



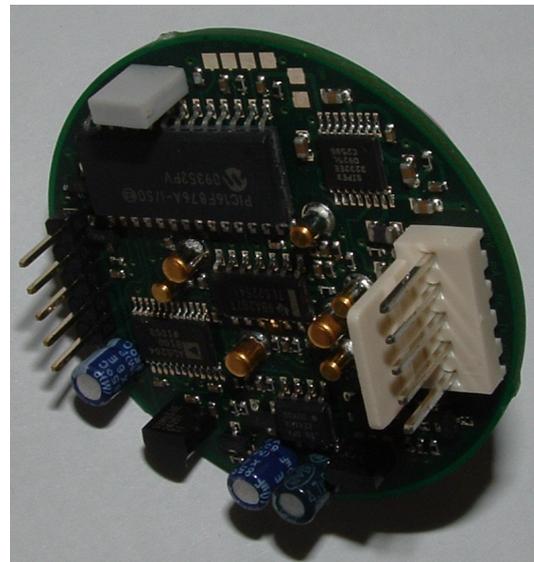
PRODUCT SAFETY DATASHEET

4-20mA PCB for use with EC4 Series Toxic Electrochemical Gas Sensors

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Front View



Reverse

Overview

The assembly comprises an EC4 electrochemical gas sensor connected to the 4 - 20 mA transmitter board.

Inherent Hazards

These sensors contain a small quantity (~0.5 ml) of either 5M sulfuric acid or 5.7M ortho-phosphoric acid (SO₂ and PH₃ sensors). Both of these acids are corrosive. In normal operation there is a minimal risk of these liquids escaping from the sensor body.

The sensors also contain a very small amount of a metallic powder or carbon. These compounds are catalysts which if removed from the sensor body, and dried out, could promote oxidation and ignition of flammable/oxidisable species. In addition the dry powder may cause irritation to eyes and the respiratory system.

If leakage of the contents is observed, gloves and eye protection should be worn to limit the risk of exposure before attempting any clean up procedures. Any spilt liquid and the sensor body can be washed with copious amounts of water.

The PCB and sensor have connection pins; take care when handling.



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Transportation Hazards

No hazards exist that require special consideration for transportation as defined by the IATA Dangerous Goods Regulations.

Operational Hazards

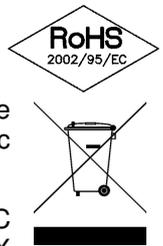
Take care when wiring up the connector leads to avoid applying incorrect voltages to the pins on the PCB. Although this would not produce a hazardous situation, some damage could be caused to the circuitry of the PCB.

Decommissioning

There are no additional hazards associated with the decommissioning of these devices.

Disposal

- **Sensors must not be disposed of by burning or crushing. Sensors need to be disposed of according to local regulations.**
- SGX Sensortech (IS) Ltd declares that this product complies with EC directive 2002/95/EC (the RoHS Directive) restricting the use of certain hazardous materials in electrical and electronic equipment.
- This product is classified as Electronic and Electrical Equipment according to directive 2002/96/EC (the WEEE Directive) and should be segregated from domestic waste for disposal. Contact SGX Sensortech (IS) Ltd for disposal instructions.



Material Data

The following table of material data provides information to enable disposal in accordance with environmental regulations.

	Mass (g)	Approximate composition % by Mass							
		Mixed electronic components	5 M (38%) Sulfuric Acid / Water CAS 7664-93-9	5.7 M Ortho-Phosphoric Acid / Water CAS 7664-38-2	Brass	ABS	Platinum Black, Ruthenium black, Gold Powder, Silver Powder, Graphite	PTFE	Glass Fibre
EC4 Series Electrochemical sensor (excluding SO ₂ and PH ₃)	~5.6	0	~15%	0	~5%	~60%	<5%	<5%	<10%
EC4 Series Electrochemical sensor (SO ₂ and PH ₃ ONLY)	~5.6	0	0	~15%	~5%	~60%	<5%	<5%	<10%
EC4 4-20 mA PCB	8.46	100%	0	0	0	0	0	0	0

Note: The catalyst contained in the sensor may be made up of one or more of these elements.

In the event of encountering difficulties in disposing of these products, contact SGX Sensortech (IS) Ltd for advice.