NOVA

Dependable Gas Analysis Solutions

DURA NOVA

910 SERIES

CONTINUOUS ANALYZERS FOR LANDFILL GAS RECOVERY & PROCESSING




APPLICATIONS

For continuous analysis of oxygen (O_2), methane (CH_4), and/or carbon dioxide (CO_2) in recovered gases from landfill sites.

913C - O_2, CH_4, & CO_2 analysis with auto-calibration and optional stainless steel cabinet

FEATURES

- Automatic analyzer calibration with color touch screen LCD display
- 'Cal-Now' feature initiates full calibration with a single swipe of magnetic wand
- Temperature-controlled sensors for maximum stability
- Long-life electrochemical O_2 sensor
- Infrared detector for reliable measurement of CH_4 & CO_2
- Stainless steel hard tubing and corrosion-resistant components for internal sample path
- Cabinet positive-pressure system to minimize the corrosive effects of hydrogen sulfide (H_2S) on cabinet electronics & sensors
- Built-in sample pump, pre-filter, filters, and flow meter
- Automatic condensate removal
- Back pressure regulator minimizes vacuum effects if the sample is vented back to blower
- Rugged NEMA4 (IP65) enclosure
- Isolated 4-20mA output for each gas
- Low flow alarm & relay

CALIBRATION

- Ambient air for O_2 span and CO_2 & CH_4 zero
- Analyzed calibration gas of CO_2 and CH_4 in nitrogen for CO_2 & CH_4 span and O_2 zero

OPTIONS

- Gas High/Low alarms with relay contacts
- RS232, RS485, MODBUS®, and Ethernet outputs
- Class 1 Division 2 Group BCD rated purge kit for use in hazardous areas
- Outdoor weather packages for operation from -30°C (-22°F) up to 55°C (131°F)
- In-cabinet LEL monitor to interrupt analyzer power in the event of an internal gas leak

NOVA ANALYTICAL SYSTEMS

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DESCRIPTION

The Nova 910 Series analyzers have been designed for monitoring recovered and processed gases from landfill sites. This equipment continuously removes moisture from the wet sample gas without the need for cooling water or compressed air. The 910 Series comes complete with pre-filter, sample pump, flow meter, continuous moisture removal system, long-life O_2 sensor, infrared CO_2/CH_4 detector, low flow sensor, alarm relay contacts, and 4-20mA outputs for each gas measured. Sensors / detectors are mounted in an internal dedicated enclosure which is heated and temperature controlled to reduce drift due to ambient temperature swings. The internal sensor enclosure is removable to allow quick field change of sensors. The infrared detector can be cleaned in the field if necessary by the on-site technician. Environmental management packages are available to allow operation of analyzer outdoors in temperatures from -30°C (-22°F) up to 55°C (131°F).

All calibration functions are controlled through the display rather than through manual potentiometers. The operator only has to input the calibration frequency and leave calibration gas cylinder connected to the analyzer - the rest is automatic. Diagnostics and troubleshooting information are also included in the display interface. This assists operators to quickly determine the cause of an alarm and get the analyzer back on line.

MODELS

- **910C** - O_2
- **911C** - CH_4
- **912C** - O_2 and CH_4
- **913C** - O_2, CH_4, and CO_2
- **914C** - CH_4 and CO_2

SPECIFICATIONS

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

Description	
Method of Detection:	O_2 by electrochemical sensor, CH_4 & CO_2 by infrared detector
Ranges Available:	0-25.0% O_2; any range between 0-50.0% to 0-100.0% CH_4, CO_2
Resolution:	0.1% on CO_2, O_2, & CH_4
Accuracy and Repeatability:	±1% of full scale
Drift:	Less than 2% of full scale per month
Response Time (T-90):	Less than 30 seconds not including sample line delay
Ambient Temperature Range:	40 to 104°F (4 to 40°C). Option: -30°C to 55°C (-22°F to 131°F) with Outdoor Pkg.
Linearity:	±1% of full scale for each gas measured
Size and Weight:	Approx. 24" H x 24" W x 10" D @ 90 lbs (61 x 61 x 25 cm @ 41 kg) Physical data may vary depending on options required
Power:	115VAC 60Hz (220VAC 50Hz available)
Output Options:	Isolated 4-20mA standard; RS232, RS485, MODBUS®, Ethernet outputs optional
Alarms:	Optional: High O_2, high CO_2, low CH_4, low flow; SPDT relays with 10A contacts

NOVA ANALYTICAL SYSTEMS
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