TELEDYNE
ANALYTICAL INSTRUMENTS
Everywhereyoulook™

3000ZA2G Series

Trace / Percent Oxygen Analyzer

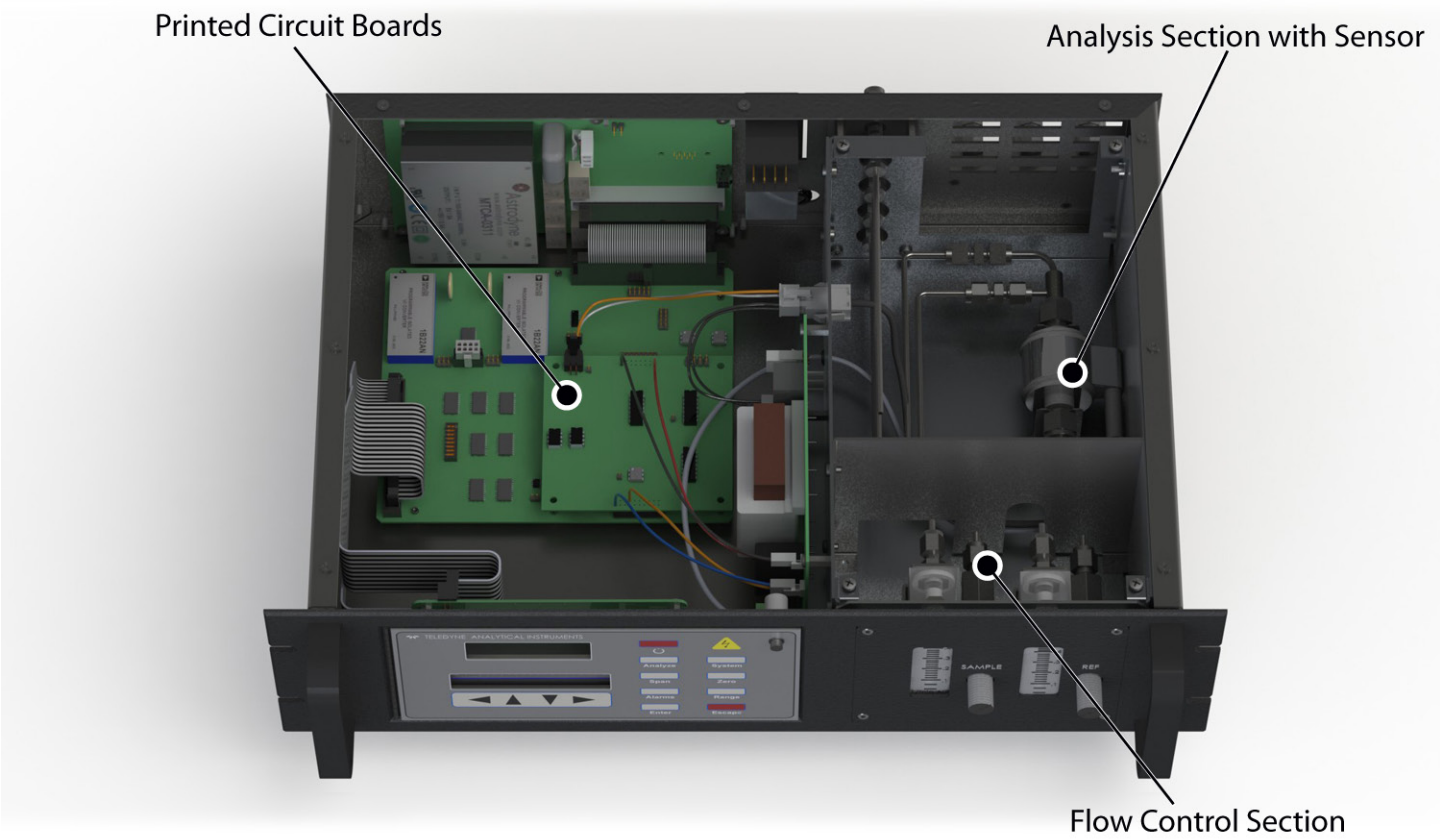
Zirconium Oxide Technology

FEATURES:

- Single-sensor design provides complete analysis range from 0-10 ppm to 0-25%
- -XL configuration provides ranging down to 0-1 ppm
- Fast response time from percent to trace ranges
- 3-5 year expected sensor life
- Maintenance-free
- Front-accessible flow control and monitoring devices
- 5-digit LED display and luminescent 2x20 vacuum fluorescent display to show menu functions and parameters
- 3U 19” rack form factor minimizes rack space requirement



MODEL 3000ZA2G - Trace / Percent Zirconium Oxide Analyzer



The 3000ZA2G combines the reliability, flexibility and ease of use of the 3000 platform with the dynamic functionality of zirconium oxide (ZrO2) sensing technology to offer a perfect solution for universal oxygen monitoring in inert gas applications.

Zirconium oxide is a non-consuming, solid state sensor. Under a high temperature of 1070°F (575°C), the difference in oxygen partial pressure between the measuring and reference surfaces will create a millivolt differential logarithmically proportional to the difference in PO2. An instrument air reference is used in the 3000ZA2G. The electronic circuitry conditions in the voltage differential and uses an integral microprocessor to provide a volumetric reading and other electronic functionality.

The 3000ZA2G's microprocessor-based electronics utilize 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 with reliable performance.

ELECTRONICS/INTERFACE:

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

MODEL 3000ZA2G - Trace / Percent Zirconium Oxide Analyzer

SPECIFICATIONS:

Type	3000ZA2G	3000ZA2G-XL
RANGE	3 user-settable ranges, 0-10 ppm to 0-25%	3 user-settable ranges, 0-1 ppm to 0-25%
ACCURACY	±2% of the active range at constant temperature	±2% of the active range at constant temperature ±0.2 ppm on 0-1 ppm range
REPEATABILITY	±1% of the active range at constant temperature	±1% of the active range at constant temperature ±0.2 ppm on 0-1 ppm range
RESPONSE TIME (T90)	30 seconds on 0-10 ppm range 15 seconds for higher trace and percent ranges	100 seconds on 0-1 ppm range 30 seconds on 0-10 ppm range 15 seconds for higher trace and percent ranges
GAS CONNECTIONS	1/8" tube fitting, 316SS	
SAMPLE FLOW	0.2 – 0.6 SCFH (100 – 300 sccm)	
REFERENCE GAS	Instrument air, 0.2 – 0.4 SCFH (100 – 200 SCCM) flow rate	
OPERATING TEMPERATURE	41 – 95°F (5 – 35°C)	
POWER	120 VAC or 240 VAC, 50/60 Hz	
DIMENSIONS	19.00" L x 5.22" H x 14.41" D (483 x 133 x 366 mm)	
WEIGHT	Approximately 30 pounds, configuration dependent	

TAI Representative:

TELEDYNE ANALYTICAL INSTRUMENTS
Everywhereyoulook™

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: Shana.Kiser@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: Soo.Lim@teledyne.com

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

TAI - Middle East and India
Manoj Kumar
P.O. Box 121744, Z -19 Building
SAIF Zone, Sharjah
UNITED ARAB EMIRATES (UAE)
TEL: 971.6.5579727
MOB: 971.50.6345537
E-mail: Manoj.Kumar@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.

ISO 9001:2008 - QMS