



## Model T802 Paramagnetic O<sub>2</sub> Analyzer

The Model T802 O<sub>2</sub> uses the proven paramagnetic measurement 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 T802 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 T Series instruments offer an advanced color display, capacitive touch screen, intuitive user interface, flexible I/O, and built-in data acquisition capability. All instrument set up, control and access to stored data and diagnostic information is available through the front panel, or via RS232, Ethernet, or USB com ports either locally or by remote connection using the included APIcom™ software.

- ▶ **O<sub>2</sub> Range: 0-1% to 0-100%, user selectable**
- ▶ **Dual ranges and auto ranging**
- ▶ **Large, vivid, and durable color graphics display with touch screen interface**
- ▶ **Ethernet, RS-232, and (optional) USB com ports**
- ▶ **Front panel USB connections for peripheral devices and firmware upgrades**
- ▶ **8 analog inputs (optional)**
- ▶ **Adaptive signal filtering optimizes response time**
- ▶ **Temperature & pressure compensation**
- ▶ **Comprehensive internal data logging with programmable averaging periods**
- ▶ **Ability to log virtually any operating parameter**
- ▶ **Two-year warranty**

# Model T802 Paramagnetic O<sub>2</sub> Analyzer

## Specifications

### General

Ranges:	Min: 0-1% Full scale Max: 0-100% Full scale (selectable)
Zero Noise:	< 0.02% (RMS)
Span Noise:	< 0.05% of reading (RMS)
Lower Detectable Limit:	< 0.04 %
Zero Drift:	< ±0.02%/24 hours < ±0.05%/7 days
Span Drift:	< ±0.1%/7 days
Accuracy:	< ±0.1%
Linearity:	< ±0.1%
Temperature Coefficient:	< ± 0.01% per degree C
Rise and Fall Time:	< 60 seconds to 95%
Flow Rate:	120ml ±20ml/min
Humidity Range:	0-95% RH
Pressure Range:	25-31 in Hg

### Electrical Specifications

Power Requirements:	100V-120V, 220V-240V, 50/60 Hz
Analog Output Ranges:	10V, 5V, 1V, 0.1V (selectable)
Recorder Offset:	±10%

### Communication Specifications

Included I/O:	1 x Ethernet: 10/100Base-T 2 x RS232 (300-115,200 baud) 2 x USB device ports 8 x opto-isolated digital outputs 6 x opto-isolated digital inputs 4 x analog outputs
Optional I/O:	1 x USB com port 1 x RS485 8 x analog inputs (0-10V, 12-bit) 4 x digital alarm outputs Multidrop RS232 3 x 4-20mA current outputs

### Physical Specifications

Operating Temperature Range:	5 - 40°C
Dimensions (HxWxD):	7" x 17" x 23.5" (178 x 432 x 597 mm)
Weight:	28 lbs (12.7 kg)

## How to Order

### Model T802 includes:

- Two year warranty
- Internal pump (optional)
- Dual ranges and auto ranging
- 47mm diameter particulate filter
- 8 isolated digital outputs
- 6 isolated digital inputs
- RS-232 ports
- Ethernet port
- USB ports for peripheral devices
- APIcom™ remote control software
- Select AC input voltage
  - 100V - 120V     50Hz
  - 220V - 240V     60Hz
- Select DC output voltage
  - 10V                 5V
  - 1V                  0.1V

### Mounting Options:

- Rack mount brackets with chassis slides
- Rack mount brackets only
- Handle

### I/O Options:

- 4-20mA outputs (up to three channels)
- USB com port
- 8 Analog Inputs
- Multi-drop RS232
- RS485

### Other Options:

- Internal pump
- CO<sub>2</sub> Sensor
- Concentration alarm relays
- Expendables kit

The values expressed above are in accordance with EPA definitions.  
All error specifications are based on constant conditions.  
Specifications subject to change without notice.  
Printed documents are uncontrolled. SAL000066A (DCN 5815) T802/11.24.10



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For more information about the Teledyne API family of monitoring instrumentation products, call us or visit our website at

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