

MIX8412 Electrochemical Ozone Gas Sensor

Version No.:1.3

Features:

- *High selectivity & sensitivity to O₃
- *High accuracy
- *Linear output
- *Environmental protection design

Application:

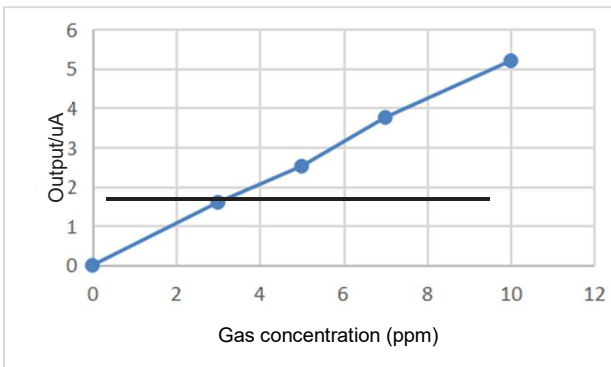
- * Industrial monitors
- * Leakage detection for sterilization equipment

MIX8412 is an electrochemical O₃ sensor developed by Mixsen. It uses the principle of electrochemistry. There is a reference electrode inside the sensor, which greatly improves the stability of the sensors. When the sensor senses the ozone, the working electrode and the counter electrode react with the redox reaction, through measure the current to get the concentration of ozone.



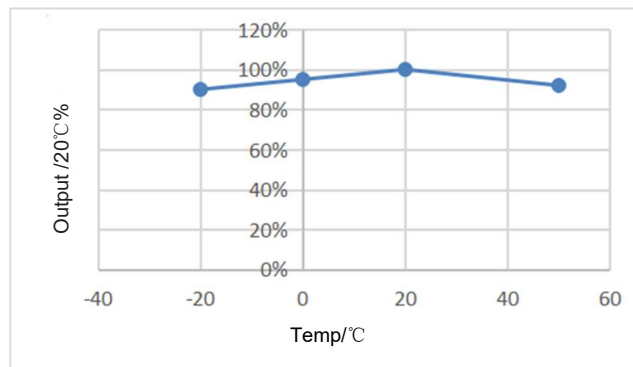
Sensitivity Characteristics:

MIX8412 (25° C) linear output

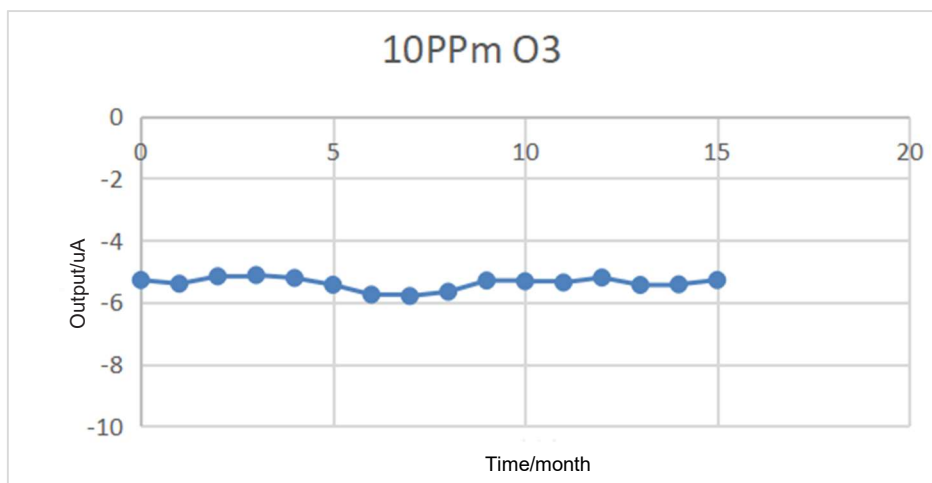


Temperature dependency:

MIX8412 temperature dependency



Stability Characteristics:



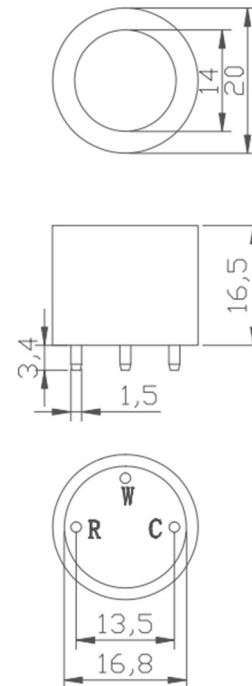
Notice: In different applications used by different customers, the operation condition is different. Mixsen strongly recommend customers contact with Mixsen's technician, especially when the detect gases are not in target gases list, Mixsen cannot responsible if customers has not asked for specifically tested by Mixsen.

Specifications:

Item	Specification
Target Gas	Ozone
Measurement Range	0 ~ 10 ppm
Maximum Overload	20 ppm
Sensitivity	0.40 ~0.80 uA/ppm (negative signal)
Repeatability	±2%
Resolution	0.1 ppm
Response Time (T90)	< 120 seconds
Long Term Output Drift	< 2% /month
Life Expectancy(in air)	2 years
Operating Temp. & Hum.	-20 ~ 50°C / 15 ~ 90% RH
Operating Press	0.1MPa±10%
Bias Voltage	Not required

Note: All measurements were taken at 20°C and 50%RH at 1013hP

Structure and Dimensions:



All dimensions in mm
All tolerance ±0.1mm, unless otherwise stated

Cross Sensitivity:

The cross sensitivity data show below is MIX8412 respond under 25 °C.

Gas	Concentration(ppm)	Reading(ppm O ₃)
Hydrogen Sulphide	10	-2
Nitrogen Dioxide	10	11
Carbon Monoxide	100	<1
Hydrogen	500	0
Ammonia	100	0
Chlorine	10	9

Operating Note:

- * The soldering tin was forbidden to contact with the sensor.
- * Aging the sensor no less than 30 mins before operation.
- * Keeping the sensor out of the volatile solvent.
- * Prohibit storage and operating the sensor in acidic or alkaline environment.

Shenzhen Mixsen Electronics Co., Ltd
 Add.: 4A, No. B Building, Dalangyongtai Industrial Park, Huawang Road, Longhua District, Shenzhen, Guangdong, China
 Post: 518000
 Tel: 86-755-86635585
 Mail: sales@mixsen.com
 Website: www.mixsensors.com