



**TELEDYNE
MONITOR LABS**

A Teledyne Technologies Company

T SERIES



Model T803 CO₂ / O₂ Analyzer

The Model T803 CO₂ / O₂ analyzer combines the non-dispersive infrared measurement principle within the model T801 and the proven paramagnetic measurement principle from the T802 into a single analyzer. Both technologies yield accurate and reliable results combined with product longevity, providing the best price performance value on the market.

The CO₂ / O₂ analyzer is based on widely accepted sensor techniques, producing an excellent, rugged product designed for extractive CEM or RATA applications.

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.

- ▶ O₂ Range: 0-1% to 0-100%, CO₂ Range: 0-1% to 0-20% 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 T803 CO₂ / O₂ Analyzer

Specifications

General

CO ₂ Ranges:	Min: 0-1% full scale Max: 0-20% full scale (user selectable), dual ranges and auto ranging supported
Zero Noise:	< 0.02% (RMS)
Span Noise:	< 0.1% 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:	< ±(1.5% of range +2% of reading)
Temperature Coefficient:	< ±0.01% / °C
O ₂ Ranges:	Min: 0-1% full scale Max: 0-100% full scale (user 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% / °C
Rise and Fall Time:	< 60 seconds to 95%
Flow Rate:	120cm ³ / min ± 20cm ³ / 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) Multidrop RS232 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 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)

The values expressed above are in accordance with EPA definitions.
All error specifications are based on constant conditions.

Specifications exceed US EPA and Eignungsgeprüft requirements.
Specifications subject to change without notice.
Printed documents are uncontrolled.



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35 Inverness Dr. East, Englewood, Colorado 80112-5412
Phone: 303-792-3300 Fax: 303-799-1409
Email: tml_sales@teledyne.com

How to Order

Model T803 includes:

- Two year warranty
- External Pump
- Dual ranges and auto ranging
- 47mm diameter particulate filter
- 8 isolated digital outputs
- 6 isolated digital inputs
- RS-232 ports
- Multi-drop RS232
- 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

I/O Options:

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

Other Options:

- Concentration alarm relays
- Consumables kit
- Internal Pump and Fittings

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

www.teledyne-ml.com

Teledyne Monitor Labs, Inc. reserves the right to make changes in construction, design, specifications and/or prices without prior notice.