



**TELEDYNE**  
**ANALYTICAL INSTRUMENTS**  
A Teledyne Technologies Company



3220 CHANNEL MODULE

## MODEL **3220** Percent Oxygen Monitoring System

Teledyne Analytical Instruments (TAI) Model 3220 Oxygen Deficiency Detection System provides a streamlined and rugged solution to monitoring breathing oxygen levels in any indoor location where compressed gases may be present.

The 3220 consists of channel modules, each capable of interface with a detector monitoring ambient oxygen levels at a remote location. Detector modules utilize TAI's Class B-3 Micro-Fuel Cell with rugged and easy-to-maintain design, simplifying maintenance.

Channel modules can be mounted in a control module, which can be provided in a 3 or 8 channel configuration available in rack, panel and wall-mount designs. Individual channels can be installed into unused slots or removed as required. Each channel module includes a 0-10 VDC or 4-20mA (negative ground) analog output and two fully-configurable alarms with Form-C contacts. Easy-to-view LEDs give local indication as to an alarm condition.



3220 3-CHANNEL & CONTROL MODULE



3220 8-CHANNEL CONTROL MODULE

# 3220 - Percent Oxygen Monitoring System

## Specifications – Control / Channel Modules

- **No. of channels:** Up to 8 per control module
- **Field connections:** Terminal strips with screw connections
- **Dimensions of 8-ch control module:** 7" H x 12.3" D x 19" W (178 mm x 312 mm x 483 mm)
- **Housing:** Aluminum, 19" rack-mount
- **Display:** Transreflective backlit 4-digit, 7-segment LCD
- **Range:** 0-25% Oxygen
- **Repeatability:**  $\pm 2\%$  of full-scale
- **Accuracy:**  $\pm 2\%$  of full-scale at constant temperature
- **Alarm indicator lights:** LED
- **Signal output:** 0-10 VDC, optional  
4-20 mA DC (negative ground)
- **Operating temperature:** 32 °F to 122 °F (0 °C to 50 °C)
- **Alarm relays:** Form-C type  
Failsafe / Non-failsafe  
Latching / Non-latching
- **Power:** 100-240 VAC 50/60 Hz  
6 W / channel nominal

## Specifications – Detector

- **Probe:** Nylon construction (others available)  
1.56" Dia x 2.63" LG  
(39.7 mm Dia x 66.7 mm LG)
- **Probe Mounting:** 2 holes, horizontal to one another,  
3/16" Dia each, 2.38" separation
- **Standard cable length:** 6 feet (1.8 meters)
- **Non-standard cables:** Available upon request
- **Sensor:** Class B-3 Micro-Fuel Cell
- **Operating Temperature:** 32 °F to 104 °F (0 °C to 40 °C)
- **Accuracy:**  $\pm 1\%$  of full-scale
- **Response Time:** 90% of scale in less than  
13 seconds
- **Expected life:** 12 months on air exposure



CONTROL MODULE  
SYSTEM ENCLOSURE



16830 Chestnut Street  
City of Industry, CA 91748, USA

TEL: (626) 934-1500 or (888) 789-8168

FAX: (626) 934-1651

E-MAIL: ask\_tai@teledyne.com

[www.teledyne-ai.com](http://www.teledyne-ai.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.

