ecotech

environmental monitoring solutions

Serinus 50 Sulphur Dioxide Analyser

The Serinus 50 Sulphur Dioxide (SO_2) analyser delivers precise and reliable performance at excellent value. It uses proven UV fluorescent radiation technology to measure SO_2 in ambient air (LDL <0.3ppb, Range 0-20ppm).

APPROVALS

- US EPA approval (EQSA–0809–188).
- EN approval (Sira MC 100168/03).
- Australian Standard: AS 3580.4.1-2008.

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 opertor 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.
- Sample pump versatility—choose either an external sample pump suitable for use by multiple analysers or the optional low power internal pump.
- 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:	< 0.15 ppb
Lower detectable limit:	< 0.3 ppb or 0.2% of concentration whichever is greater
Linearity:	< 1% of full scale
Precision:	0.5 ppb
Zero drift:	24 hours: < 0.5 ppb
	7 days: < 0.5 ppb
Span drift:	7 days: < 0.5% of reading
Response time:	60 seconds to 95%
STP reference:	0°C, 20°C, 25°C at 101.3 kPa
Sample flow rate:	725 cc/min
Temperature range:	0 - 40°C
Power:	99-132 VAC, 198-264 VAC 47-63 Hz
	255VA (max startup), 180 VA (nominal)
Dimensions (wxhxd):	3.5 RU, 429 x 175 x 638 mm
Weight:	18.1kg

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.

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.

Inputs/outputs: 25 pin I/O port

- Menu selectable current or voltage output 0-20mA, 4-20 mA, or 0-5 VDC (opt 0-10VDC).
- 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

- External AC powered pump (capable of operating 3 analysers, excluding NO$_x$).
- Internal long life, low power maintenance free pump (Max 6 watts).
- 12VDC power supply, Dual filter (particulate), TCP/IP network port.
- High pressure zero/span valves.
- Printed manual—electronic manual supplied with analyser.

For your local certified distributor visit:
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