

**Introduction**      The DceL O3 is a low profile Ozone sensor ideal for use in portable and fixed gas detectors

**Key Features:**      Low transient response to changes in RH conditions, fast response, high stability, robust environmental performance, cost effective

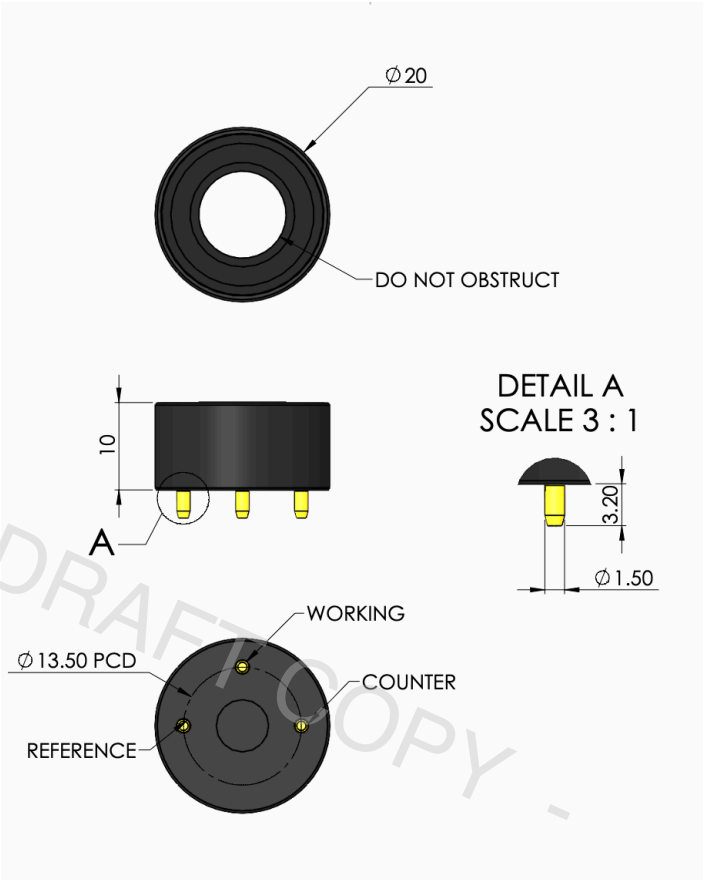
Performance Characteristics	
Output signal	1600±600nA/ppm
Zero Current (Offset)	±0.25ppm
T90 Response Time <small>(Based on 3min exposure time)</small>	<60secs
Measurement Range	0 - 20ppm
Maximum Overload	50ppm
Linearity	Linear
Repeatability	±2%
Recommended Load Resistor	10

Environmental Details	
Temperature Range Continuous	-20°C to +60°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range (non-condensing)	15% to 90% RH (continuous)

**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.



**Product Dimensions**

All dimensions in mm

All tolerances ±0.15 mm

# Product Data Sheet

P/N : DceL O3

## DceL O3 Ozone Sensor (O<sub>3</sub>)

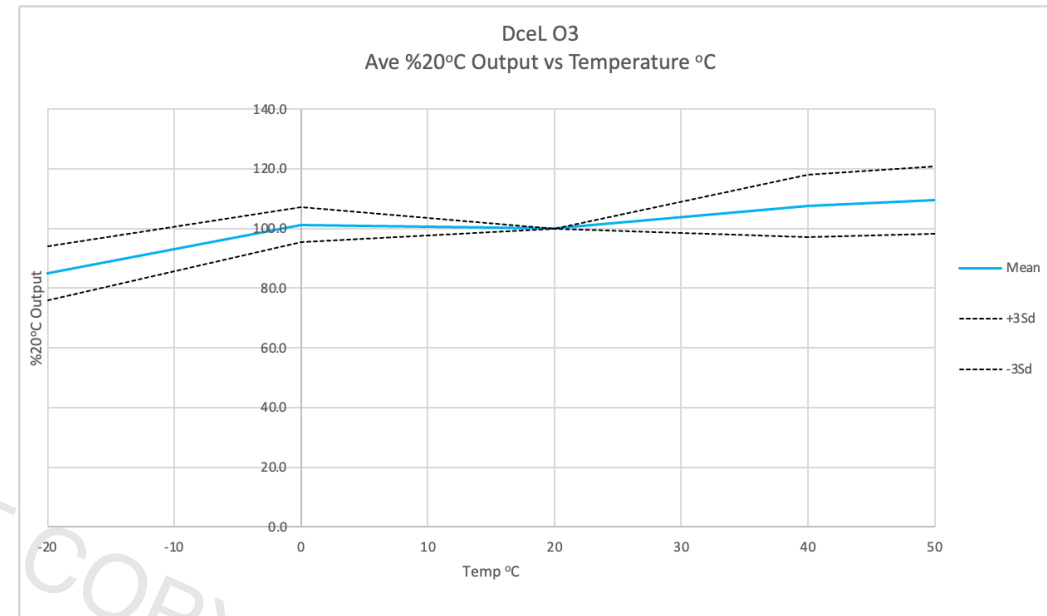
### Lifetime Details

Long Term Output Drift	< 20%/annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	12 months from date of dispatch

### Cross - Sensitivity Data

GAS	CONC	ppmO3 equiv
Carbon Monoxide	200 ppm	<0.5
Sulphur dioxide	20 ppm	≈ -12
Nitrogen dioxide	20 ppm	≈16
Nitric Oxide	50 ppm	< -0.5
Hydrogen Sulphide*	25 ppm	-35
Carbon Dioxide	5000 ppm	0

Note \*  
H2S will cause temporary loss in sensitivity to Ozone



### Intrinsic Safety Data

Maximum current in normal operation (pure O <sub>2</sub> )	0.3m A
Maximum o/c Voltage (10 to 100% O <sub>2</sub> )	1.3 V
Maximum s/c Current (10 to 100% O <sub>2</sub> )	1.0 A

**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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