



**TELEDYNE**  
ADVANCED POLLUTION INSTRUMENTATION  
A Teledyne Technologies Company

MODEL **802E**

# Paramagnetic O<sub>2</sub> Analyzer



- ▶▶ **Standard two year warranty**
- ▶▶ **Ranges, 0-1% to 0-100%, user selectable**
- ▶▶ **Dual ranges and auto ranging supported**
- ▶▶ **Microprocessor controlled for versatility**
- ▶▶ **Multi-tasking software allows viewing test variables while operating**
- ▶▶ **Continuous self checking with alarms**
- ▶▶ **Dual bi-directional RS-232 ports for remote operation (optional RS-485 or Ethernet)**
- ▶▶ **Digital status outputs indicate instrument operating condition**
- ▶▶ **Adaptive signal filtering optimizes response time**
- ▶▶ **Temperature & Pressure compensation**
- ▶▶ **Critical orifices provide flow stability**

The Model 802E uses the proven Paramagnetic principle, coupled with state of the art microprocessor technology to provide accurate and dependable measurements of Percent-Level O<sub>2</sub>.

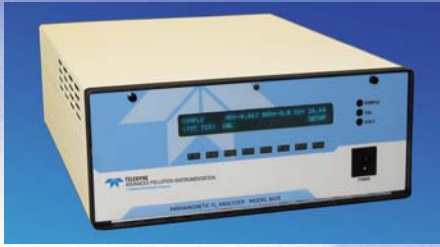
Paramagnetic technology is non-depleting, which means that there are no consumable parts, and ensures a consistent performance over time. The selectivity of the paramagnetic measurement for oxygen means that there is little or no interference from other common background gases. The 802E offers a stable and inherently linear measurement of oxygen. Making it possible to calibrate the analyzer by checking only two points. There is no requirement for a reference gas during operation.

All instruments of the TAPI E Series include an extensive built-in data acquisition capability using the analyzer's internal memory. This allows the logging of multiple parameters including averaged and instantaneous concentration values, calibration data and operating parameters such as flow and pressure.

Stored data are easily retrieved through the serial port or optional no-cost Ethernet port and viewed via our APlcom software or from the front panel, allowing operators to perform predictive diagnostics and enhanced data analysis by tracking parameter trends.

The Model 802E combines light-weight, rugged construction, ease of use, powerful diagnostics, modular design and outstanding performance to yield the ideal tool for today's air monitoring requirements.

**FREE Customer Support by telephone and email for the life of the instrument**

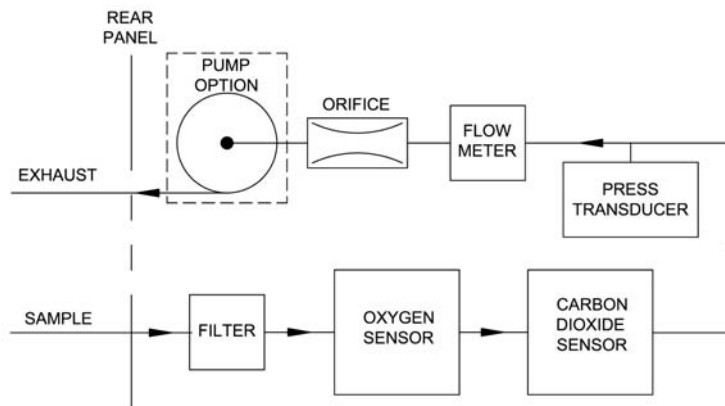


# MODEL 802E Paramagnetic O<sub>2</sub> Analyzer

## Specifications

Ranges:	0-1% to 0-100% user selectable. Dual ranges and auto-ranging supported.	Dimensions (HxWxD):	7" (178 mm) x 17" (432 mm) x 23.5" (597 mm)
Zero Stability		Weight:	28 lbs (12.7 kg)
Short Term:	< 0.1% O <sub>2</sub> in 24 hours	Power:	100-120V, 220-240V 50/60Hz
Long Term:	< 0.2% O <sub>2</sub> in 7 days	Analog Outputs:	10V, 5V, 1V, 100mV, user selectable
Span Noise:	< 0.05% O <sub>2</sub>	Recorder Offset:	±10%
Minimum Detectable Change (MDC):	< 0.1% O <sub>2</sub>	Serial Outputs:	Format (RS232/485, Ethernet, Multi-drop) One RS-232 port (DB-9 male), one RS-232 or RS-485 User Selectable (DB-9 female)
Lag Time:	< 10 seconds	Status (Digital):	8 outputs, 6 inputs (opto-isolated), 6 alarm outputs (optional)
Rise and Fall Time:	< 60 seconds to 95%	Current Output:	Optional 4-20mA, select up to three channels
Linearity:	< 0.1% O <sub>2</sub>		
Repeatability:	< 0.01% O <sub>2</sub>		
Sample Flow Rate:	Max/Min 130ml ± 20ml/min		
Operating Temperature Range:	5 - 40°C		
Humidity Range:	0-95% RH		
Pressure Range:	25-31 in Hg		

## Schematic



## How to Order

### Model 802E Paramagnetic O<sub>2</sub> Analyzer includes::

- Standard two year warranty
- Selectable voltage (specify below)
- Auto ranging and dual ranges
- 8 isolated digital status outputs
- Dual bi-directional RS-232
- APLcom remote control software

### Specify input AC voltage & frequency:

- 100V - 115V       50Hz  
 220V - 240V       60Hz

### Specify output DC voltage:

- 10V     5V     1V     0.1V

### Additional Options:

- Rack mount brackets (19") with chassis slides
- Rack mount brackets only
- 4-20mA outputs (specify up to three channels)
- Multi-drop RS-232 connection
- Ethernet port includes 7 ft. CAT-5 cable (disables one serial port)
- Internal pump
- CO2 sensor 0-20%

### Accessories:

- RS-232 cable
- Expendables kit
- Ethernet cable

Specifications subject to change without notice. Printed documents are uncontrolled. SAL000032 B (DCN 5437) M802E 06/19/09.