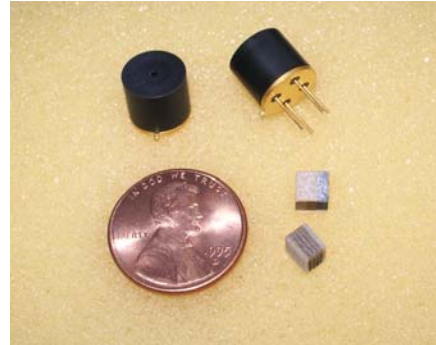


## Sensor Features

- 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

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

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



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

Data Sheet

## Physical Characteristics

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

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

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