

Serinus 40 Oxides of Nitrogen Analyser

The Serinus 40 Oxides of Nitrogen analyser delivers precise and reliable performance at excellent value. It uses proven chemiluminescence technology to measure NO, NO₂ and NO_x in ambient air (LDL <0.4ppb, range 0-20ppm).

APPROVALS

- US EPA approval (RFNA-0809-186).
- EN approval (Sira MC 100167/02).
- Australian Standard (AS 3580.5.1-2011).

BENEFITS

The Serinus range of analysers have been designed using our experience and knowledge gained from operating large air quality monitoring networks for more than 35 years. The result, instruments that integrate seamlessly into continuous monitoring networks.

Benefits include:

- Guaranteed performance with a two year warranty.
- Minimises time spent on site performing maintenance through superior remote instrument control, diagnostic viewing and calibration.
- Comprehensive data logging and remote viewing of over 200 operational parameters.

- Versatile interfacing through RS232, USB, Bluetooth, analogue and optional TCP/IP.
- Easier setup through an intuitive menu system with "Quick Menu", advanced GUI and a new larger keypad with tactile keys.
- Instant display of operational status using illuminated traffic lights on the front panel.
- Removable flash memory stores 10 years of data, including up to 12 individual parameters and event logs. Operational parameters can also be transferred to memory for easy retrieval.
- Latest firmware updates can easily be installed using the USB flash memory drive.
- Programming, viewing, downloading and emailing of data is made even simpler using Bluetooth connectivity combined with the "Ecotech Serinus Remote" Android App.
- Enhanced operator safety through the use of 12VDC internal voltages.
- Reduced cost of spare parts, accessories and consumable items through extensive use of standard components across the Serinus range.
- Improved rack slide design makes accessing internal components and removing the analyser from a rack cabinet easy.
- AQM system power usage can be reduced due to the instrument's low power demand and its ability to operate over a wide temperature range.



SPECIFICATIONS

Ranges:	Autoranging 0-20ppm (Analogue ranges 0-50 ppb to 0-20 ppm)
Concentration display:	User selectable mg/m ³ , µg/m ³ , ppm, ppb, ppt
Noise:	< 0.2 ppb
Lower detectable limit:	< 0.4 ppb or 0.5% of reading whichever is greater
Linearity:	< 1% of full scale
Precision:	0.4 ppb or 0.5% of reading whichever is greater
Zero drift:	24 hours: < 0.5 ppb 7 days: < 0.5 ppb
Span drift:	7 days: < 1% of reading
Response time:	15 seconds to 95%
STP reference:	0°C, 20°C, 25°C at 101.3 kPa
Sample flow rate:	600 cc/min (total for 2 channels)
Temperature range:	0 - 40°C
Power:	99-132 VAC, 198-264 VAC 47-63 265VA (max startup), 190 VA (n)
Dimensions (wxhxd):	3.5 RU, 429 x 175 x 638 mm
Weight:	21.85 kg

Communications

- USB port (digital communication).
- Bluetooth (digital communication via Android App).
- TCP/IP Ethernet network connection (optional).
- RS232 Port 1: Digital communication.
- RS232 Port 2: Multidrop port.
- Protocols: Modbus RTU/TCP, Bavarian, EC9800, Advanced.

Inputs/outputs: 25 pin I/O port

- Menu selectable current or voltage output 0-20mA, 4-20 mA, or 0-5 VDC.
- Menu selectable offset of 0%, 5% or 10%.
- Auto-ranging from 0-50 ppb to 0-20ppm (between two user specified full scale values).
- 3 scaleable analogue inputs, 0-5v, 160µV resolution.
- 8 logic level digital status inputs/8 open collector digital outputs.

Data logging: Removable USB flash memory drive that stores data in the following formats:

- Instantaneous data from: 1, 3, 5, 10, 30, or 60 minute intervals.
- Average data from: 1, 3, 5, 10, 15, 30 minutes, 1, 4, 8, 12, or 24 hours.
- Data storage of 10 years of 12 parameters, 1 minute data on 4 Gb memory.

OPTIONS & ACCESSORIES

- Extended measurement ranges.
- External AC powered pump | External charcoal scrubber
- Dual filter (particulate), Rack slide kit.
- TCP/IP network port.
- High pressure zero/span valves.
- Printed manual—electronic manual supplied with analyser.

For your local certified distributor visit:

www.ecotech.com/distributors

Ecotech Pty Ltd

T (Australia) 1300 364 946 T (International) +61 3 9730 7800

E info@ecotech.com W www.ecotech.com



Bluetooth connectivity combined with the “Ecotech Serinus Remote” Android App makes it even easier to program, maintain, download and email data without touching the instrument.

An ISO 9001, 17025, 14001 & AS4801
certified company



© October 2012 BRO- 2400 Serinus 40