

Microx

Compact Oxygen Analyzer

With zirconia and electrochemical sensor options, Microx is a cost-effective, reliable and compact analyzer. It features three configurable alarm contacts and an LCD screen displaying O₂ concentration, as well as process connection options, for a solution that provides flexibility.

The zirconia sensor delivers fast response times and a long service life with low drift, whilst the electrochemical sensor allows measurement of background gases containing hydrocarbons. Microx consists of a remote sensor that can be located near or inside the process, with multiple measurement ranges available.



Din rail mounting option pictured with remote zirconia flow-through sensor. Wall and panel mount analyzer options, and electrochemical sensors with range of process connections also available.



Highlights

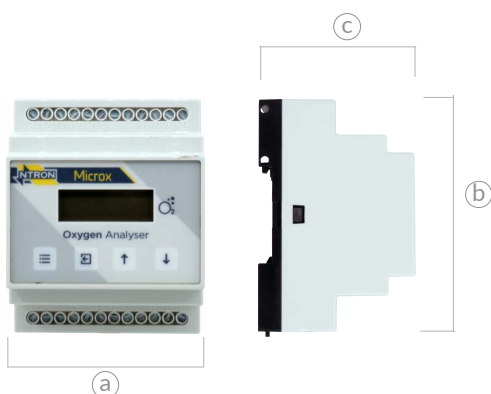
- Wide variety of measurement ranges from 0...1000 ppm to 0...100 %
- Designed for inline and extractive gas applications
- Compact integrated solution with remote sensor
- Three configurable alarms
- Analog 4...20 mA or RS232 outputs
- Custom labeling available

Applications

- Gas generation (oxygen and nitrogen)
- Glove box and containment solutions
- Additive Manufacturing
- Inert gas blanketing
- Semiconductors
- Industrial gas testing / analysis

Technical Specifications

Sensor		
	Zirconia (ZR)	Electrochemical (EC)
Measurement Range	0...1,000 ppm _v 0...25 %, 0...96 %	0...1,000 ppm _v 0...25 %, 0...100%
Accuracy	Please see Accuracy Table below	
Output Resolution (4...20 mA)	1 ppm _v / 0.01 %	0.5 ppm _v / 0.01 %
Lower Detection Limit (LDL)	1 ppm _v (ppm ranges) / 0.01 % (% ranges)	
Sample Flow Rate (application dependent)	Flow-through in extractive: 100...500 ml/min (250 ml/min optimal) in a vented atmosphere Direct insertion: Up to 6 m/s	
Pressure Range	900...1100 mBar _{abs}	
Response Time (T90)	< 15 seconds @ 25 °C (77 °F) within selected range	
Operating Temperature Range	-25 °C...+60 °C (-13 °F...140 °F)	0 °C...+45 °C (32 °F...113 °F)
Life Expectancy (application dependent)	Up to 5 years	Up to 18 months
Humidity	0...95 %rh non-condensing (with normal use)	
Process Connections	M16 threaded connection, flow-through housing, or 6 mm compression sample T-piece	
Shelf Life	Unlimited	Up to 3months
Calibration Interval (application dependent)	12 months	3...6 months
Analyzer		
Electrical		
Display	LCD	
Output Signal	4...20 mA	
Digital Communications	RS232	
Relay Output Options	Three configurable relays, dry contact 5 Amp-rated	
Electrical Interface	2 x 12-way electrical terminal block	
Power Supply	85...230 V AC (50...60 Hz) or 24 V DC	
Maximum Power Consumption	6 W	2.4 W
Mechanical		
Ingress Protection	Din rail - IP20, Panel - IP40, Wall - IP65	
Housing Material	ABS	
Mounting	Din rail (M36) / panel / wall	
Standards and Certification		
ETL: UL-610101-1, EMC: EN 50270, UKCA		



Din rail mounting option pictured.

Accuracy Table

Accuracy at standard temperature and pressure (STP)		
Range	ZR	EC
1000 ppm	+/- 3ppm @ 100 ppm	+/- 3ppm @ 100 ppm
	+/- 1 ppm @ 10 ppm	+/- 1 ppm @ 10 ppm
25 %	+/- 0.03 % @ 1 %	+/- 0.03 % @ 1 %
	+/- 0.02 % @ 0.1 %	+/- 0.02 % @ 0.1 %
96%	+/- 0.5 % @ 20.9 %	-
	+/- 0.3 % @ 95 %	-
100 %	-	+/- 1 %

Dimensions (mm)

	Din rail	Panel	Wall
a	69	96	110
b	85	96	110
c	57	90	90

! 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).

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.