Product Data Sheet

P/N : S+4OX

S+4OX

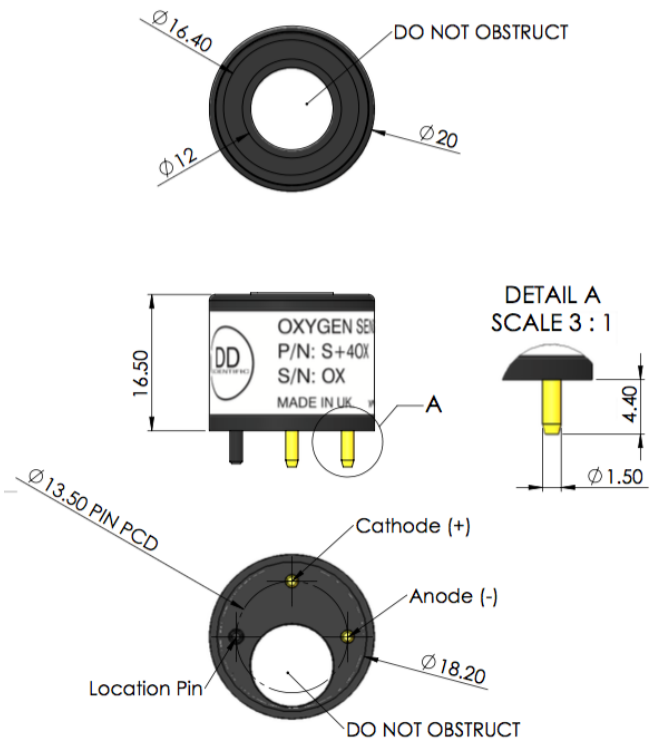
Oxygen Sensor (O_2)

Introduction The S+4OX is a market leading industrial safety oxygen sensor, ideal for fixed and portable gas detectors.

Key Features: Resilient to challenging environments, guaranteed life performance, fast response

Performance Characteristics	
Output signal	0.10 ± 0.03 mA
Zero Current (Offset)	< 0.6% vol. O2 (typically <0.3% vol. O2)
T90 Response Time	< 10 seconds (typically <5 seconds)
Measurement Range	0 - 25% Oxygen
Maximum Overload	30% Oxygen
Linearity	S=Klog 1/1-C
Recommended Load Resistor	100 ohms

Environmental Details	
Temperature Range Continuous	-30°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	5% to 95% RH



Product Dimensions
All dimensions in mm
All tolerances ±0.15 mm

Important Note:
All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.

Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.

Website: www.ddscientific.com Email: info@ddscientific.com

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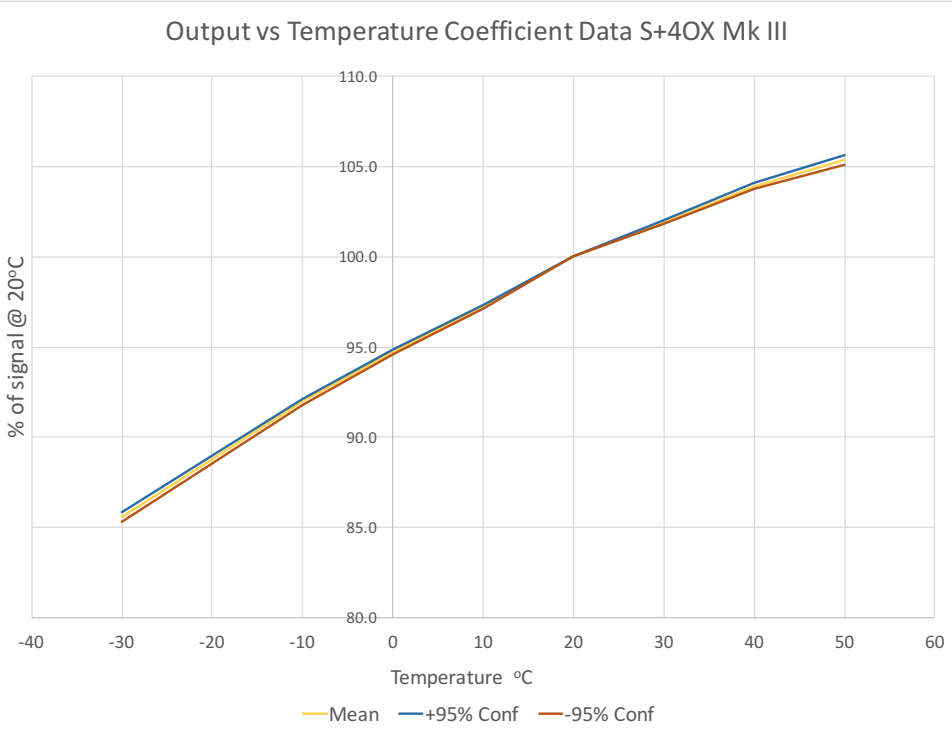
Lifetime Details	
Long Term Output Drift	< 5% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	24 months from date of dispatch

Intrinsic Safety Data	
Maximum current in normal operation (pure O2)	0.01 A
Maximum o/c Voltage (10 to 100% O2)	0.9 V
Maximum s/c Current (10 to 100% O2)	0.5 A



Cross Sensitivity Data

Toxic gases at TLV levels will have no cross-sensitivity effect on DD-Scientific oxygen sensors. At very high levels (i.e. percent levels), highly oxidising gases (e.g. ozone, chlorine) will interfere to the extent of their oxygen equivalent, but most other commonly occurring gases will have no effect.

Acid Gases

IMPORTANT NOTE: Acid gases such as CO_2 and SO_2 will be absorbed by the electrolyte and tend to increase the flux of oxygen to the electrode. This gives an enhanced oxygen signal of approximately 0.3% of signal per 1% CO_2. DD-Scientific oxygen sensors are not suitable for continuous operation in concentrations of CO_2 above 25%.

WARNING: By the nature of the technology used, any electrochemical gas sensor offered by DD Scientific can potentially fail to meet specification without warning. Although DD Scientific Ltd makes every effort to ensure the reliability of our products of this type, where life safety is a performance requirement of the product, we recommend that all sensors and instruments using these sensors are checked for response to gas before use.

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