

# NOVA

Dependable Gas Analysis Solutions

## 334 SERIES PORTABLE HELIUM ANALYZER



### APPLICATIONS

For checking helium (He) concentration in a single other background gas, such as nitrogen.

### FEATURES

- Rugged design that is easy to operate and maintain
- Fast warm up and response
- Long life thermal conductivity cell that provides accurate and stable readings
- Digital meter readout with backlight
- Rechargeable 'gel cell' battery operated
- Built-in sample pump
- Lightweight, compact and easy to use
- Weatherproof (WP) cabinet with clear lexan cover

### OPTIONS

- Recorder outputs of 0-1V or 4-20mA
- Sample pre-cooler for hot samples
- Suitcase (K) style cabinet available
- Helium alarm with LED
- Detachable/portable datalogger

### CALIBRATION

- Ambient air for zero
- 100% He calibration gas for span



Weather Proof (WP) Enclosure



Suitcase Style (K) Enclosure

NOVA ANALYTICAL SYSTEMS

[www.nova-gas.com](http://www.nova-gas.com)

## DESCRIPTION

The Nova 334 Portable Analyzer has been designed for the detection of He primarily in air or nitrogen (N<sub>2</sub>). However it can be used in some other applications with several background gases present. Consult Nova on these applications.

The thermal conductivity (T/C) cell provides a fast and accurate measurement of He. It has an expected life of over 10 years unless contaminated.

In operation, a built-in sample pump draws in the gas sample through the probe, filters, flow meter, then on to the T/C cell. For samples under pressure, a pressure regulator is supplied. The detected He is displayed on an LCD digital meter which has a switchable back light for use in dark areas.

A rechargeable 'gel cell' battery provides enough power for approximately 8 hours of continuous operation and the analyzer can be used while it is being recharged. A red LED tells when to recharge and a green LED verifies that it is receiving recharging power. The recharger is included. The analyzer may be used while it is charging.

## SPECIFICATIONS

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

### Description

**Method of Detection:** Temperature compensated thermal conductivity (T/C) cell cannot be burned out due to loss of flow or changing gases

**Ranges:** 0-100.0% He in air or in N<sub>2</sub>

**Resolution:** 0.1% of He

**Accuracy and Repeatability:** ± 2% of full scale

**Drift:** ± 1% of full scale per week

**Response Time:** 90% of final reading in 10 seconds

**Ambient Temperature Range:** 55° to 120°F (12° to 50°C)

**Linearity:** ± 2% of F.S. on He in Air or Nitrogen

**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)  
K style - approx. 14" L x 6" H x 10½" D @ 8 lbs (35.5 x 15.2 x 26.6 cm @ 3.6 kg)

**Power:** AC/DC operation. 115VAC 60Hz for recharging (220VAC 50Hz available)

**Output Options:** 4-20 mA or 0-1 VDC

**Alarms:** Helium alarm with LED (optional)

## UNIQUE APPLICATIONS

The Nova T/C cell will respond in the presence of many gases and may need to be compensated either directly in the analyzer or in the calibration gas. Consult Nova on these types of applications.



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