

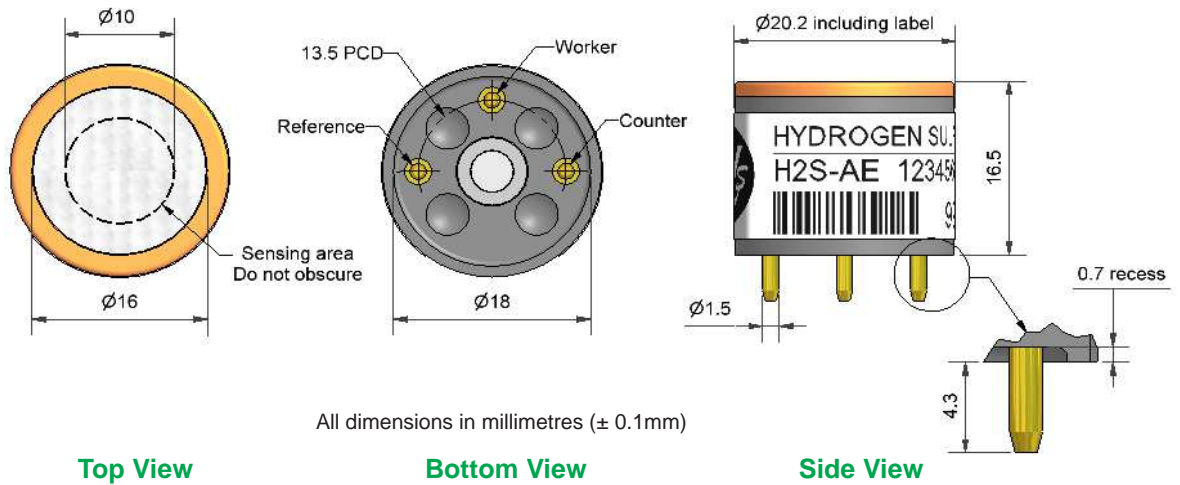


# H2S-AE Hydrogen Sulfide Sensor

## High Concentration



Figure 1 H2S-AE Schematic Diagram



Technical Specification

<b>PERFORMANCE</b>	Sensitivity	nA/ppm in 400ppm H <sub>2</sub> S	65 to 110
	Response time	t <sub>90</sub> (s) from zero to 400ppm H <sub>2</sub> S	< 25
	Zero current	ppm equivalent in zero air	< $\pm 3$
	Resolution	RMS noise (ppm equivalent)	< 0.5
	Range	ppm H <sub>2</sub> S limit of performance warranty	2,000
	Linearity	ppm error at full scale, linear at zero and 400ppm H <sub>2</sub> S	0 to -40
	Overgas limit	maximum ppm for stable response to gas pulse	10,000
<b>LIFETIME</b>	Zero drift	ppm equivalent change/year in lab air	nd
	Sensitivity drift	% change/year in lab air, monthly test	nd
	Operating life	months until 80% original signal (24 month warranted)	> 24
<b>ENVIRONMENTAL</b>	Sensitivity @ -20°C	% (output @ -20°C/output @ 20°C) @ 20ppm	80 to 92
	Sensitivity @ 50°C	% (output @ 50°C/output @ 20°C) @ 20ppm	100 to 110
	Zero @ -20°C	ppm equivalent change from 20°C	< $\pm 1$
	Zero @ 50°C	ppm equivalent change from 20°C	< $\pm 1$
<b>CROSS SENSITIVITY</b>	NO <sub>2</sub> sensitivity	% measured gas @ 10ppm	< -20
	Cl <sub>2</sub> sensitivity	% measured gas @ 10ppm	< -15
	NO sensitivity	% measured gas @ 50ppm	< 20
	SO <sub>2</sub> sensitivity	% measured gas @ 20ppm	< 20
	CO sensitivity	% measured gas @ 400ppm	< 4
	H <sub>2</sub> sensitivity	% measured gas @ 400ppm	< 1
	C <sub>2</sub> H <sub>4</sub> sensitivity	% measured gas @ 400ppm	< 0.1
NH <sub>3</sub> sensitivity	% measured gas @ 20ppm	< 0.1	
<b>KEY SPECIFICATIONS</b>	Temperature range	°C	-30 to 50
	Pressure range	kPa	80 to 120
	Humidity range	% rh continuous	15 to 90
	Storage period	months @ 3 to 20°C (stored in sealed pot)	6
	Load resistor	$\Omega$ (recommended)	10 to 47
	Weight	g	< 6



At the end of the product's life, do not dispose of any electronic sensor, component or instrument in the domestic waste, but contact the instrument manufacturer, Alphasense or its distributor for disposal instructions.

**NOTE:** all sensors are tested at ambient environmental conditions, with 10 ohm load resistor, unless otherwise stated. As applications of use are outside our control, the information provided is given without legal responsibility. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

