

Description: Grove - Oxygen Sensor (MIX8410)

Part Number: 101990680

## Overview:

Grove - Oxygen Sensor (MIX8410) is an electrochemical oxygen sensor and it can be used to test the oxygen concentration in air. Under the catalysis of the electrodes, a redox reaction occurs on the working electrode and the counter electrode, thereby generating a current. The concentration of oxygen in the air is calculated by measuring this current and referring to the oxygen concentration linear characteristic graph.



## Product Details:

### Features:

- High sensitivity ( $0.1 \pm 0.03$  mA) with linear output
- High stability with  $<10$ s response time
- Environmental protection design
- Advanced anti-leakage technology which greatly reduces the probability of leakage
- Low output current for longer sensor life

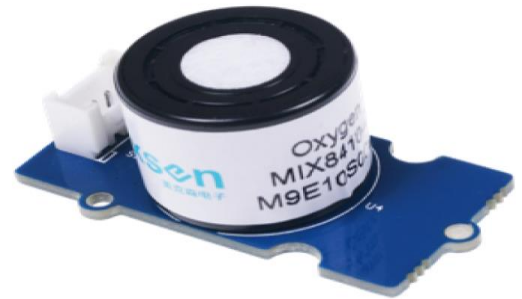
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In order to enhance the user experience and improve the quality of the Grove - Oxygen Sensor, we have adopted this new version of the oxygen sensor. The old version was based on the ME2-O2-Φ20 sensor and we now bring you this new version which is based on the MIX8410-O2 sensor.



OLD



NEW

The following is a comparison of the old and new versions.

Similarities	Differences
Same Bottom pin positions	The new version adopts an advanced anti-leakage technology, which greatly reduces the probability of leakage and solves the leakage problem of the old version.
Same physical dimensions	The output current of the new version is lower, so the electrolyte consumption is slower and the sensor life is longer.
Same driver board	
Same method of use	

### Attention



- When in use, the maximum input voltage cannot exceed 5.5V
- This sensor needs to be preheated for 5-10 minutes before use
- Keep the sensor out of volatile solvents
- Prohibit storing and operating the sensor in an acidic or alkaline environment

### Note



The sensor value only reflects the approximated trend of gas concentration in a permissible error range, it DOES NOT represent the exact gas concentration. The detection of certain components in the air usually requires a more precise and costly instrument, which can not be done with a single gas sensor. If your projects aim to obtain the gas concentration at a very precise level, then we do not recommend this gas sensor.

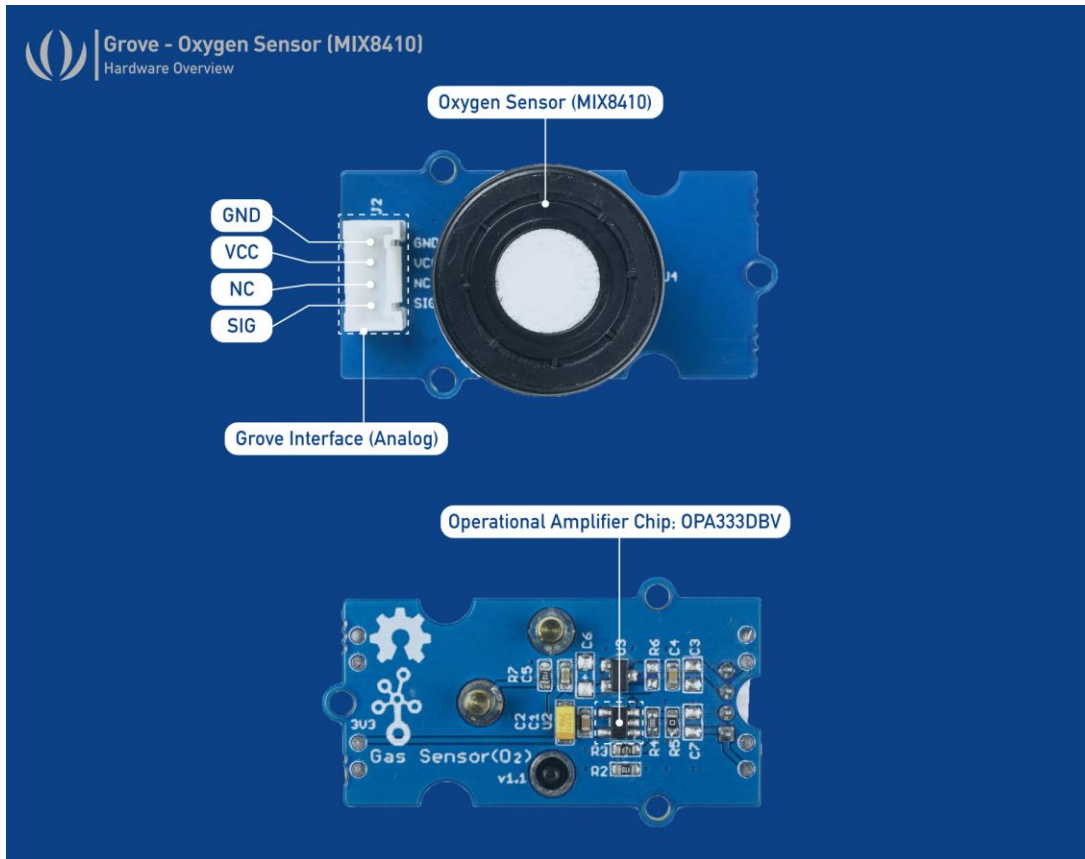
## Specifications:

Specification	Details
Input Voltage	3.3/5V
Interface	Analog
Measurement range	0-25%
Maximum Overload	30%
Sensitivity	0.1±0.03 mA
Repeatability	±2%
Response Time	<10S
Working Temperature Range	-20 - 50°C
Storage Temperature Range	0 ~ 50 °C
Operating Humidity Range	15 ~ 90% RH, no-condensing
Power on aging time	30min

## Applications:

- Industrial monitoring
- HAVC oxygen monitoring
- Oxygen analysis meter
- Oxygen generator

## Hardware Overview:



## Part List

- 1 x 101990680, Grove - Oxygen Sensor (MIX8410)
- 1 x Grove Cable

## ECCN/HTS

HSCODE	9027100090
USHSCODE	9027102000
UPC	