

Gas analyzer

SIRA ROA Premix





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Analysis of residual oxygen content after combustion of fuel gas/air mixtures

ROA Premix is an application of the stationary SIRA analyzer that determines the residual oxygen content after combustion of premixed fuel gas/air mixtures. Optimal combustion of premixed gases is crucial for maximum energy efficiency, product quality, and minimal pollutant emissions. The device uses a catalyst to oxidize the gas sample and a zirconium sensor to determine the residual oxygen content.

The SIRA ROA premix application is characterized by very low gas flows in the actual measurement process, which are achieved using a special gas metering and mixing device. This extends the service life of the zirconium sensor and the catalyst, thereby reducing maintenance costs.

The device also features automatic monitoring of all measuring components and a controlled bypass for fast response times.

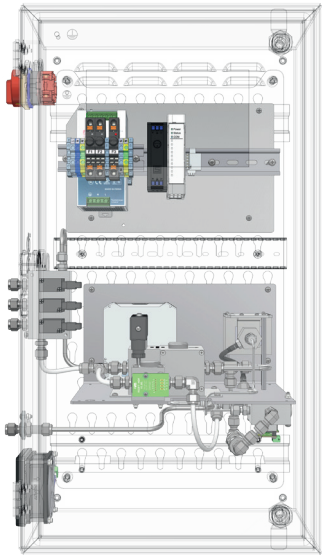
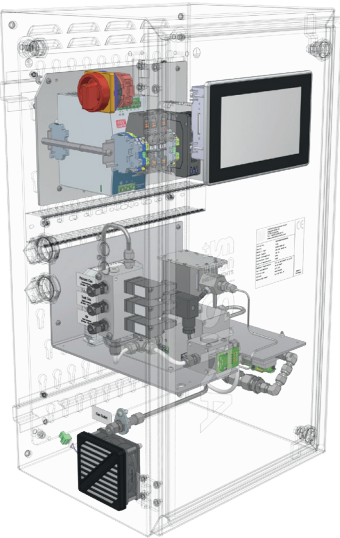
Typical areas of application include fiber optic manufacturers and glass melting tank operators.

Benefits

- Fast response time
- Low maintenance
- Adjustable bypass
- Self-checking of catalyst
- Easy to integrate
- Various interfaces

Technical data SIRA ROA Premix

Dimensions H x W x D (mm)	660 x 360 x 300, aluminum housing
Weight	Aprox. 20 kg
Degree of protection	IP42
Operating temperature	5–50 °C
Ambient humidity	Max. 95% relative humidity, non-condensing
Fastening	Wall mounting, wall bracket included
Electrical connection	110-230 VAC, 50-60 Hz, 185 VA
Display/Operation	7"-Touchscreen-Display
Gas inlet	Process gas, calibration gas, test gas
Gas connection	6 mm stainless steel clamping ring
Process gases	Premixed fuel gases
ambient pressure range	950 – 1.100 mbar
Gas inlet pressure	40 – 60 mbar
Gas consumption	20 l/hour
Communication options	0/4 – 20 mA, digital output, relay, fieldbuses (optional)
Repeatability	± 0,1 Vol. %
Range	0,1% O2 to 20.9% O2
Precision	±2% of measured value or ±0.1% O2, whichever is greater
Sensor flow	2–3 l/h
Response time t ₉₀	< 5 s.
Calibration gas suggestion	air & O ₂ in N ₂
Power supply	115 to 240 V AC





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