

GOW-MAC[®]
INSTRUMENT CO.

Series 1300 Trace N₂ 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
- 19" Rack Mount or Bench Top
- 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

Specifications — Series 1300 Trace Nitrogen in Helium Analyzer

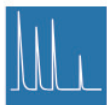
Measurement Ranges	0 - 2 ppm N ₂ in Helium 0 - 20 ppm N ₂ in Helium 0 - 200 ppm N ₂ in Helium	
Accuracy	± 0.02 ppm N ₂ in Helium on 0 - 2 ppm range ± 0.25 ppm N ₂ in Helium on 0 - 20 ppm range ± 2.50 ppm N ₂ in Helium on 0 - 200 ppm range	
Response Time	90% of full scale: 11 seconds 95% of full scale: 13 seconds	
Sample Flow Required	2 scfh (0.88 slpm)	
Sample Conditions	1/4" VCR® sample inlet 1/4" Swagelok® vent	
Recommended Calibration Gases	<i>For 0 - 2 ppm Range:</i> zero gas: N ₂ -free helium span gas: 1.60 - 2.00 ppm N ₂ in helium <i>For 0 - 20 ppm Range:</i> zero gas: 0 - 2 ppm N ₂ in helium span gas: 16 - 20 ppm N ₂ in helium <i>For 0 - 200 ppm Range:</i> zero gas: 0 - 2 ppm N ₂ in helium span gas: 160 - 200 ppm N ₂ in helium	
Ambient Temperature Limits	60 - 95 °F (16 - 35 °C)	
Maximum Operating Pressures	10 psig (69 kPa) at sample inlet 6 psig (41 kPa) on analytical cell	
Nominal Sample Inlet Pressure	2 - 7 psig (14 - 48 kPa)	
Display	LED Digital	
Output	4 - 20 mA Dry contacts for range selection indication Dry contacts for over range indication	
Detector Type	Spectroscopic emission	
Sensitivity	± 0.01 ppm N ₂ in helium	
Power	~ 100 W, 115/230 VAC, 50/60 Hz	
Dimensions	5.25" H x 16.625" W x 14.625" D (13.34 x 42.23 x 37.15 cm)	
Weight	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



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Analytical instruments since 1935

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SB-1300 1221

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Printed in the U.S.A.

