

NOVA

Dependable Gas Analysis Solutions

MODEL 3255

PORTABLE ANALYZER FOR PPM OXYGEN & LOW RANGE DEW POINT



APPLICATIONS

Designed for use on low oxygen (O_2) and low dew point (DP) process gases.

FEATURES

- Compact & easy to use
- Rechargeable battery operation or AC
- Large LCD digital readouts with backlighting
- Built-in sample pump or pressure regulator
- O_2 ranges: 0-100 PPM to 0-10,000 PPM
- Dew point ranges of -58° to $+68^\circ F$ or -50° to $+20^\circ C$
- Customer-replaceable electrochemical O_2 sensor
- Long-life aluminum oxide (AlO_2) dew point sensor
- Last sample locked into sensors when analyzer is not in use
- Can be field calibrated

OPTIONS

- Recorder outputs
- Bench Top (BT) or suitcase-style (K) cabinets available
- Detachable/portable datalogger
- Separate thermalconductivity hydrogen (H_2) detector (Model 3255H)

CALIBRATION

- On dry nitrogen (N_2) with known PPM moisture level for O_2 zero and DP low setting
- On analyzed PPM O_2 in N_2 for O_2 span
- On ambient air with known DP for DP span



Weatherproof (WP) Enclosure



Suitcase (K) Enclosure
(shown with H_2 option)



Bench Top (BT) Enclosure

NOVA ANALYTICAL SYSTEMS INC.

www.nova-gas.com

DESCRIPTION

The Model 3255 Portable Analyzer has been designed for the accurate measurement of both PPM levels of O₂ and low-level dew points in furnace atmosphere gas or in other dry process gases. A customer-replaceable electrochemical sensor senses the O₂. This sensor produces a small output current, which is directly proportional to the PPM level of O₂ present in the sample. The dew point is sensed by an aluminum oxide sensor that varies its electrical capacitance with moisture. The O₂ and dew point signals are then amplified and displayed on the front panel meters.

A unique feature of this analyzer is the built-in micro-blocking valves that trap the last gas sample drawn into the sensors. This ensures a rapid start and minimum purge-down time when the analyzer is used again.

The optional hydrogen detector is a thermalconductivity (TC) cell which responds rapidly to the hydrogen content of the sample gas. It is non-consumable and does not require replacing or renewing under normal operation.

SPECIFICATIONS

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

Description	
Method of Detection:	Customer-replaceable O ₂ sensor; AlO ₂ Dew Point sensor; TC cell for H ₂
Ranges Available:	0-100 PPM to 0-19,999 PPM O ₂ ; -58° to +68°F or -50° to +20°C Dew Point 0-100% H ₂
Resolution:	± 1 PPM O ₂ ; ± 1 degree C or F Dew Point; 0.1% H ₂
Accuracy and Repeatability:	± 2% of reading
Drift:	Less than 1% full scale per 8 hours
Response Time (T-90):	O ₂ sensor may require an initial purge down from air to low PPM O ₂ which may last several hours. After purge down, T90 response from 1000 to 100 PPM is 30 seconds. H ₂ is 6-8 seconds.
Ambient Temperature Range:	32° to 122°F (0° to 50°C)
Linearity:	± 1% of full scale
Size and Weight:	WP style - approx. 10" L x 7½" H x 6½" D @ 8 lbs (25.5 x 19 x 16.5 cm @ 3.6 kg) BT style - approx. 7½" W x 9½" H x 10" D @ 10 lbs (19 x 24 x 25 cm @ 4.5 kg) K style - approx. 14" L x 6" H x 10-1/2" D @ 12 lbs (35.5 x 15.2 x 26.6 cm @ 5.5 kg)
Power:	AC/DC operation. 115VAC 60Hz for recharging (220VAC 50Hz also available)
Output Options:	4-20 mA or 0-1 VDC
Alarms:	Optional

UNIQUE APPLICATIONS

All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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