

# APPENDIX A

## SENSOR SPECIFICATIONS

### GERMANE

**(0-2.00 ppm)**

**Part No. 302042-D-1**

Minimum Indicated Concentration .....	0.07 ppm
Repeatability .....	± 2% of reading
Accuracy * .....	± 2% of full scale
Zero Drift .....	< 5% change per year (typical)
Span Drift .....	< 10% change per year (typical)
Response Time (Rise) .....	T <sub>50</sub> : < 10 seconds, (typical) T <sub>90</sub> : < 30 seconds, successive exposures
Recovery Time (Fall) .....	T <sub>10</sub> : < 180 seconds
Temperature Range .....	-20° to 50°C (-4° to 122°F)
Humidity Range (continuous) .....	5–95 %RH, non-condensing
Humidity Range (intermittent†) .....	0–99 %RH, non-condensing
Pressure Range .....	Ambient atmospheric, ± 1 psi
Recommended Calibration Flow Rate .....	1.0 LPM
Oxygen Requirement .....	1% by volume, minimum

† Gas exposure should not exceed eight (8) hours during any 24 hour period.

\* When unit is calibrated and serviced at recommended intervals.

#### GERMANE

Interferent	TLV	LEL	Exposure	Response
Acetylene	asphyxiant	2.5 %v	ppm range	No Data-Pos(+) Interferent
Arsine	0.05 ppm	***	1.05 ppm	+ 1 ppm
Carbon Monoxide	25 ppm	12.5 %v	300 ppm	None
Diborane	0.1 ppm	0.8 %v	0.6 ppm	+ 1 ppm
Hydrocarbons			%vol range	None
Hydrogen	asphyxiant	4.0 %v	3000 ppm	None
Phosphine	0.3 ppm	***	1 ppm	+ 1 ppm
Silane	5 ppm	***	1.2 ppm	+ 1 ppm
Sulfur Dioxide	2 ppm	***	4 ppm	+ 1 ppm

#### Interferent Notes

(\*\*\*) means the substance is not combustible in air under normal conditions. "C" Denotes a ceiling (in TLV column).

If an interferent is present and there is no target gas, certain transmitters will not display the interferent response until the EFFECT of the interferent reaches ± 0.04 ppm. This is due to display "blinking" that occurs between - 0.03 ppm and + 0.03 ppm on transmitters that display gas concentrations with two digits after the decimal.