TELEDYNE
MONITOR LABS
A Teledyne Technologies Company

T SERIES

Model T360 Gas Filter Correlation CO_2 Analyzer

The Model T360 CO_2 analyzer measures Carbon Dioxide by comparing infrared energy absorbed by a sample to that absorbed by a reference gas according to the Beer-Lambert law. Using a Gas Filter Correlation Wheel, a high-energy IR light source is alternately passed through a CO_2 filled chamber and a chamber with no CO_2 present. The light path then travels through the sample cell, which has a folded path of 2.56 meters.

The energy loss through the sample cell is compared with the reference signal provided by the filter wheel to produce a signal proportional to concentration, with little effect from interfering gases within the sample. This design produces excellent zero and span stability and a high signal-to-noise ratio, allowing excellent performance over a wide concentration range.

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.

- **Ranges: 0-2 ppm to 0-2,000 ppm, 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**
- **Five-year warranty on GFC wheel**

Model T360 Gas Filter Correlation CO_2 Analyzer

Specifications

General

Ranges:	Min: 0-2 ppm full scale Max: 0-2,000 ppm full scale (user selectable), dual ranges and auto ranging supported
Measurement Units:	ppb, ppm, µg/m³, mg/m³ (selectable)
Zero Noise:	< 0.1 ppm (RMS)
Span Noise:	< 1% of reading (RMS)
Lower Detectable Limit:	< 0.2 ppm
Zero Drift:	< 0.25 ppm/24 hours
Span Drift:	< 0.5% of reading/24 hours
Lag Time:	10 seconds
Rise and Fall Time:	< 60 seconds to 95%
Linearity:	1% of full scale
Precision:	0.5% of reading
Sample Flow Rate:	800 cm³/min ±10%

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 - 40ºC
Dimensions (HxWxD):	7” x 17” x 23.5” (178 x 432 x 597 mm)
Weight:	40 lbs (18.1 kg)

How to Order

Model T360 includes:

- Two-year warranty, five-year on GFC wheel
- Internal 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
☐ External Pump and Fittings
☐ O_2 0-25% Paramagnetic sensor
☐ CO_2 0-20% NDIR

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

www.teledyne-ml.com

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