TELEDYNE INSTRUMENTS
Monitor Labs
A Teledyne Technologies Company

sensor-e®

UV Fluorescence SO_2 Analyzer (TML50)

0-50 ppb to 0-20 ppm, user selectable

Dual ranges and auto ranging

Microprocessor controlled for versatility

Multi-tasking software allows viewing of test variables while operating

Continuous self checking with warning alarms

Ethernet and RS-232 ports for remote operation

Digital status outputs provide instrument condition

Adaptive signal filtering optimizes response time

Temperature & Pressure compensation

Internal Zero and Span check (optional)

Internal data logging with 1 minute to 24 hour multiple averages (over 500,000 records)

Critical orifices provide flow stability

Sensor-e.com remote operation software

The sensor-e® SO_2 uses the proven UV flourescence principle, coupled with state-of-the art microprocessor technology to provide accurate and dependable measurements of low level SO_2. Exceptional stability is achieved with the use of an optical shutter to compensate for PMT drift and a reference detector to correct for changes in UV lamp intensity. A hydrocarbon “kicker” and advanced optical design combine to prevent inaccuracies due to interferents. The multi-tasking software gives real time indication of a large number of operational parameters and provides automatic alarms if diagnostic limits are exceeded.

All instruments of the sensor-e® series include an extensive built-in-data acquisition capability using the analyzer’s internal memory. This allows the logging of multiple parameters (over 500,000 records) including averaged or instantaneous values, calibration data and operating parameters such as flow, pressure and lamp intensity.

Stored data are easily retrieved through the RS-232 port via sensor-e.com software or from the front panel, allowing operations to perform predictive diagnostics and enhanced data analysis by tracking parameter trends.

The sensor-e® SO_2 combines lighter weight, rugged construction, ease of use, powerful diagnostics, modular design and outstanding performance to yield the ideal tool for today’s air monitoring requirements.

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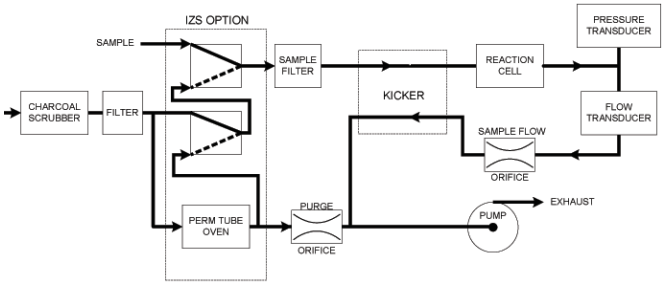

SPECIFICATIONS

Model:	TML-50
Ranges:	0-50ppb to 0-20,000 ppbfull sale, user selectable Dual ranges and autoranging supported
Units:	ppb, ppm, $\mu g/m^3$, mg/m^3
Zero Noise:	<0.2 ppb(RMS)
Span Noise:	<0.5% of reading (RMS) above 50 ppb
Lower Detectable Limit (LDL):	0.4 ppb
Zero Drift:	<0.5ppb/24 hours, 1ppb/7 days
Span Drift:	<0.5% FS/24 hours, 1% FS/7 days
Lag Time:	20 seconds
Rise and Fall Time:	<100 seconds to 95%
Linearity:	1% of full scale
Precision:	0.5% of reading above 50ppb
Sample Flow Rate:	$650cm^3$/min ± 10%
Operating Temperature Range:	5 - 40°C

Dimensions (HxWxD):	7" (178 mm) x 17" (432mm) x 23.5" (597 mm)
Weight:	35 lbs (16kg)
Power:	100V, 115V, 220-240V, 50/60Hz
Analog Outputs:	Bi-polar, 10V, 5V, 1V, 0.1V, selectable
Recorder Offset:	±10%
Serial Port 1:	RS-232, DB-9M/RS485 optional
Serial Port 2:	Ethernet
Status (Digital):	8 outputs and 6 inputs (opto-isolated)
Current Output:	Specify up to three channels
Approvals:	Contact factory for current listing

NOTE: The values expressed above are in accordance with EPA definitions. All error specifications are based on constant conditions. Specifications exceed US EPA and Eignungsgepruft requirements.

sensor-e® Flourescent SO_2 Analyzer includes:

*** Selectable voltage (specify below)**
* Internal pump
* Auto ranging and dual ranges
* 5 micron filter
* 8 isolated digital status outputs
* 6 isolated digital inputs
* Multi-drop RS-232 connection
* Ethernet Port
* Sensor-e.com software

Specify input AC voltages & frequency:

☐ 100V -115V ☐ 50HZ
☐ 220V - 240V ☐ 60Hz

Specify outputDC voltage:

☐ 10V ☐ 5V ☐ 1V ☐ 0.1V

Additional options:

☐ 4-20 mA output
☐ * NO_x optical filter (recommended for high NO_x applications).

* Required for EN14212 approved configuaration.

☐ O_2 0-25% Paramagnetic
☐ CO_2 0-20% NDIR

Accessories:

☐ RS-232 Cable
☐ Expendables Kit
☐ Spare Parts Kit
☐ Rack Mount Slides

TELEDYNE INSTRUMENTS

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