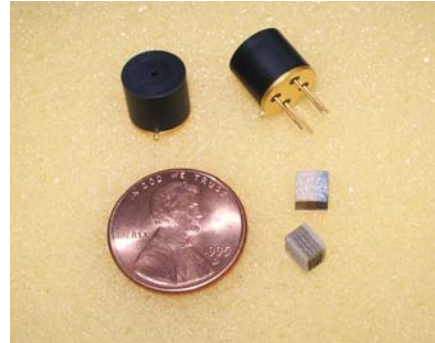


## Sensor Features

- High Performance electrochemical (fuel cell) technology
- Polymer based solid electrolyte
- Room temperature operation for low power consumption
- Tolerates a wide range of temperature, pressure and humidity level
- No liquids, therefore no chance for electrolyte leakage
- Small, lightweight package
- Unique microelectrode design
- Low cost



## Performance Characteristics

<b>Nominal Range</b>	0-50 ppm
<b>Maximum Overload</b>	TBD
<b>Expected Operating Life</b>	TBD, >2 years in air expected
<b>Output Signal</b>	0.04μA/ppm
<b>Resolution</b>	0.1 ppm
<b>Temperature Range</b>	TBD, -10°C to +50°C minimum
<b>Pressure Range</b>	TBD, large range expected due to solid electrolyte
<b>Pressure Coefficient</b>	TBD
<b>T50 Response Time</b>	< 10 seconds
<b>T90 Response Time</b>	TBD, depends on packaging
<b>Relative Humidity Range</b>	TBD, 0 to 95% non-condensing expected
<b>Typical Baseline Range (pure air)</b>	-0.5 to +0.5 ppm equivalent
<b>Maximum Zero shift (+20°C to +40°C)</b>	TBD; < 10 ppm expected
<b>Long Term Output Drift</b>	< 5% signal loss/ 5 months (testing in progress)
<b>Recommended Load Resistor</b>	TBD
<b>Bias Voltage</b>	0 mV
<b>Repeatability</b>	TBD
<b>Output Linearity</b>	Linear

All performance data is based on conditions at approximately 22°C, 0% RH and 0.83atm, unless otherwise noted.



# Amperometric Hydrogen Sulfide (H<sub>2</sub>S) Sensor

Data Sheet

## Physical Characteristics

<b>Weight</b>	0.8 g (unpackaged)
<b>Packaging</b>	TO-39 standard; Other packaging available
<b>Position Sensitivity</b>	None
<b>Storage Life</b>	TBD, > 6 months expected
<b>Recommended Storage Temperature</b>	0-20°C
<b>Warranty Period</b>	TBD

## Cross-Sensitivity Data

Synkera's Amperometric Hydrogen Sulfide sensors have been tested for their response to a number of commonly interfering gases and the results are presented in the table below.

<b>Gas</b>	<b>Concentration</b>	<b>Synkera Amperometric H<sub>2</sub>S</b>
<b>Carbon Monoxide</b>	35 ppm	0
<b>Ethanol</b>	400 ppm	0
<b>Hydrogen</b>	10,000 ppm	Approx. - 0.3
<b>Nitrogen Dioxide</b>	5 ppm	Approx. - 0.7
<b>Nitric Oxide</b>	35 ppm	Approx. - 4.2
<b>Sulfur Dioxide</b>	35 ppm	Approx. - 0.5
<b>Toluene</b>	100 ppm	0

This is a preliminary data sheet. The characteristics reported are based upon limited testing of prototype sensors.