

# EC9852

## Sulfur Compounds Analyzer

### H<sub>2</sub>S, TRS, TS, SO<sub>2</sub>

The EC9852 Sulfur Compounds Analyzer combines microprocessor control with fluorescence detection and an external converter to measure H<sub>2</sub>S and SO<sub>2</sub> or TS, TRS and SO<sub>2</sub> or H<sub>2</sub>S, SO<sub>2</sub> and H<sub>2</sub>S + SO<sub>2</sub> in the range of 0-2 ppm with a detection limit of 0.5 ppb for SO<sub>2</sub>.

Improved performance, sensitivity, noise, and zero drift specifications are obtained through the use of a superior reaction cell and a new electronics suite.

The EC9852 utilizes automatic stream switching which facilitates the sequential measurement of multiple gases. The analyzer utilizes both catalytic and thermal techniques to convert H<sub>2</sub>S/TRS/TS to SO<sub>2</sub>. The converter efficiency is better than 96% over a temperature range of 200°C to 400°C.

The cycle time for each channel is operator selectable with both gases analyzed in about 16 minutes. Each gas has individual calibration slopes and zero offsets.



## Features

- Large Graphic LCD provides continuous instrument status output including analyte concentrations, real time zero/span calibration curves, diagnostics and flow and pressure graphs.
- Zinc lamp reference source reduces NO and water vapour interference and provides optimal sensitivity. Long lamp lifetime reduces operating cost.
- Menu selectable data trending graphically displays up to 100 data points.
- Auto zero function periodically checks and corrects for background illumination, virtually eliminating zero drift.
- The micro processor facilitates total external remote control and provides up to 100 channels of instrument operating parameters.
- Stored data can be retrieved via RS232, USB interface or the optional Ethernet connection and uploaded to a TCP/IP network.
- Inbuilt data logger utilizes Flash ROM to store up to 135 days of 5 minute data averages.
- Ethernet option facilitates data download from an analyzer connected to the internet via a standard web interface. This feature also supports remote access to instrument parameters and the status output screen.



**ECOTECH**

WORLD CLASS  
environmental  
MONITORING

## Specifications

Ranges:	Auto-ranging 0-2000 ppb	
Data Display:	Large Graphic LCD display, with unit selection mg/m <sup>3</sup> , µg/m <sup>3</sup> , ppm, ppb, ppt.	
Analogue Out:	0 - full scale from 0 - 50 ppb to 0 - 2000 ppb with menu selectable offset of 0%, 5% or 10%. Auto-ranging between two user specified full-scale values	
Noise (At zero):	0.25 ppb with Kalman filter active.	
Lower Detectable Limit:	0.5 ppb with Kalman filter active (SO <sub>2</sub> )	
Linearity:	< 1% of full scale	
Precision:	0.5 ppb or 1% of reading whichever is greater	
Zero Drift:	24 hours < 1.0 ppb	
	30 days < 1.0 ppb	
Span Drift:	24 hours less than 0.5 % of reading	
	30 days less than 0.5 % of reading	
Temperature/Pressure Compensation:	Temperature/Pressure compensation with selectable reference temperature of 0°C, 20°C, 25°C at 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	
	US EPA designated temperature range 15°-35°C	
Analogue Outputs:	Menu selectable current output 0-20 mA, 2-20 mA, 4-20 mA	
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 analogue inputs 0-5V.	
Communication Port:	Rear panel multi-drop RS232 port shared between analysers for data, status and control. 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 135 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:	90-132 VAC, 170-264 VAC 47-63 HZ, 200 VA during start up.	
Dimensions/weight	43.2 x 17.8 x 64.8 cm (w x h x d), 25 kg	
Options:	Rack mount kit assembly (19")	9800036-2
	External zero/span valve assembly (EZS)	98300087
	Ethernet connection to a TCP/IP network via an RJ45 connector	
	HTO1000 H <sub>2</sub> S/TRS Converter	
	H <sub>2</sub> S1100 Low Temperature H <sub>2</sub> S Converter.	
Configurations Available:	EC9852 with external HTO1000 Converter and internal pump EC9852 with external H <sub>2</sub> S1100 converter and internal pump EC9852 with internal H <sub>2</sub> S Converter and external pump	



### USA contact details:

Ph: (401) 247 0100

Fax: (401) 537 9166

Email: [Info@AmericanEcotech.com](mailto:Info@AmericanEcotech.com)

Website: [www.AmericanEcotech.com](http://www.AmericanEcotech.com)



2006 Governor of Victoria

**Export Awards**

Winner

BRO 0031 14-SEP-07