

NOVA

MODEL 415 SERIES

TRACE OXYGEN ANALYZER

APPLICATIONS

In process gas streams such as blanketing mixtures, glove boxes, electronics, research, hydrogen/nitrogen mixtures, etc.



415N12



415PM

FEATURES

- Digital readout in PPM O₂
- 0-10 to 0-10,000 PPM ranges available
- Customer replaceable 'fuel cell' oxygen sensor
- Linear output
- Unaffected by hydrocarbons in sample
- Recorder outputs
- Alarms for high or low O₂ level (Optional)
- Low flow alarm available
- Built in sample pump or pressure regulator

MODELS AVAILABLE

415N4x: Wall Mount Nema 4
415N12: Wall Mount Nema 12
415PM: Panel Mounted

415RM: 19" Rack Mounted
415N7MC: Explosionproof (separate brochure)

NOVA ANALYTICAL SYSTEMS INC.
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DESCRIPTION

The Nova Model 415 Series Trace Oxygen Analyzers have been designed for the detection of trace levels of oxygen in a non-corrosive gas stream. Several types of enclosures are available including Nema 4x/12 wall mount, panel mount, rack mount, benchtop or explosionproof.

The oxygen concentration in the sample gas is detected by a 'fuel cell' type electrochemical

sensor. This sensor produces a small current output directly proportional to the oxygen in the sample. This small output is amplified and displayed in PPM O₂ on the digital meter and also appears at the output terminals as a voltage or current output. Alarms are available for low flow, high O₂ or low O₂.

As the O₂ sensor ages, the sealed electrolyte within the sensor will be consumed and it

will require replacement. The sensor will normally last about 12 to 18 months and can be replaced at nominal cost.

The sensor is not normally affected by gas stream composition but high levels of acid gases such as CO₂ or SO₂ can cause a slightly enhanced reading and shorter cell life.

SPECIFICATIONS

DESCRIPTION	
Ranges:	Any range between 0-10 PPM and 0-10,000 PPM
Method of Detection:	Customer replaceable 'fuel cell' oxygen sensor
Readout:	LED digital
Accuracy and Repeatability:	± 2% of reading
Speed of Response:	O ₂ sensor may require an initial purge down from air to low PPM O ₂ which may last up to 6 hours. After purge down, T90 response from 1000 to zero PPM is 30 seconds
Resolution:	± 1 PPM
Maximum Drift:	2% of reading per week
Ambient Temperature Limits:	32 to 122°F (0 to 50°C)
Outputs:	0-1V, 0-10V or 4-20 ma linear
Sample Flow Rate:	1 LPM (2.2 SCFH)
Sample Pressure:	-10" W.C. to 50 PSI (Sample pressure regulation or pump can be provided.)
Size and Weight:	Wall mount: 12" W x 14" H x 8" D Approx. 15 lbs Panel mount: 17" W x 5-3/8" H x 14" D Rack mount: 19" W x 10" H x 17" D Explosionproof: 18" W x 26" H x 10" D 77 lbs
Connections:	All tubing connections 1/4" stainless steel FNPT (metric available)
Power:	115VAC 50/60Hz (other voltages available)

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

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