



Model T102 UV Fluorescence TRS Analyzer

The Model T102 TRS analyzer uses the proven UV fluorescence principle to measure Total Reduced Sulfur at levels commonly required for ambient air monitoring.

The Model T102 uses a high temperature external converter set at 850°C to allow conversion of H₂S, methyl mercaptan, dimethyldisulfide, and methyl-disulfide to SO₂ with efficiency greater than 98%. A switching option alternately measures TRS and SO₂ while showing both readings concurrently on the front display.

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: 0-50 ppb to 0-10 ppm TRS and up to 20 ppm SO₂, user selectable
- ▶ Independent 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
- ▶ Auto zero system
- ▶ Comprehensive internal data logging with programmable averaging periods
- ▶ Ability to log virtually any operating parameter
- ▶ Two-year warranty

Model T102 UV Fluorescence TRS Analyzer

Specifications

General

Ranges:	TRS Min: 0-50 ppb full scale Max: 0-10 ppm full scale SO ₂ Up to 0-20 ppm full scale (user selectable), independent ranges and auto ranging supported
Measurement Units:	ppb, ppm, µg/m ³ , mg/m ³ (selectable)
Zero Noise:	< 0.2 ppb (RMS)
Span Noise:	< 0.5% of reading (RMS) above 50 ppb
Lower Detectable Limit:	0.4 ppb
Zero Drift:	< 0.5 ppb/24 hours
Span Drift:	< 0.5% of full scale/24 hours
Lag Time:	20 seconds
Rise and Fall Time:	< 120 seconds to 95%
Linearity:	1% of full scale
Precision:	0.5% of reading above 50 ppb
Sample Flow Rate:	650 cm ³ /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 - 40°C 850°C (external converter)
Dimensions (HxWxD):	Analyzer: 7" x 17" x 23.5" (178 x 432 x 597 mm) Converter: 7" x 17" x 23.5" (178 x 432 x 597 mm)
Weight:	Analyzer: 37 lbs (16.8 kg) Converter: 16 lbs (7.3 kg) Converter: 26 lbs (11.8 kg) CE version

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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How to Order

Model T101 includes:

- Two year warranty
- Internal pump
- Independent 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:

- NO optical filter (Recommended for high NO applications; Required for EN14212 approved configuration.)
- Concentration alarm relays
- Consumables kit
- External Pump and Fittings

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

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