S4 AURORA Paramagnetic Oxygen Analyser

Paramagnetic Oxygen Analysers for accurate percent measurements in combustion testing, inert atmospheres, medical and safety for humans, internal combustion engine exhaust and many more applications.

Flexible

- Many different configurations
- Programmable contact closure for gas path control

Easy to Use

- Touch-screen colour display
- Remote software suite for control over the Internet

Accurate

- 0.1% O2 resolution
- 0.1% linearity

Non-screen Version
available for system integrators

SIGNAL GROUP
AtUt Sp. z o.o.

S4 AURORA

Signal Series 4 AURORA Paramagnetic Oxygen Analyser

Oxygen is possibly the most measured of all gases. Essential for all life on Earth, it is also required for combustion and a wide range of industrial processes.

The Paramagnetic Oxygen analyser will remain in operation for many years giving accurate and dependable readings. Essentially, users can almost fit it and forget it, because it is likely to be the most reliable of gas analyzers.

The Signal series 4 platform augments this reliability with embedded firmware and remote operational software running over Ethernet. Each analyser has its own individual I.P. address, which provides the operator with functionality such as:

- **remote data logging**
- **analyser set-up**
- **gas path configuration**
- **fault log examination**
- **remote viewing of important tests or processes**

In recent years electrochemical sensors have become widely available and these have improved significantly. Their advantages are their small size and negligible power requirement. They have therefore been widely used for safety applications in confined spaces. However, they have a short life span; typically lasting for up to 2 years before replacement is necessary. Of course this is unacceptable in a fixed industrial process or in testing laboratories where operational uptime and maintenance costs are important.

SPECIFICATIONS

DETECTOR TYPE: Paramagnetic. 'Dumb bell' servo driven.

RANGES:
Range A: 0-5%, 0-10%, 0-25%. or
Range B: 0-100% or
Range C: 95-100%

NOISE: 0.005% O_2.

LINEARITY: +/- 0.1% O_2

REPEATABILITY: < +/- 0.01% O_2

ZERO DRIFT: <+/- 0.2% O_2 per 30 days

RESPONSE TIME: < 2.5s

FLOW EFFECT:
1% change in reading with flow change of 0.5 l/min to 3 l/min into atmospheric pressure.

TEMPERATURE EFFECT:
0.005% O_2 change on Zero reading with temperature change of 5 to 40 ^{O}C.
0.015% O_2 change on span reading with temperature change of 5 to 40 ^{O}C.

TILT EFFECT: 0.01% O_2 per degree of tilt.

EXTERNAL MAGNETIC EFFECT:
A mass of soft magnetic material anywhere on the enclosure will cause less than 0.1 % O_2 change in reading.

CONSTRUCTION:
Wetted parts, 316 Stainless steel and Quartz

DIMENSIONS:
19" X 133.3mm X 550mm
Weight: 12 Kg

POWER REQUIREMENTS: 110VAC - 250VAC or 24VDC. 70 Watts.

OUTPUTS:
0-10 volts
RS232
Ethernet (remote software is included)
Optional 4-20 mA.

GAS CALIBRATION SERVICES:
Nitrogen (to set analyser zero)
Oxygen in Nitrogen of appropriate concentration for calibration. Or room air.

OPTIONAL:
Atmospheric barometric pressure compensation

Authorised Representative:

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QMS ISO 9001 : 2015 REGISTERED
Cert No. 317012019

Specifications may be changed without notification