

# Series 1300 Trace N<sub>2</sub> in Helium Analyzer



Series 1300 Trace Nitrogen in Helium Analyzer

Nitrogen impurity  
measurement made fast,  
simple, reliable, and accurate

## Features

- Guaranteed 10 ppb sensitivity
- Measuring system based on spectral emission of helium plasma
- Exceptional detector performance by utilizing patented electro-optical modulation
- On-line continuous trending
- Fast response...Fast recovery
- 4-20 mA output
- Dry contacts for over range indication
- Dry contacts for range selection indication
- No valves, columns, or carrier gas
- No radioactive source
- No sensor or detector to replace
- Maintenance free
- Available in two configurations
  - 0-2/0-20 parts per million (ppm)
  - 0-20/0-200 ppm

## Practical Applications

- Cryogenic truck loading stations
- Specialty gas laboratories
- Process control
- New line certification
- Gas management/monitoring systems
- Quality control for truck fills & gas cylinders
- Welding gas management
- Semiconductor manufacturing

**SB-1300**



### **Global Headquarters**

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## Specifications – Series 1300 Trace Nitrogen in Helium Analyzer

<b>Measurement Ranges</b>	0 - 2 ppm N <sub>2</sub> in Helium 0 - 20 ppm N <sub>2</sub> in Helium 0 - 200 ppm N <sub>2</sub> in Helium
<b>Accuracy</b>	± 0.02 ppm N <sub>2</sub> in Helium on 0 - 2 ppm range ± 0.25 ppm N <sub>2</sub> in Helium on 0 - 20 ppm range ± 2.50 ppm N <sub>2</sub> in Helium on 0 - 200 ppm range
<b>Sample Flow Required</b>	2 scfh (0.88 slpm)
<b>Sample Conditions</b>	1/4" VCR® sample inlet 1/4" Swagelok® vent
<b>Recommended Calibration Gases</b>	<i>For 0 - 2 ppm Range:</i> zero gas: N <sub>2</sub> -free helium span gas: 1.60 - 2.00 ppm N <sub>2</sub> in helium <i>For 0 - 20 ppm Range:</i> zero gas: 0 - 2 ppm N <sub>2</sub> in helium span gas: 16 - 20 ppm N <sub>2</sub> in helium <i>For 0 - 200 ppm Range:</i> zero gas: 0 - 2 ppm N <sub>2</sub> in helium span gas: 160 - 200 ppm N <sub>2</sub> in helium
<b>Ambient Temperature Limits</b>	60 - 95 °F (16 -35 °C)
<b>Maximum Operating Pressures</b>	10 psig (69 kPa) at sample inlet 6 psig (41 kPa) on analytical cell
<b>Nominal Sample Inlet Pressure</b>	2 - 7 psig (14 - 48 kPa)
<b>Display</b>	LED Digital
<b>Output</b>	4 - 20 mA Dry contacts for range selection indication Dry contacts for over range indication
<b>Detector Type</b>	Spectroscopic emission
<b>Sensitivity</b>	± 0.01 ppm N <sub>2</sub> in helium
<b>Power</b>	<i>For 0 - 2/0 - 20 ppm unit:</i> ~ 300 W, 115/230 VAC, 50/60 Hz <i>For 0 - 20/0 - 200 ppm unit:</i> ~ 100 W, 115/230 VAC, 50/60 Hz
<b>Dimensions</b>	5.25" H x 16.625" W x 14.625" D (13.34 x 42.23 x 37.15 cm)
<b>Weight</b>	25 lbs (11.3 kg)

Specifications and features will vary depending upon system configuration and are subject to change without notice. The above specifications are established during design, but are not to be construed as test criteria for every product.

### Ordering Information

Series 1300-A.....0-2/0-20 ppm Range, 115 V  
Series 1302-A.....0-2/0-20 ppm Range, 230 V  
  
Series 1300-B .....0-20/0-200 ppm Range, 115 V  
Series 1302-B .....0-20/0-200 ppm Range, 230 V

### Warranty

The Series 1300 is warranted for a period of one year against defects in materials and workmanship.