

# SIL O<sub>2</sub> 109 Oxygen Analyser



The Ntron SIL O<sub>2</sub> 109 Oxygen Analyser has been designed to specifically address the OEM market's requirements for a low cost SIL2 rated oxygen analyser for inertisation applications.

The SIL O<sub>2</sub> 109 Oxygen Analyser utilises two continuous self-monitoring microprocessors. The complete system (analyser and sensor) meets the requirements of IEC 61508 SIL2.

A fast response, high repeatability and no sensor drift make this analyser a low maintenance solution that delivers reliable performance for safety critical, process control applications.

### Applications

#### An Oxygen Analyser for use in:

- Additive Manufacturing
- Glove box purge and leak detection
- Air Separation
- Wave Soldering
- Inert Ovens

### Features

- Meets the requirements of IEC61598 SIL2
- Measurement ranges: 0 25% O<sub>2</sub>
- Solid State Ceramic sensor technology
- Suited to harsh process applications
- Fast response time
- Din rail mounting
- LCD display
- Analogue 4 to 20mA output for retransmission of measured signal (SIL2 Rated)
- RS232 communications
- 24VDC power supply
- 2 Configurable alarm relays (SIL2 rated)
- 1 Transistor output
- 2 pushbuttons for span calibration
- Process Connection: KF-40

EXCELLENCE THROUGH DIVERSITY **Datasheet:** D-04-908-P-005



# SIL O<sub>2</sub> 109 Product specifications

Gas Type / Range	Oxygen / 0 - 25%				
Sensor Technology	Solid State Ceramic sensor technology				
Sensor Type	Ntron Oxygen Sensor - OC-26				
Accuracy	± 2% of reading at 20°C				
Response Time (T90)	<10 seconds				
Warm Up Time	15 seconds				
Expected Sensor Life	3 -5 years				
Relative Humidity	0 - 95% non-condensing				
Operating Temperature	-20°C to 50°C				
Sample Pressure	Vented to atmosphere during operation and calibration				
Display	4 Digit LCD display & LED indication for Alarm / Fault				
Power Requirements	24VDC ± 10%, 1.2 Amps				
Analogue Output	4 to 20mA, Linearity is ± 1%				
Relay Outputs	2 Relay contacts, 1 transistor (SIL2 Rated)				
Serial Communication	RS 232				
Warranty	12 Months from date of shipping				
Dimensions	114.5mm (h) x 67mm (w) x 99mm (d)				
Weight	300g Din Rail Mount				
Mounting	Din Rail Mount				
Environmental Rating	IP 20 analayser. Up to IP67 application dependent for senso				
Certification	CE, ATEX (EN 60079-0, EN 60079-11, EN 60079-26)				
	EMV 204/108/EG (EN 61000-6-2, EN 61000-6-4)				
	EN61326-1-SIL2 to IEC 61508/61511				

## SIL O<sub>2</sub> 109 Ordering information

	Product	Sensor Type	Measuremen	it Range	Process Co	nnection	Part No.	
$\square$	SIL O <sub>2</sub> 109	Zirconia	0 to 25	5%	KF-4	10	04-908	
Standard Cable Length - 3 metres							·	
		Con	Components		Drawing Number		Part Number	
		SIL	D <sub>2</sub> Module		E511	(	01-758	

Components	Drawing Number	Part Number		
SIL O <sub>2</sub> Module	E511	01-758		
OC-26 O <sub>2</sub> Sensor	E510	04-909		

Please note: Ntron Ltd. adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version.

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