## **Product** Data Draft Sheet

P/N: MceLCO

MceL CO
Carbon Monoxide Sensor (CO)

**Introduction** The MceL CO is a miniature high quality robust CO sensor, ideal for use in portable and fixed gas detectors.

Key Features: high stability, fast response and recovery, robust environment performance.

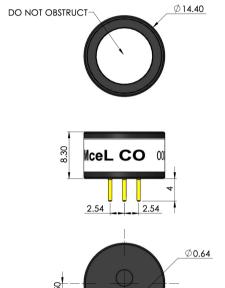
Performance Characteristics			
Output signal	40 ± 15 nA / ppm		
Typical Baseline Range (pure air)	±3 ppm CO equivalent		
Filter Capacity	> 20000 ppm hours		
T90 Response Time	< 30 seconds		
Measurement Range	0 - 1000 ppm		
Maximum Overload	2000 ppm		
Linearity	Linear up to 1000 ppm		
Repeatability	< ±2% CO equivalent		
Recommended Load Resistor	10 ohms		
Resolution (Electronics dependent)	< 0.5 ppm typical		

Environmental Details		
Temperature Range Continuous	-30°C to +50°C	
Pressure Range	800 to 1200 mbar	
Operating Humidity Range	15% to 90% RH	

#### mportant 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.



Recommended Socket: Cambion 450-3703-01 03-00

Counter

Reference Working

Product Dimensions All dimensions in mm All tolerances ±0.15 mm



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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		

Cross - Sensitivity Data				
GAS	CONC.	MceL CO		
Hydrogen Sulphide	25 ppm	0 ppm		
Sulphur dioxide	20 ppm	0 ppm		
Hydrogen	100 ppm	<30 ppm		
Nitric Oxide	50 ppm	<15 ppm		
Ethanol	200 ppm	<1 ppm		
Ammonia	50 ppm	0 ppm		
Chlorine	15 ppm	0 ppm		

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	120	9020°C Ou	tput vs Tem	perature *C	,		
	100						
	80 -						
	60						
	40						
	20						
	20						
-10	0	10	20	30	40	50	60
	Ü	10	Temperature °C			50	00

#### Poisoning:

DD Scientific sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important that exposure to high concentrations of solvent vapors is avoided, both during storage, fitting into instrument and operation. When using sensors on printed circuit boards (PCB's), degreasing agents should be used prior to the sensor being fitted.

Please note gluing or soldering direct to the pins of DD Scientific Ltd gas sensors will void warranty, please use PCB sockets when connecting DD Scientific sensors.

Intrinsic Safety Data			
Maximum at 2000 ppm	0.3 mA		
Maximum o/c Voltage	1.3 V		
Maximum s/c Current	<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.

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement

DD SCIENTIFIC Limited reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a program of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of DD SCIENTIFIC Limited, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application. Performance of newly supplied sensors. Output signal can drift below the lower limit over

