

EC9830B

Carbon Monoxide Analyser

The EC9830B Carbon Monoxide Analyser utilises NDIR Gas Filter Correlation photometry and microprocessor control to measure CO in the range of 0-200 ppm with a detection limit of 50 ppb.

Improved sensitivity, noise, and zero drift specifications are obtained through the use of superior optical technology and the introduction of a new electronics suite to provide better all round performance.



Standards

- Complies with U.S. EPA Automated Reference Method RFCA-0992-088
- Complies with Australian standard: AS 3580.7.1-1992

Features

- Large Graphic LCD provides continuous system status outputs, including real time zero/span calibration curves, sample flow and pressure graphs.
- Internal zero air catalytic scrubber provides CO free air for user selectable auto zero sequence.
- Selectable eight hour rolling average for compliance monitoring.
- The micro processor facilitates total external remote control providing up to 100 channels of instrument operating parameters. Stored data can be retrieved via RS232, USB or optional Ethernet to a TCP/IP network.
- Inbuilt data logger utilises Flash ROM to store up to 175 days of 5 minute averaged data.
- Ethernet option facilitates data download from an analyser connected to the internet via a standard web interface. This feature also supports remote access to instrument parameters and the status output screen.
 - Optional span valve for performing direct span calibrations from an external pressurised source.





Specifications

Ranges Display:	Auto ranging 0-100 ppb to 0-200ppm (0-1000ppm range on request)	
Data Display:	Large Graphic LCD display, with unit selection mg/m ³ , µg/m ³ , ppm, ppb, ppt.	
Analogue Out:	0 - full scale from 0 - 100 ppb to 0 - 200ppm with menu selectable offset of 0%, 5% or 10%. Auto-ranging between two user specified full-scale values	
Noise:	<25ppb RMS with Kalman filter active.	
Lower Detectable Limit:	50 ppb with Kalman or 300sec filter active	
Linearity:	± 1% full scale 0- 50ppm range	
Precision:	0.1 ppm or 1 % of reading whichever is greater	
Zero Drift:	24 hours: < 100ppb 30 days: < 100 ppb	
Span Drift:	24 hours < 0.5% of reading 30 days <0.5% of reading	
Filter types:	No filter, Kalman, 10,30,60,90,300 second and 8 hour rolling average	
Temperature/Pressure Compensation:	Temperature/Pressure compensation with selectable reference temperature of 0°C, 20°C, 25°C at 1 01.3 kPa.	
Sample Flow Rate:	1 slpm, optional 2 slpm	
Temperature Range:	USEPA designated temperature range 15 - 35°C may be operated at 5°C – 45°C Temperature dependence, 0.1% per °C changes.	
Analogue Outputs:	Menu selectable 0 - full scale from 0.05 – 200ppm, voltage jumper selectable 100mV, 1, 5 and 10V. Menu selectable offset of 0%, 5% or 10% offset. Menu selectable current output of 0-20mA, 2-20mA and 4-20mA	
Digital I/O DB50:	Local user DB50 I/O interface with 32digital 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:	Multidrop RS232 port shared between analysers for data, status and control. 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 memory.	
Data selection:	Instantaneous data: 1,3,5,10,30, or 60 minute intervals average 1, 3, 5, 10, 15, 30 minutes, 1, 4, 8, 12, 24 hours or 8 hour rolling average.	
Power:	99-132 vAC, 198-264 vAC 47-63 HZ, 110 Watts.	
Dimensions/weight:	43.2 x 17.8 x 64.8 cm (w x h x d), weight 20.9 kg	
Options:	Rack mount kit assembly (19")	9800036-2
	External zero/span valve assembly (EZS)	98300087
	Zero/Span Valve for External Valve (Pressurized Source)	98301002
	Sample particulate filter assembly	98000210-1
	External sample pump 115V 60 Hz	002-033603
	External sample pump 220V 50/60 Hz	002-033601
	PCA 50 pin I/O	98000066-2
	Ethernet connection to a TCP/IP network via an RJ45 connector	

