

# Fluorescence SO<sub>2</sub> Analyzer

## Ecotech EC9850 Sulfur Dioxide Analyzer

The EC9850 Sulfur Dioxide Analyser combines the benefits of microprocessor control with the fluorescence technique for accurate measurement of SO<sub>2</sub> in the ranges of 0-50 ppb to 0-20 ppm with a detection limit of 0.4 ppb.

Improved sensitivity, noise, and zero drift specifications are obtained through the use of a superior reaction cell and the introduction of new electronics package, that provides improved control, diagnostics, internal data logging and USB connectivity.



### Features

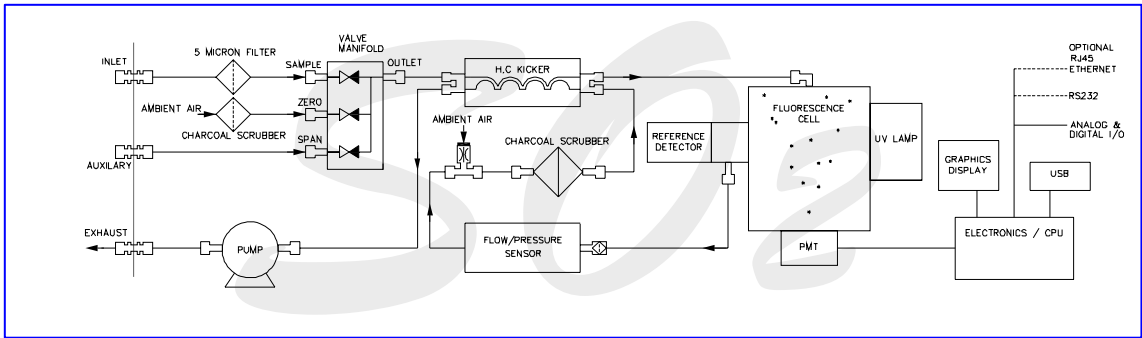
- Large Graphic LCD provides advanced continuous system faults messages, status outputs, real time zero/span calibration curves, sample flow and sample pressure graphs.
- The use of the zinc lamp reference source reduces NO and water vapour interference and provides maximum sensitivity and long lamp lifetime, thus reducing operating cost.
- Menu selectable data trending graphically displays up to 100 data points.
- Auto zero routine allows the analyzer to periodically check and correct for background illumination, virtually eliminating zero drift.
- The new SMT processor package combines total remote control and provides up to 100 channels of instrument operating parameters for troubleshooting and diagnostic capabilities via USB or RS232 interface.
- Inbuilt data logger using Flash ROM stores up to 175 days of 5 minute data
- Data stored can be retrieved via RS232, USB interface or the optional Ethernet connection to a TCP/IP network via an RJ45 connector.
- Ethernet option enables the user to download data from an analyser connected to the internet via a standard web interface, also supports remote access to instruments parameters and the front screen remotely using a web browser..
- Optional internal pump and optional internal 12VDC power supply enables the EC9850A to be operated from a 12VDC power source for remote or mobile applications.
- USEPA Automated Equivalent Method EQSA-0193-092



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## Model EC9850 A Series Analyzer



### Specifications

Ranges:	Auto-ranging for 0-50 ppb to 0-20 ppm
Data Display:	Large Graphic LCD display, with unit selection mg/m <sup>3</sup> , ug/m <sup>3</sup> , ppm, ppb, ppt.
Display Resolution:	User selectable (0-5 decimal points displayed).
Analog Out:	0 - full scale from 0 - 50 ppb to 0 - 20 ppm with menu selectable offset of 0%, 5% or 10% offset. Auto-ranging between two user specified full-scale values
Noise (At zero):	0.2 ppb with Kalman filter active.
Lower Detectable Limit:	0.4 ppb with Kalman filter active
Linearity:	< 1% of full scale (from best straight-line fit)
Precision:	0.4 ppb or 0.5% of reading whichever is greater
Zero Drift:	24 hours; < 0.4 ppb 30 days; < 1ppb
Span Drift:	24 hours less than 1 % of reading 30 days less than 1 % of reading
Temperature/Pressure Compensation:	Temperature/Pressure compensation with selectable reference temperature of 0°C, 20°C, 25°C @ 101.3 kPa.
Rise/Fall Time:	Less than 120 seconds for 95% of final reading with Kalman filter active.
Sample Flow Rate:	0.750 SLPM (Std)
Sample Pressure Dependence:	5% change in pressure produces less than 1% change in reading
Temperature Range:	5° - 40 °C (U.S. EPA approval 15°C - 35°C)
Analog Outputs:	Menu selectable current output 0-20 mA, 2-20 mA, 4-20mA
50 pin I/O PCA:	Allows for jumper selectable voltage outputs of 100 mV, 1 V, 5 V, 10 V with menu selectable zero offset of 0, 5% or 10% .
Digital I/O DB50:	Local user DB50 I/O interface with 32 digital open collector outputs and 3 digital inputs user controls. The digital outputs are 24 status output commands, 8 status alarm conditions and 2 analog inputs 0-5V.
Communication Port:	Rear panel multi-drop RS232 port shared between analysers for data, status and control and front panel service RS232 port. Output Baud rates 1200 – 38400 baud. Plus USB interface and optional ethernet connection to a TCP/IP network via an RJ45 connector.
Data Logging:	Supports internal data logging capability with storage up to 175 days of 5 minute data stored in flash ROM.
Data Storage selection:	Instantaneous data selectable period from: 1,3,5,10,30, or 60 minute intervals Average data selectable period from: 1,3,5,10,15,30 minutes, 1,4,8,12, or 24 hours.
Power:	99-132 VAC, 198-264 VAC 47-63 HZ, 100 Watts.
Dimensions/weight	43.2 x 17.8 x 64.8 cm (w x h x d), 24 kg
Options:	Rack mount kit assembly (19") 9800036-2 External zero/span valve assembly (EVS) 98300087 12VDC Internal Power Supply 98000115 Ethernet connection to a TCP/IP network via an RJ45 connector

For further information please contact our nearest office



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