# Oxides of Nitrogen Analyzer

## Ecotech EC9841A NO/NO2/NOx Analyzer

The EC9841A Nitrogen Oxides Analyser combines the benefits of microprocessor control with the chemiluminescence technique for accurate measurement of NO,  $NO_2$  and  $NO_x$ . 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 low pressure reaction cell and the introduction of new electronics package, that provides improved control, diagnostics, internal data logging and USB connectivity.



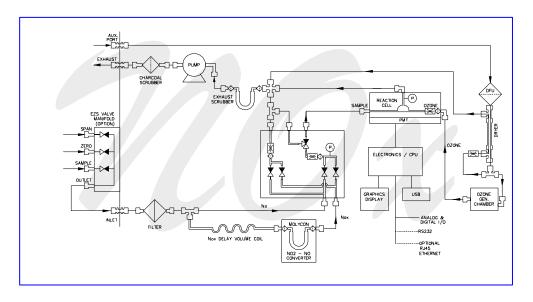
#### **Features**

- Large Graphic LCD provides advanced continuous system faults messages, status outputs, real time zero/span calibration curves, sample flow and sample pressure graphs.
- 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 132 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 EC9841A to be operated from a 12VDC power source for remote or mobile applications.
- USEPA Automated Reference Method RFNA-1292-090









#### **Specifications**

Ranges: Data Display: Display Resolution:

Analog Out:

Noise (At zero): Lower Detectable Limit:

I inearity: Precision: Zero Drift:

Span Drift:

Temperature/Pressure Compensation:

Rise/Fall Time: Sample Flow Rate:

Sample Pressure Dependence:

Temperature Range: **Analog Outputs:** 

50 pin I/O PCA:

Digital I/O DB50:

Communication Port:

Data Logging:

Power:

Data Storage selection:

Dimensions/weight Options:

Auto-ranging for 0-50 ppb to 0-20 ppm

Large Graphic LCD display, with unit selection mg/m³, ug/m³, ppm, ppb, ppt.

User selectable (0-5 decimal points displayed).

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

0.2 ppb with Kalman filter active.

0.4 ppb or 0.2% of reading with Kalman filter active < 1% of full scale (from best straight-line fit) 0.4 ppb or 1 % of reading whichever is greater

24 hours; < 0.4 ppb 30 days; < 1ppb

24 hours less than 1 % of reading 30 days less than 1 % of reading

Temperature/Pressure compensation with selectable reference temperature of 0°C, 20°C, 25°C @ 101.3 kPa.

Less than 30 seconds for 95% of final reading with Kalman filter active.

0.640 SLPM (Std)

5% change in pressure produces less than 1% change in reading

5°- 40 °C (U.S. EPA approval 15°C - 35°C)

Menu selectable current output 0-20 mA, 2-20 mA, 4-20mA

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%

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.

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

Supports internal data logging capability with storage up to 132 days of 5 minute data stored in

ethernet connection to a TCP/IP network via an RJ45 connector.

flash ROM. 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.

99-132 VAC, 198-264 VAC 47-63 HZ, 200 Watts. 43.2 x 17.8 x 64.8 cm (w x h x d), 24 kg Rack mount kit assembly (19") 9800036-2

External zero/span valve assembly (EZS) 98300087

External pump 115V 60 Hz 002-033603 External pump 220V 50/60 Hz 002-033601

Internal pump and 12VDC 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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