



Oxygen Analyzer



SILO2

SIL2-capable Oxygen Analyzer

SILO2 is a high-quality, low-maintenance analyzer with remote sensor, approved for hazardous area use. This SIL2-capable system is designed for OEM and end-users for inertization applications such as centrifuges, reactors, mills, glove boxes and vent headers. Using two continuous self-monitoring microprocessors, SILO2 delivers fail safe oxygen measurements in demanding safety-critical applications, requiring compliance with the requirements of IEC 61508 SIL2.



SIL2
Capable

Pictured with OC-25M and OC-26M KF40 sensor options.



Highlights

- Market-leading solution for SIL-capable oxygen measurement
- Inbuilt analyzer and galvanic isolation barrier in one device
- Ease of integration for OEM applications
- Analog 4...20 mA output
- Sensor design for installation in Zone 0 hazardous area

Applications

- Additive Manufacturing
- Inerting of glove box and containment solutions
- Inerting control in API pharmaceuticals
- Powder handling
- Gas generation
- H₂ electrolyzers

Technical Specifications

Sensors				
Solid State (S-S)	OC-25 / OC-25M		OC-26 / OC-26M	OC-200 series
Measurement Range	0...25 %O ₂			
Accuracy	Please see Accuracy Table below			
Output Resolution	0.01 %O ₂			
Lower Detection Limit (LDL)	0.02 % +/- 0.01			
Response Time (T90)	<20 seconds, typically 12 seconds			
Operating Temperature Range	-20 °C...+50 °C (-13 F...122 °F)			
Pressure Range	950...1050 mBar _{abs}			
Life Expectancy (application dependent)	Up to 24 months			12 months
Humidity	0...95 %rh non-condensing			
Process Connection	2" Tri-clamp / Flow-through	KF40 flange		Via Oxy Extract: 2" Tri-clamp / ANSI 150
Shelf Life	12 months			Up to 6 months
Calibration Interval (application dependent)	6...12 months			
Analyzer				
Electrical				
Display	LCD			
Output Signal	4...20 mA			
Digital Communication	RS485			
Relay Output Options	2 x configurable alarm relays, 1 x fault alarm relay, 1 x transistor			
Power Supply	24 V DC			
Relay Contact Outputs	Switching power max.: 62.5 V A resp max. 30 W			
RL1 / RL2 / Alarm	Switching voltage: Um 125 V AC / 110 V DC			
	Min. current 10 uA DC			
	Min. voltage 10 mV DC			
	According to IEC 947-5-1 resp. EN 60947			
Transistor Output (DO)	Switching parameters: < 28 V @ < 50 mA			
Intrinsically Safe Connection	Voltage U _o = 6 V DC			
	Current intensity I _o = 0.2 mA			
	Power P _o = 0.3 mW			
	Max. outer inductivity L _o = 1000 mH			
	Max. outer capacity C _o = 10 µF			
Maximum Power Consumption	1.5 W			
Indicators	LCD and LED alerts on analyzer			
Mechanical				
Ingress Protection	IP20 enclosure			
Housing Material	PBT			
Mounting	35 mm din rail			
Cable Length	I.S sensor connection 5 meter / 10 meter / 15 meter			
Standards and certification				
ETL: UL-610101-1, EMC: EN 50270, ATEX Classification: Ex ia Ga IIC 1 G, Ex ia Da IIIC 1 D, ATEX Standard: EN 61000, UKCA				

Dimensions (mm)



 CAUTION

Ntrion Gas Measurement is part of the Process Sensing Technologies Group (PST). As customer applications are outside of PST control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure the equipment is suitable for the intended application(s).

Accuracy Table

Accuracy at standard temperature and pressure (STP)	
Range	
25 %	+/- 0.02 % @ 1 %
	+/- 0.01 % @ 0.1 %

We adopt a continuous development program which sometimes necessitates specification changes without notice. For technical assistance or enquiries about other options, please contact us here: oxygen@processsensing.com.