

PRODUCT DETAILS

The Grove - VOC Gas Sensor (SGP40) is an innovative environmental sensing module developed for a wide array of Volatile Organic Compound (VOC) detection applications. This sensor can perform high-quality VOC measurements in real-time.

Feature

- **Reliable and Real-time VOC detection:** It utilizes the Sensirion SGP40 sensor for reliable detection of volatile organic compounds (VOCs).
- **Simple Connection and Operation:** Uses the standard Grove connector (HY2.0 - 4Pin) for easy integration with other Grove modules. No complex wiring or soldering is required, making it accessible to users of all skill levels.
- **Efficient data transfer:** The sensor communicates via the I2C interface, enabling efficient data transfer between the sensor and the main controller.
- **Compact and modular design:** The sensor has a compact and modular design, making it perfect for embedding in various applications.

Description

The Grove - VOC Gas Sensor (SGP40) is an innovative environmental sensing module developed for a wide array of Volatile Organic Compound (VOC) detection applications. Based on the advanced Sensirion SGP40 sensor, it excels in transforming raw sensor signals into standardized digital signals for seamless integration into existing systems.

One of the key advantages of the Grove - VOC Gas Sensor (SGP40) is its communication protocol. The sensor module uses the I2C interface, a widely adopted protocol known for its simplicity and efficiency. This makes the data transfer process between the sensor and your main controller extremely smooth, enabling quick reaction times for applications where immediate actions based on VOC levels are crucial.

Its compatibility with the Grove ecosystem facilitates an easy and straightforward setup process. The plug-and-play nature of Grove system allows developers to incorporate this module without needing to handle complicated wiring or intricate coding. This feature can significantly speed up development time and allows users to focus more on data interpretation and action steps based on the VOC measurements.

With its capability to perform high-quality VOC measurements in real-time, this sensor module provides a versatile solution for tracking and monitoring indoor air quality. Given the increasing awareness and need for monitoring air quality due to its direct correlation with health, the Grove - VOC Gas Sensor (SGP40) can be an essential component of systems targeted towards improving indoor air quality, personal environment monitoring, HVAC systems, industrial safety and any application where air quality assessment is pivotal.

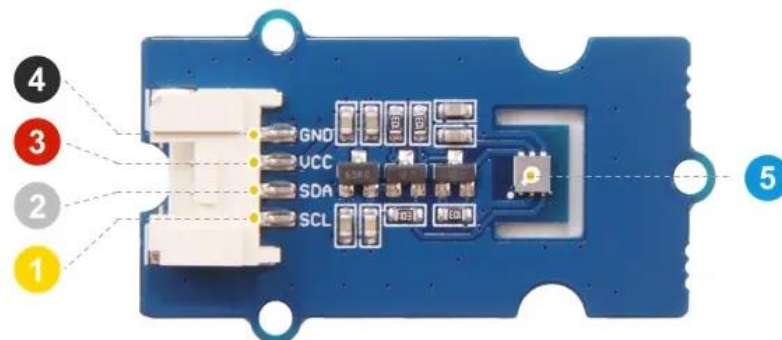
Application

- Indoor air quality monitoring system
- Personal environment monitoring device
- HVAC systems
- Industrial safety

Specification

Feature	Specification
Operating Voltage	3.3/5V
Interface	I2C
Dimensions	20x40mm

Hardware Overview



- 4 GND: connect this module to the system GND
- 3 VCC: you can use 5V or 3.3V for this module
- 2 SDA: I²C serial data
- 1 SCL: I²C serial clock
- 5 SGP40 module

Part List

Grove - VOC Gas Sensor (SGP40)	x1
Grove cable	x1

ECCN/HTS

HSCODE	9027100090
USHSCODE	9027102000
UPC	
EUHSCODE	9027109000
COO	CHINA
CE	1
EU DoC	1
RoHS	1
UK DoC	1