



Midas® Sensor Cartridge Specifications

Chlorine (Cl₂) MIDAS-E-HAX

Gas Measured	Chlorine (Cl ₂)
Cartridge Part Number	MIDAS-E-HAL 2 year extended warranty
Sensor Technology	3 electrode electrochemical cell
Measuring Range	Cl ₂ 0 - 2ppm
Minimum Alarm 1 Set Point	0.25ppm
Lower Detection Limit	0.22ppm
Linearity	< ± 3% of measured value
Repeatability	< ± 5% of measured value
Resolution	0.01ppm
Response Time t _{62.5}	≤ 5 seconds
Sensor Cartridge Life Expectancy	≥ 24 months under typical application conditions
Operating Temperature	0°C to +40°C (32°F to 104°F)
Effect of Temperature	
Zero Sensitivity	< ± 0.005ppm / °C < ± 1.8% of measured value / °C
Operating Humidity	10 to 90% RH
Effect of Humidity	
Zero Sensitivity	< ± 0.003ppm / % RH < ± 0.3% of measured value / % RH
Operating Pressure	90 – 110kPa
Effect of Position	No effect in typical application
Long Term Drift	
Zero Sensitivity	< ± 2ppm / year < 10% of measured value / year
Calibration Gas	Chlorine (Cl ₂)
Bump Test Gas	Chlorine (Cl ₂)
Warm Up Time	< 20 minutes
Storage Temperature	+5°C to +25°C (+41°F to +77°F)

The sensor data listed is based on ideal test environment; observed performance may vary based on the actual monitoring system and the sampling conditions employed.

Cross Sensitivities

Each Midas® 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 Cl ₂)
Ammonia	NH ₃	100	0
Bromine	Br ₂	1	1.0(theoretical)
Carbon Dioxide	CO ₂	1%	0
Carbon Monoxide	CO	100	0
Chlorine Dioxide	ClO ₂	2.4	0.55
Hydrogen	H ₂	3000	0
Hydrogen Sulfide	H ₂ S	20	0.1
Nitrogen Dioxide	NO ₂	10	1.5
Ozone	O ₃	0.25	0.11
Sulfur Dioxide	SO ₂	20	0
isopropyl Alcohol	C ₃ H ₇ OH		No response

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.

Find out more

www.honeywellanalytics.com
 Korea Tel: +82 (0)2 6909 0300
 Singapore Tel: +65-65803776
 Australia Tel: +61-3-94642770
 Japan Tel: +81-3-6730-7320
 India Tel: +91-124 4752700

Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.