

# **TELEDYNE** **ANALYTICAL INSTRUMENTS**



## ***SERIES 3110*** ***Trace Portable*** ***Oxygen Analyzer***

**T**he Model 3110 represents the new generation of portable trace oxygen analysis capability for the natural gas industry.

The 3110 combines a rugged, portable analyzer design with the high reliability of Teledyne trace level sensors. This ensures highly accurate ppm oxygen readings in a variety of background gases -- including hydrocarbons. The batteries supply at least 100 hours of continuous power to the analyzer, with a low-battery indicator LED.

The system is equipped with a flowmeter and needle valve filter (optional), and includes quick-disconnect fittings, giving the user the ability to take measurements without hassle. The microprocessor-based electronics provide accurate, high resolution readings and easy-to-use features.

### ***Ideal for the Natural Gas industry***

#### **OPTIONS**

- Analog voltage output
- User controlled dual-ranges with alarm options
- Real-time data-logging capabilities with digital output that can be downloaded directly to a PC

The electrical and mechanical designs meet the specifications for intrinsic safety.

#### **APPLICATIONS**

- Air separation and liquefaction
- Pure gaseous hydrocarbon stream monitoring
- Semiconductor manufacturing
- Protective atmosphere blanketing of primary liquid feedstocks and flammable liquids
- Process analysis of gaseous monomers – vinyl chloride, propylene, butadiene, isoprene, or ethylene
- Gas purity certification
- Glove box or pipeline leak detection
- Natural gas treatment and transmission
- Catalyst protection
- Inert gas welding of exotic metals
- Wave and reflow soldering
- Heat treating and bright annealing
- Nuclear fuel processing and isotope separation
- Analysis of chemical reactions
- Headspace gas analysis
- Crystal growth
- Plastics manufacturing

**Built for Reliability and Performance**

# Model 3110 Portable O2 Analyzer

## SPECIFICATIONS

Ranges:	2 user selectable ranges between 0-10 ppm to 0-25% (depending on sensor selection)
Display resolution:	10 ppb
Response time:	90% in 61 seconds
System operating temperature:	0 to 40°C
Reproducibility:	±1% at constant temperature
Sensor type:	Class B-2C
System power	AC power for battery recharge circuit of two current limited rechargeable NiCad batteries, 115 VAC, 50/60 Hz (100 / 220 VAC optional) 0.25 amps
Weight:	6 lbs. (2.71 kg)
Approval:	Intrinsically safe (Class I, Division 1, (Standard) Groups A, B, C, and D) Factory Mutual (FM) (pending) (Cenelec) BASEEFA certified for EExibICT4 intrinsically safe for zone 1 and 2; hydrogen, ethylene, oxide; temperature class - no surface temperatures above 135°C (pending)

## OPTIONS

- Sample system consisting of coalescing filter, regulator, tubings and fittings
- 100 or 220 VAC; charged by universal AC charging circuit
- Stainless steel, quick disconnect gas fittings
- Can interface with Total Flow™ natural gas flow monitoring system

## FEATURES

- Two user selectable ranges between 0-10 ppm and 0-25% (depending on sensor selection)
- Digital meter readout
- 0-1 VDC output, data logging capabilities
- Ideal for measuring O2 in natural gas and other inert gases
- Long-life, maintenance-free, Micro-fuel Cell oxygen sensor

## TELEDYNE ANALYTICAL INSTRUMENTS

A Teledyne Technologies Company

16830 Chestnut Street  
City of Industry, California 91748, USA

TEL: 626-934-1500 or 888-789-8168  
FAX: 626-934-1651 EMAIL: ask\_tai@teledyne.com

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

## Warranty

Instrument is warranted for 1 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.

