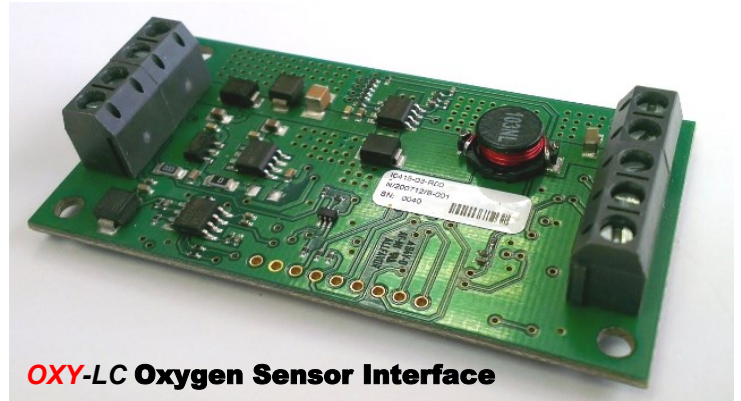


## Zirconia Oxygen Measurement System

The **OEM Zirconia Oxygen Measurement System** from SST consists of our latest fast response **OEM-Oxygen Sensor** in conjunction with our **OXY-LC Oxygen Sensor Interface** control electronics.



### Key Features

- Oxygen range 0.1 - 25% O<sub>2</sub>
- Zirconium dioxide (ZrO<sub>2</sub>) sensing element
- Long life non-consuming technology
- Integral heating element
- No reference gas required
- High accuracy
- Linear output signal
- Available in RS485 Modbus RTU protocol and analogue output variants
- Sensor probe has M18x1.5 screw mount for simple flue gas connection
- Complete system removes the need to design discrete control electronics
- Operates between 8 and 28V<sub>DC</sub> (RS485) or 20 to 28V<sub>DC</sub> (Analogue Output Variants)
- The OEM Oxygen Measurement System is easily calibrated in normal air (20.7% O<sub>2</sub>)

# Zirconia Oxygen Measurement System

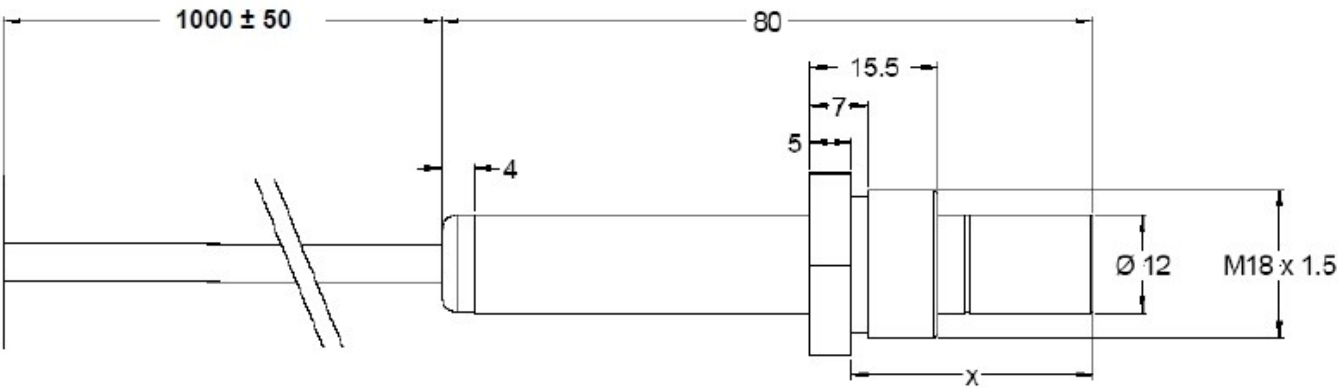
## Description

The **OEM Oxygen Measurement System** is a complete solution consisting of both a zirconium dioxide oxygen sensor and control electronics.

For further specification details on the Oxygen Probe part of the system please reference SST Datasheet DS0122

For further specification details on the Control Electronics part of the system please reference SST Datasheet DS0058

## Sensor Dimensions



All dimensions in mm.  
Sensor lengths are approximate.

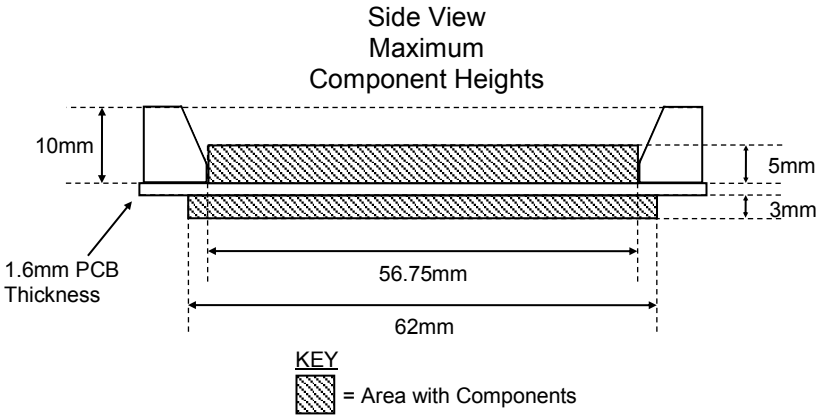
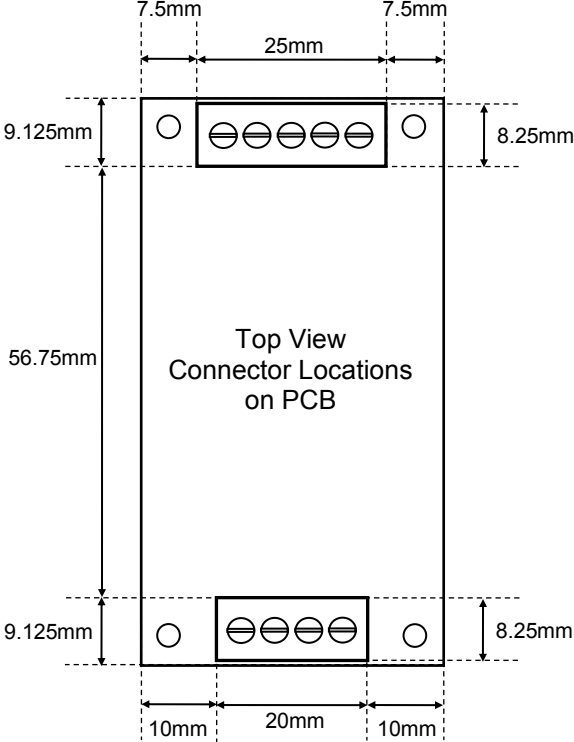
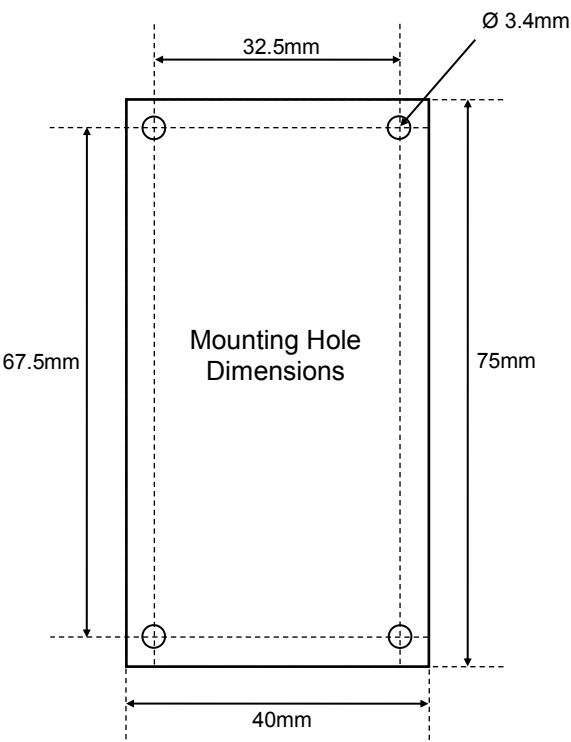
Sensor Part Number	O2S-FR-T2-18BM-A	X = 55mm
	O2S-FR-T2-18BM-B	X = 45mm
	O2S-FR-T2-18BM-C	X = 28mm

# Zirconia Oxygen Measurement System

## Board Dimensions

### OUTLINE DRAWING AND MOUNTING INFORMATION

(All dimensions are in mm)



# Zirconia Oxygen Measurement System

## Ordering Information

- Please select what mounting position for the nut (A, B or C) is best for your application using the diagram on page 2.

Board Part Number	O2 Measurement range (vol O <sub>2</sub> %)	Output Type	Heater Voltage
O2S-FR-T2-18BM-A/B/C-RS485	0.1% and 100%	Modbus RTU	Configurable
O2S-FR-T2-18BM-A/B/C-420MA	0.1 to 25%	Current: 4-20mA	4.55V <sub>DC</sub>
O2S-FR-T2-18BM-A/B/C-010V	0.1 to 25%	Voltage: 0-10V <sub>DC</sub>	4.55V <sub>DC</sub>

### **WARNING: Do Not Use The Sensor With Silicones:**

SST Sensing's oxygen sensors, like all other Zirconium Dioxide sensors, are damaged by the presence of silicone.

Vapours (organic silicone compounds) of RTV rubbers and sealants are known to poison oxygen sensors and must be avoided. For further information please refer to [Application Note AN0043](#).

**General Note:** SST Sensing Ltd reserves the right to make changes in product specifications without notice or liability. All information is subject to SST's own data and considered accurate at time of going to print.

#### **WARNING**

All SST Sensing Ltd products are tested under nominal operating conditions during the production process. Applications for our products are varied and, as these are outside our control, specification information provided is given without legal responsibility. Customers should test under their own conditions, to ensure that the sensors are suitable for their intended application.

#### **CAUTION**

Do not exceed maximum ratings.  
Carefully follow all wiring instructions, incorrect wiring can cause permanent damage to the device.  
Do not use chemical cleaning agents.

**Failure to comply with these instructions may result in product damage.**