

EC9832

Carbon Monoxide Analyser

The EC9832 Carbon Monoxide analyser combines the benefits of microprocessor control with the NDIR gas filter correlation photometry to measure CO with minimal interference from CO₂ and/or H₂O.

The CO concentration is automatically corrected for gas temperature and/or pressure changes and can be displayed in units of parts per million (ppm) or milligrams per cubic metre (mg/m³).

The EC9832 has been designed for CEMS applications including the monitoring of CO emissions from industrial processes including steel mills, thermal power plants, gas turbines, municipal waste incinerators and boilers.



Features

- The infrared source and advanced materials in the gas filter wheel facilitates trouble free, long life operation with minimal maintenance requirements.
- The EC9832 is not affected by interference from H₂O and/or CO₂, fluctuations in the infrared source output or vibration and/or accumulation of dust on the optics.
- Software controls all instrument functions including the performance of diagnostics, system status ,output signal linearity and the calculation of CO concentration.
- Operator input functions are limited to routine maintenance and periodic calibration of the unit.
- Stored data 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. It also supports remote access to instrument parameters and display screen using a web browser.
- Inbuilt data logger uses Flash ROM to store up to 175 days of 5 minute averaged data.



**ECOTECH**WORLD CLASS
environmental
MONITORING

Specifications

Ranges Display:	Auto ranging 0-3000 ppm, resolution equals 0.1ppm
Analogue Out:	0 - full scale from 0 - 200 ppm to 0 - 3000 ppm with 0%, 5%, 10% offset.
Noise:	Auto-ranging between two user specified full-scale values 0.5ppm or 0.1% of concentration reading (1)
Lower Detectable Limit:	1 ppm with Kalman adaptive filter active
Zero Drift:	1% of span, typical 24 hours max value for 7-day drift; Temperature dependence, 0.2 ppm per °C change
Span Drift:	2% of span, typical 24 hours max value for 7-day drift; Temperature dependence, 0.2 ppm per °C change
Temperature/Pressure Compensation:	Temperature/Pressure compensation with selectable reference temperature of 0°C, 20°C, 25°C at 101.3 kPa.
Lag Time	Less than 15 sec
Rise/Fall Time	95% of final value, less than 45 sec (1.5 slpm flow) with Kalman filter active
Repeatability	0.5 ppm or 1.0% of reading (1)
Sample Flow Rate:	1.5 slpm or as specified. Adjustable from 0.5 slpm to 2.0 slpm. The 2.0 slpm is activated during internal calibration.
Sample Pressure Dependence:	Less than 1% of reading for 5% change in sample inlet or outlet pressure
Temperature Range:	5°C – 40°C
Relative Humidity:	10% to 80% non-condensing
Rejection Ratio:	Negligible interference from H ₂ O and CO ₂
Analogue Outputs:	Jumper selectable voltage output of 100mV, 1V, 5V, 10V with menu selectable zero offset of 0.5% or 10%. Menu selectable current output of 0-20mA, 2-20mA and 4-20mA
Digital Outputs:	Multidrop RS232 port shared between analyzers for data, status and control. Service RS232 port gives front panel access & USB port.
Comm Port:	Rear panel multi-drop RS232 port shared between analysers for data, status and control. Plus USB interface and 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
DB50 Interface (STD):	DB50 with discrete status, user controls and analogue output. Provides status outputs, control inputs and 20mA current loop output.
Power:	99-132 VAC, 198-264 VAC 47-63 HZ, 110 Watts consumed at 115 VAC.
Dimensions/weight:	43.2 x 17.8 x 64.8 cm (w x h x d), weight 20.9 kg (46 lbs)

(1) Whichever is greater with Kalman Adaptive Filter active



World Wide contact details
Ph: (+61) 1300 364 946
Fax: (+61) 1300 668 763
Email: ecotech@ecotech.com.au
Website: www.ecotech.com

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