

3300 Series

Trace and Percent Oxygen Analyzers



The 3300 series of low cost, microprocessor-based instrument are specially designed to satisfy industry's need for a simple yet highly reliable process analyzer. These units offer excellent accuracy, ease of use, high reliability, low maintenance and a variety of standard features usually found on more expensive instruments.

Advantages

Multiple Configurations

This series is a cost-effective solution to many process applications. With three different sensing technologies to choose from and multiple design configurations, a customized unit for a given application is easily secured. Sensing ranges are varied based on the oxygen sensor and technology used. All units come with an auto-ranging capability and a 0-25% calibration range. Fully adjustable high or low concentration alarms provide the versatility to satisfy nearly any requirement.

Outputs for Data Transmission

A standard 0-10 VDC output provides range identification, while the oxygen concentration is output through 4-20 mA DC negative ground and 0-10 VDC negative ground signals. An optional unidirectional RS-232 serial interface can be incorporated to relay information to a host computer for remote monitoring, making information and analysis results as close as a personal computer

Additional Advantages

- Customer selectable ranges
- Auto ranging capabilities
- Fully adjustable high or low alarms set-points with corresponding relay contacts
- Digital interface allows monitoring from a remote station
- Sensor failure alarm

Configurations



(A) - 19" Rack Mount

Sensing Technologies

The 3300 Series is available with three sensing technologies, each with their own benefit.

Micro-fuel Cell - 3300T, 3300P

- Disposable, no maintenance sensor design
- Specific to oxygen
- Linear from 0-100% O₂
- Absolute zero (no O₂, no output); single point calibration only
- Unaffected by hydrocarbons, H₂ or CO₂
- Easy to handle, inexpensive and easy to replace
- Can apply to ppb, ppm and percent ranges

Zirconium Oxide - 3300Z

- Quick response time
- Long life / service in clean, non-corrosive streams
- No shelf life concerns
- Can be applied on a wide variety of applications

Paramagnetic - 3300M

- Long life / service in clean gas streams
- High accuracy
- Can be applied on corrosive, high temp. applications
- Fast response times (even on CO₂ streams)



(B) - Wall Mount Enclosure

Specifications

	3300T	3300P	3300M	3300Z
Ranges	0-10 ppm to 0-9,999 ppm with a 0-25% calibration range.	0-1 to 0-25% oxygen (0-3% and 0-10% default)	Two ranges with auto-ranging capability; field configurable between 0-3% and 0-10%	Please contact the factory
Calibration Range	0 to 25% O ₂	0 to 25% O ₂	0 to 25% O ₂	0 to 25% O ₂
Range ID	0-10 VDC	0-10 VDC	0-10 VDC	0-10 VDC
Display	4 digit LED	4 digit LED	4 digit LED	4 digit LED
Accuracy	± 2% FS at constant temperature ± 5% FS over operating temperature (once temperature equilibrium has been reached) Higher accuracy is available for special configurations			
Response Time	90% in less than 45 seconds at 77°F (25°C)	90% in less than 10 seconds at 77°F (25°C)	90% in less than 6 seconds at 77°F (25°C)	
Temperature	32° to 122°F (0° to 50°C); special temperature ranges available			
Output	For oxygen concentration: 4-20 mADC negative ground and 0-10 VDC signals For range identification: 0-10 VDC signal			
Alarm	Two fully adjustable high or low alarms; one sensor fail relay (all alarms are fail-safe)			
Power	Universal AC 85-265 VAC, 47-63 Hz			
Connections	1/4 inch or 6 mm - user specified			
Oxygen Sensor	Micro-fuel Cell	Micro-fuel Cell; Class I-22	Paramagnetic	Zirconium oxide



TELEDYNE ANALYTICAL INSTRUMENTS

Everywhereyoulook™



EMAIL: ASK_TAI@TELEDYNE.COM
WEBSITE: WWW.TELEDYNE-AI.COM

16830 CHESTNUT STREET, CITY OF INDUSTRY, CA
UNITED STATES OF AMERICA (USA)
TEL: +1 888.789.8168