MIDAS S2
OZONE (O_3)
HIGH RANGE

Sensor Cartridge Specifications

Selectable gases	Ozone (O_3)
Cartridge Part Number	MIDAS S2-E-O3H 2-year extended warranty
Sensor Technology	Electrochemical sensor
Measuring Range	O_3 0 - 0.7ppm
Default Alarm 1	O_3 0.3ppm
Default Alarm 2	O_3 0.6ppm
LDL, LAL	O_3 0.065ppm
Resolution	O_3 0.005ppm
Accuracy	≤ ± 5% of measured value
Response Time $t_{62\cdot5}$	Typical 22 seconds
Sensor Cartridge Life Expectancy (Expiration Period)	24 months under typical application conditions Extendable for 1 year through calibration after 24 months
Operating Temperature	0°C to +40°C (32°F to 104°F)
Effect of Temperature Sensitivity	≤ ± 15% of measured value at 20°C
Operating Humidity	15 to 90% non-condensing
Operating Pressure	90 – 110kPa
Calibration Gas	O_3 0.35ppm
Warm Up Time	< 10 minutes
Storage Temperature	+5°C to +25°C (+41°F to +77°F)

The sensor data listed is based on the test data with O_3 gas under normal Lab test conditions (20-25 C, 0 - 60%RH, normal atmosphere pressure); observed performance may vary based on the actual monitoring system and the sampling conditions employed.

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CROSS SENSITIVITIES

Each Midas S2 sensor is potentially cross sensitive to other gases and this may cause a gas reading when exposed to other gases than those originally designated. The table below presents typical readings that will be observed when a new sensor cartridge is exposed to the cross sensitive gas (or a mixture of gases containing the cross sensitive species).

Gas Measured	Chemical Formula	Concentration Applied(ppm)	Reading (ppm O_3)
Ammonia	NH_3	100	0 (Negative Drift)
Chlorine	Cl_2	1	0.4 (Over Range)
Chlorine Dioxide	ClO_2	1	0.4 (Over Range)
Chlorine Trifluoride	ClF_3	1	0.4 (Over Range)
Fluorine	F_2	0.1	0.1
Hydrazine	N_2H_4	3	0.4 (Over Range)
Hydrogen Sulfide	H_2S	20	0.4 (Over Range)
Nitric Oxide	NO	50	0.07
Nitrogen Dioxide	NO_2	10	0.4 (Over Range)
Sulfur Dioxide	SO_2	20	0.4 (Over Range)
Hydrogen Chloride	HCl	4	0.4 (Over Range)
Hydrogen	H_2	500	0 (Negative Drift)
Hydrogen Fluoride	HF	6	0.4 (Over Range)
Hydrogen Cyanide	HCN	10	0.114
Arsine	AsH_3	0.2	0
Carbon Dioxide	CO_2	5000	0
Carbon Monoxide	CO	100	0
Silane	SiH_4	10	0
Phosphine	PH_3	0.6	0
Ethylene Oxide	C_2H_4O	20	0

Interference differs from cartridge to cartridge and over cell life. It is not recommended to calibrate with cross sensitivity factors. The target gas should be used for calibration.

For more information
automation.honeywell.com

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