MIDAS S2
AMMONIA (NH_3)

Sensor Cartridge Specifications

Selectable gases	Ammonia (NH_3)
Cartridge Part Number	MIDAS S2-E-NH3 2-year extended warranty
Sensor Technology	Electrochemical sensor
Measuring Range	NH_3 0 - 100ppm
Default Alarm 1	NH_3 12.5ppm
Default Alarm 2	NH_3 25ppm
LDL, LAL	NH_3 9ppm
Resolution	NH_3 0.5ppm
Accuracy	≤ ± 5% of measured value
Response Time $t_{62\cdot5}$	Typical 10 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	≤ ± 10% of measured value at 20°C
Operating Humidity	15 to 90% non-condensing
Operating Pressure	90 – 110kPa
Calibration Gas	NH_3 50ppm
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 NH_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 NH_3)
Hydrogen Chloride	HCl	10	0 (Negative Drift)
Nitrogen Dioxide	NO_2	10	0 (Negative Drift)
Sulfur Dioxide	SO_2	20	0 (Negative Drift)
Silane	SiH_4	10	0
Hydrogen	H_2	500	0
Chlorine	Cl_2	1	0
Carbon Monoxide	CO	50	0
Phosphine	PH_3	0.6	0
Ozone	O_3	0.2	0
Hydrogen Fluoride	HF	6	0
Ethylene Oxide	C_2H_4O	20	0
Hydrogen Sulfide	H_2S	20	0
Nitric Oxide	NO	50	0
Carbon Dioxide	CO_2	500	0
Hydrogen Cyanide	HCN	10	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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