MIDAS S2
HALOGEN GROUP (Cl_2, Br_2, ClO_2)

Sensor Cartridge Specifications

Selectable gases	Chlorine (Cl_2) Fluorine (Br_2) Chlorine Dioxide (ClO_2)
Cartridge Part Number	MIDAS S2-E-BR2 2-year extended warranty
Sensor Technology	Electrochemical sensor
Measuring Range	Cl_2 0 – 0.4ppm Br_2 0 – 0.4ppm ClO_2 0 – 0.4ppm
Default Alarm 1	Cl_2 0.05ppm Br_2 0.05ppm ClO_2 0.05ppm
Default Alarm 2	Cl_2 0.1ppm Br_2 0.1ppm ClO_2 0.1ppm
LDL, LAL	Cl_2 0.036ppm Br_2 0.036ppm ClO_2 0.036ppm
Resolution	Cl_2 0.002ppm Br_2 0.002ppm ClO_2 0.002ppm
Accuracy	≤ ± 5% of measured value
Response Time $t_{62·5}$	Typical 2 seconds
Sensor Cartridge Life Expectancy (Expiration Period)	24 months under typical application conditions Extendable for 1 year through calibration after 24 months
Operating Temperature Effect of Temperature Sensitivity	0°C to +40°C (32°F to 104°F) ≤ ± 10% of measured value at 20°C
Operating Humidity	10 to 90% non-condensing
Operating Pressure	90 – 110kPa
Calibration Gas	Cl_2 0.2ppm Br_2 0.2ppm ClO_2 0.2ppm
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 Cl_2 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.

Honeywell

Midas S2 Halogen Group (Cl_2, Br_2, ClO_2) Sensor Cartridge Specifications

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 Cl_2)
Ammonia	NH_3	50	0.28
Hydrogen Chloride	HCl	9	0.4 (Over Range)
Hydrogen Fluoride	HF	6	0.4 (Over Range)
Hydrogen Sulfide	H_2S	25	0 (Negative Drift)
Nitrogen Dioxide	NO_2	6	0.4 (Over Range)
Ozone	O_3	0.2	0.24
Sulfur Dioxide	SO_2	50	0.4 (Over Range)
Carbon Monoxide	CO	20000	0
Silane	SiH_4	10	0
Hydrogen	H_2	500	0
Phosphine	PH_3	0.6	0
Sulfur Dioxide	SO_2	4	0
Ethylene Oxide	C_2H_4O	20	0
Nitric Oxide	NO	50	0
Carbon Dioxide	CO_2	10000	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

Honeywell Process
Measurement and Control
2101 CityWest Blvd
Houston, TX 77042
www.honeywell.com

Midas S2-E-BR2 | Rev 1 | 5/24

Honeywell