

LINE / 8000

ORTHODYNE®
GAS CHROMATOGRAPHY

AZ8001

TRACE NITROGEN IN ARGON,
HELIUM AND CRUDE ARGON ANALYZER



The AZ8001 is an online analyzer to monitor trace N_2 in Ar/He/ Crude Argon. Plasma emission detector is used to selectively measure trace N_2 in Argon or/and Helium bulk gases. The analysis of trace N_2 in Neon, Xenon and Krypton can also be realized.



FEATURES

- Trace Nitrogen in Argon/Helium/
Crude Argon
- Compact 3U rackmount enclosure
- Large scale measurement
- 4-20 mA outputs as standard
- LAN/Web control
- Range Identification Relay
- Micro-valve for very low dead vo-
lume and fast purging time
- Low sample consumption
- Optional zero gas calibration free
system
- Touchscreen 7" HMDI TFT Display

APPLICATIONS

- Air separation unit
- Helium cryogenic installation
- Cryogenic truck loading station
- Specialty gas laboratories
- Process control
- Argon purification plant
- Steel Industries
- Chemical plants
- Welding gas control
- Helium liquification plants
- Gas management system
- Semiconductor manufacturing
- Quality control for truck fills and gas
cylinders
- Inert glove box systems
- Universities and laboratories

SPECIFICATION AZ8001

DETECTOR TYPES	Plasma Emission Detector for N2	
RANGE FOR N2	0 – 1 ppm, resolution to 10 ppb 0 – 10 ppm, resolution to .1 ppm	0 – 100 ppm, resolution to 1 ppm other range possible up to 5000 ppm configurable
Standard features	<ul style="list-style-type: none"> • Manual or autoranging (user selectable) • Microprocessor controlled • Touchscreen 7" HMDI TFT Display • Self-diagnosis system with auto-resolve alarm • 4-20 mA isolated outputs 	<ul style="list-style-type: none"> • Alarm Historic • Safe calibration procedure to avoid any bad calibration • Digital outputs for remote monitoring: (all dry relay contacts) <ul style="list-style-type: none"> - System status (1 output) - Range in use (3 outputs per impurity)
OPTIONS	<ul style="list-style-type: none"> • Internal sampling system for zero, span and sample 	<ul style="list-style-type: none"> • Serial port: RS-232 / 422 / 485 / Profibus • 2 alarm outputs (user programmable set point) • Zero calibration gas free system
GAS CONNECTIONS	Sample: 1/8" compression fittings	Vent: 1/8" compression fitting
CALIBRATION GAS	Zero: Purifier gas (Getter)	Span: 8.0 to 9.5 ppm N2 (application dependent)
SAMPLE FLOW REQUIREMENTS	75 to 200 sccm	
OPERATING TEMPERATURE	10 °C to 45 °C	
SUPPLY	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
ACCURACY	Better than $\pm 1\%$ full scale	
DRIFT	$< \pm 1\%$	
RESPONSE TIME	T90 < 10 seconds	
OPERATING SAMPLE PRESSURE RANGE	3-30psig (for lower sample pressure requirement, an additional high purity pump is used)	
OUTLET PRESSURE	Atmospheric	
ENCLOSURE TYPE	3U rackmount type	
INGRESS PROTECTION	IP20 in accordance with IEC 60529	
ENCLOSURE FINISH	RAL7030 powder coat	
CERTIFICATION	In compliance with EMC directives: IEC 61000-4-3: 2020, IEC 61000-4-6: 2013, IEC 61000-4-2: 2008, IEC 61000-4-4: 2012, IEC 61000-4-5: 2014 A1: 2017, IEC 61000-4-8: 2009, IEC 61000-4-11: 2020 for immunity & CISPR 32: 2015 A1: 2019, FCC Part 15, Subpart B: 2021, CISPR 32: 2015 A1: 2019, FCC Part 15, Subpart B: 2021 for emissions.	
WEIGHT	29 lbs (13 kg)	

DIMENSIONS

