damaged.
- The module should not be placed in water or ice.
- After the module is powered on, the sensor will heat up to a certain degree during the process, which is a normal phenomenon.
- Users MUST preheat the module before starting to measure gases.

## What is Grove?

Grove makes it easier to connect, experiment, and simplify the prototyping process. No jumpers or soldering required. We have developed more than 300 Grove modules, covering a wide range of applications that can fulfil a variety of needs. Not only are these open hardware, but we also have open-source software.

#### Note

For all Grove users (especially beginners), we provide you with the guidance of operation. Please download and read through <u>Sensor - Gas</u> and <u>Seeed Gas Sensor Selection</u> <u>Guide</u> before your using the product.

#### **Parts list**

- 1x Multichannel gas sensor board
- 1x Grove cable

### **ECCN/HTS**

HSCODE	9027900000
USHSCODE	8517620090

UPC