



TELEDYNE
ANALYTICAL INSTRUMENTS
Everywhereyoulook™

Model
2120XL
Trace Nitrogen Analyzer
Plasma Ionization Technology

FEATURES:

- For use in Argon or Helium background
- 10 ppb detectable limit
- Maintenance-free
- No switching valves, column or carrier gas required
- Integral digital sample flow control
- Microprocessor-based electronics with menu-driven functionality and diagnostics
- Large, luminescent LCD display and 2x20 vacuum fluorescent display to show menu functions and parameters
- Profibus DP ready with Teledyne Valve Box



MODEL 2120XL - Trace Nitrogen Analyzer

In many argon or helium gas supply systems, the detection of trace nitrogen (N_2) is essential in determining system integrity. Teledyne Analytical Instruments Model 2120XL is the new standard in this critical measurement. It provides continuous and accurate nitrogen analysis using field-proven emission spectroscopic technology in a space-saving 19" rack-mount 3U package.

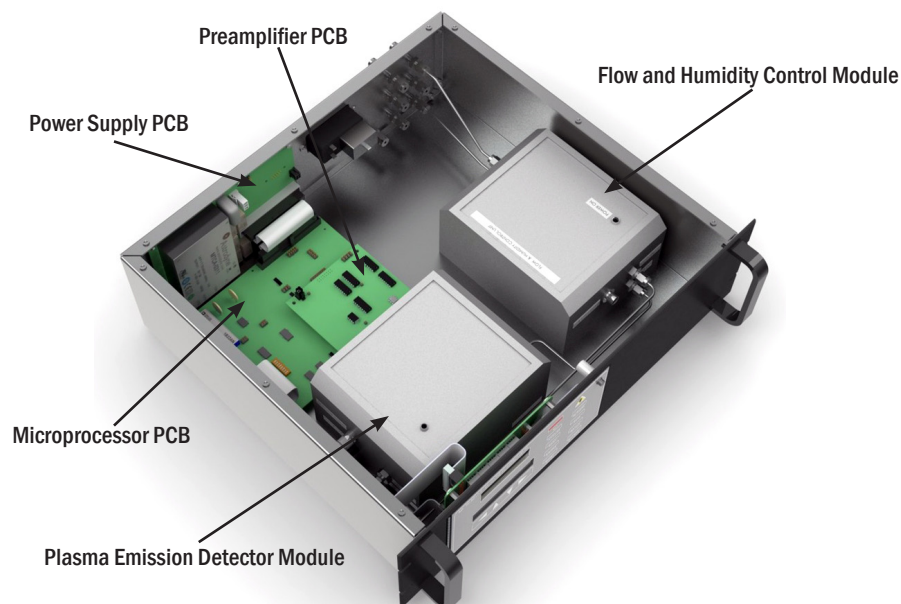
The 2120XL's unique design raises the bar for reliability available on the market. The 2120XL uses a menu-adjustable, digitally controlled sample flow for all applications. During operations, the 2120XL allows for a wide range of pressures without affecting readings with a low overall sample flow requirement. Its plasma emission detector design is based on a unique Duty Cycle Controlled System which dramatically reduces contamination and coating inside the plasma cell, offering a more efficient, reliable, and accurate analyzer than any other system available.

Its non-consuming sensing technology requires no regular maintenance or replacement intervals, providing ultra-low detectability without the maintenance overhead of similar high-performance systems. Even when maintenance is required, the 2120XL offers ease of access to all internal components which minimizes down time. A new design and specialized components also minimize necessary volume for purge-down time.

The 2120XL operates with microprocessor-based electronics utilizing menu-driven functionality. Users are provided a large, luminescent LCD display and 2x20 vacuum fluorescent displays to show all menu functions and parameters. A preamplifier with multiple stage gains supports a wide dynamic operating range. The 2120XL also offers a full diagnostics suite including a display of raw millivolt signal for troubleshooting.

APPLICATIONS:

- Air separation unit
- Cryogenic truck loading station
- Specialty gas laboratories
- Process control
- Argon purification plant
- Steel Industries
- Chemical plants
- Welding gas control
- Helium liquefaction plants
- Gas management system
- Semiconductor manufacturing
- Quality control for truck fills and gas cylinders



MODEL 2120XL - Trace Nitrogen Analyzer

ELECTRONICS/INTERFACE:

- Microprocessor based electronics
- User-settable ranges
- 4-20mA isolated analog output
- Self-diagnostics with Form-C system alarm contact
- Two (2) fully-programmable concentration alarms with Form-C contact
- Range Identification: Form-A contacts and 0-1 VDC
- RS-232 bi-directional serial output
- Digitally-settable flow rate
- Optional integral auto-calibration valve manifold
- Profibus DP communications option when used in conjunction with TAI Valve Box

OPTIONAL EQUIPMENT:

- Moisture trap (TAI part number S1766)
- Scrubber for purification of zero gas (TAI part number S1748)

SPECIFICATIONS:

Range	0-1, 0-10, 0-100 ppm, user-settable, fixed or auto-ranging. Higher ranges optional
Resolution	PPM Readout: 0.01 ppm below 10.0 ppm, 0.1 ppm at or above 10.0 ppm PPB Readout: 0.1 ppb
Accuracy	1% of full scale
Drift	1% of full scale
Gas Connections	1/8 inch tube fitting
Calibration Gas	Zero: purified argon/helium” and “Span: PPM nitrogen in argon/helium
Sample Flow	20-200 sccm, programmable
Operating Pressure	4-30 psig
Operating Temperature	10-35°C (50-95°F)
Power	110-240 VAC 50/60 Hz, 60 watts max
Dimensions (HxWxD)	5.22 x 19.00 x 18.40 in (132.6 x 482.6 x 467.4 mm) (3U form factor)
Weight	Approximately 35 pounds



 **TELEDYNE ANALYTICAL INSTRUMENTS**
Everywhere you look™

**Teledyne Analytical Instruments
(TAI) - Factory**
16830 Chestnut Street
City of Industry, CA 91748, USA
TOLL FREE (888) 789-8168
TEL: 626.934.1500
FAX: 626.934.1651
www.teledyne-ai.com

TAI - South America
Angel Luhia (consultant)
Av. Dellepiane 4208
(C1407H2W) Buenos Aires
ARGENTINA
TEL & FAX: 54.11.4601-0050
MOB: 54.911.5388-3664
E-mail: aluhia@taisudamerica.com.ar
E-mail: info@taisudamerica.com.ar

**TAI - Houston & Gulf Coast
Region USA**
Shana Kiser
Sales Engineer
TEL: 281.557.8740
MOB: 281.685.3758
FAX: 281.557.8741
E-mail: skiser@teledyne.com

TAI - So. East Asia
Soo Keong Lim
No. J-03-2, Dataran Glomac
Jalan SS6/18, Pusat Bandar Kelana Jaya
47301 Kelana Jaya
Selangor
MALAYSIA
TEL: 603.7805.7712
FAX: 603.7805.7710
MOB: 6012.2010.610
E-mail: slim@teledyne.com

TAI - Southeast USA
Dave Solomon
Sales Manager
TEL: 281.471.2935
MOB: 281.414.8236
FAX: 281.471.3091
E-mail: dsolomon@teledyne.com

TAI - Middle East and India
Manoj Kumar
PO Box 8976
Y2-113 SAIF Zone
Sharjah
UNITED ARAB EMIRATES (UAE)
TEL: 971.6.5575.704
MOB: 971.5.0634.5537
E-mail: mkumar@teledyne.com

Warranty

Instrument is warranted for one year against defects in material or workmanship

NOTE: Specifications and features will vary with application. The above are established and validated during design, but are not to be construed as test criteria for every product. All specifications and features are subject to change without notice.

