

# Series 1200 Trace N<sub>2</sub> in Ar Analyzer



Series 1200 Trace Nitrogen in Argon Analyzer

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

## Features

- Guaranteed 10 ppb sensitivity
- Measuring system based on spectral emission of argon plasma
- Exceptional detector performance by utilizing patented electro-optical modulation
- On-line continuous trending
- Precision flow control
- 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

- Air separation plants
- Argon purification plants
- Cryogenic truck loading stations
- Specialty gas laboratories
- Process control
- New line certification
- Cryogenic steel manufacturing
- Chemical plants
- Gas management/monitoring systems
- Quality control for truck fills & gas cylinders
- Welding gas management
- Semiconductor manufacturing

**SB-1200**



### Global Headquarters

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## Specifications — Series 1200 Trace Nitrogen in Argon Analyzer

<b>Measurement Ranges</b>	0 - 2 ppm N <sub>2</sub> in Argon 0 - 20 ppm N <sub>2</sub> in Argon 0 - 200 ppm N <sub>2</sub> in Argon
<b>Accuracy</b>	± 0.02 ppm N <sub>2</sub> in Argon on 0 - 2 ppm range ± 0.25 ppm N <sub>2</sub> in Argon on 0 - 20 ppm range ± 2.50 ppm N <sub>2</sub> in Argon on 0 - 200 ppm range
<b>Sample Flow Required</b>	2 scfh (0.88 slpm)
<b>Sample Connections</b>	1/4" VCR® sample inlet 1/4" Swagelok® vent
<b>Recommended Calibration Gases</b>	<b>For 0 - 2 ppm Range:</b> zero gas: N <sub>2</sub> -free argon span gas: 1.60 - 2.00 ppm N <sub>2</sub> in argon <b>For 0 - 20 ppm Range:</b> zero gas: 0 - 2 ppm N <sub>2</sub> in argon gas: 16 - 20 ppm N <sub>2</sub> in argon <b>For 0 - 200 ppm Range:</b> zero gas: 0 - 2 ppm N <sub>2</sub> in argon span gas: 160 - 200 ppm N <sub>2</sub> in argon
<b>Ambient Temperature Limits</b>	60 - 95 °C (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 Argon
<b>Power</b>	<b>For 0 - 20/0 - 200 ppm unit:</b> ~ 100 W, 115/230 VAC, 50/60 Hz <b>For 0 - 2/0 - 20 ppm unit:</b> ~ 300 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 1200-A ..... 0-2/0-20 ppm Range, 115 V  
Series 1202-A ..... 0-2/0-20 ppm Range, 230 V

Series 1200-B ..... 0-20/0-200 ppm Range, 115 V  
Series 1202-B ..... 0-20/0-200 ppm Range, 230 V

### Warranty

The Series 1200 is warranted for a period of one year against defects in materials and workmanship.

