Product Data Sheet

P/N : S+VOX

S+VOX

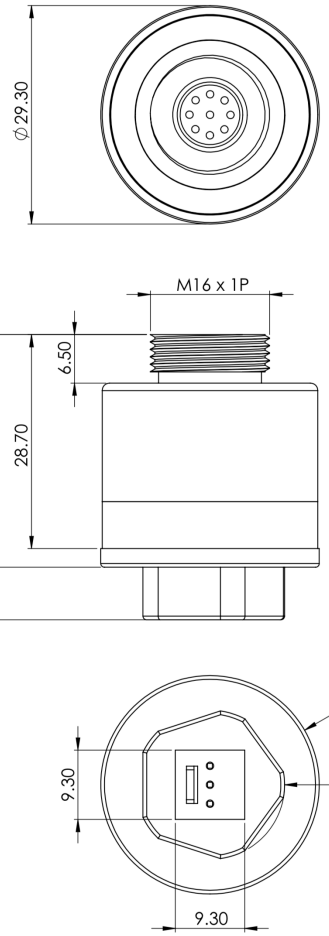
Oxygen Sensor (O_2)

Introduction The S+VOX is a partial pressure O2 sensor with linear output from 0-100%O2, optimised for ventilators

Key Features: Fast response, 0-100% measurement range, on-board temperature compensation, low drift. CE approved.

Performance Characteristics	
Output signal	8-13mV in Air @STP
Zero Current (Offset)	< 100uV
T90 Response Time	< 5 seconds
Measurement Range	0 - 100% Oxygen
Temperature Compensation (0-40oC)	<2%O2
Linearity	Linear
Recommended Load Resistor	Min 10KOhms

Environmental Details	
Temperature Range Continuous	-20°C to +50°C
Pressure Range	500 to 2000 mbar
Operating Humidity Range	0-99% non condensing



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

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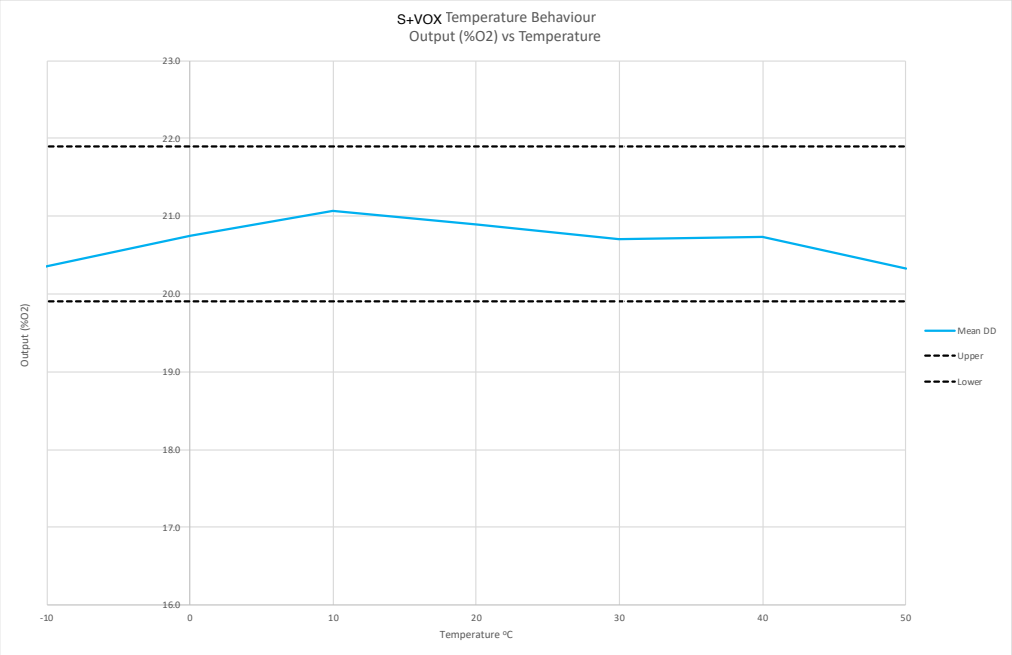
Lifetime Details	
Long Term Output Drift	< 5% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	375000%O2hrs @20oC
Standard Warranty	12 months from date of dispatch

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%.
The S+VOX is **not designed** for use in applications where anaesthetic gases are present. This includes halogenated anaesthetics and nitrous oxide.

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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