



## Model T100H High Range UV Fluorescence SO<sub>2</sub> Analyzer

The Model T100H SO<sub>2</sub> analyzer uses the proven UV fluorescence principle with the high measurement ranges and interferent rejection needed for extractive source monitoring. The Model T100H provides a simple but precise solution for a broad range of CEM and stack testing applications,

The instrument design provides minimal quenching by O<sub>2</sub> or CO<sub>2</sub> and less than a 0.1% response to water in the sample. Additionally, special optical filtering reduces the effects of NO interference.

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: 0-10 ppm to 0-5,000 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**
- ▶ **Fast response (<30 seconds to 95%)**
- ▶ **Comprehensive internal data logging with programmable averaging periods**
- ▶ **Ability to log virtually any operating parameter**
- ▶ **Two-year warranty**

# Model T100H High Range UV Fluorescence SO<sub>2</sub> Analyzer

## Specifications

### General

Ranges:	Min: 0-10 ppm Full scale Max: 0-5,000 ppm Full scale (selectable, dual ranges and auto ranging supported)
Measurement Units:	ppm, mg/m <sup>3</sup> (selectable)
Zero Noise:	0.1 ppm (RMS)
Span Noise:	< 1% of reading (RMS) above 10 ppm
Lower Detectable Limit:	0.2 ppm
Zero Drift:	< 1 ppm/24 hours
Span Drift:	< 0.5% of full scale/24 hours
Lag Time:	5 seconds
Rise and Fall Time:	< 30 seconds to 95%
Linearity:	1% of full scale
Precision:	0.5% of reading above 10 ppm
Sample Flow Rate:	700 cm <sup>3</sup> /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) 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:	Analyzer: 31 lbs (16 kg) External pump: 15 lbs (7 kg)

## How to Order

### Model T100H includes:

- ☐ Two year warranty
- ☐ External pump or 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

### Calibration Options:

- ☐ Ambient zero and ambient span
- ☐ Ambient zero and 2 ambient span

### 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:

- ☐ Paramagnetic O<sub>2</sub> Sensor
- ☐ CO<sub>2</sub> Sensor
- ☐ Hydrocarbon kicker
- ☐ 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. SAL000040A (DCN 5815) T100H/10.25.10



9480 Carroll Park Drive ■ San Diego, CA 92121-5201  
Ph. 858-657-9800 Fax 858-657-9816  
Email api-sales@teledyne.com

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

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

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