





Serinus®50

Sulfur Dioxide Analyser

The Serinus®50* sulfur dioxide (SO₂) analyser delivers precise and reliable performance at excellent value.

It uses proven pulsed UV fluorescent radiation technology to measure SO_2 in ambient air (LDL < 0.3 ppb, range 0 to 20 ppm).

^{*} Acoem Serinus 50 for merly known as Ecotech Serinus 50.

Approvals

- USEPA approval (EQSA-0809-188)
- ENapproval TÜV(0000040205-02)
- Australian Standard (AS 3580.5.1-2011)
- Russian approval (56263-14)

- French approval LSCQA
- Ukraine approval (12/3/B/24/295-17)
- Chinese Pattern Approval (JJF1361-2012)
- Korean approval NIER (AACMS-2017-04)

Benefits

The Serinus®range of analysers have been designed using our experience & knowledge gained from operating large air quality monitoring networks for more than 45 years. The result, instruments that integrate seamlessly into continuous monitoring networks.

- Reliableperformance complemented with a two year warranty
- Minimise time spent on site performing maintenance through superior remote instrument control, diagnostic viewing & calibration
- Comprehensive data logging & remote viewing of over 200 operational parameters
- Versatile interfacing through RS232, analog & digital I/O & optional TCP/IP& Bluetooth
- Easy setup through an intuitive menu system, advanced GUI& a large alphanumeric keypad with tactile keys
- Instant status indication via illuminated instrument status light buttons on the front panel
- Removable flash memory stores ~ 10 years of data, including up to 12 individual parameters & event logs. Operational parameters can also be transferred to memory for easy retrieval

- Latest firmware updates can easily be installed using the USBflash memory drive
- Programming, viewing, downloading & emailing of data is made even simpler using optional Bluetooth connectivity combined with the Serinus Remote Android App
- Built-in digital display measuring values & having function of measuring values transferred to graphical trend display
- Enhanced operator safety through the use of 12 VDCinternal voltages
- Reduced cost of spare parts, accessories & consumable items through extensive use of standard components across the Serinusrange
- Rack slide design makes accessing internal components & removing the analyser from a rack cabinet easy
- AQMSpower usage can be reduced due to the instrument's low power demand & its ability to operate over a wide temperature range.



Specifications

Range: 0 - 20 ppm (autoranging)

Concentration units: mg/m³, µg/m³, ng/m³, ppm, ppb or ppt

Noise: < 0.15 ppb

Lower detectable limit: < 0.3 ppb 0.2 % of concentration whichever is greater

Linearity: < 1 % of full scale

Precision: 0.5 ppb or 0.5 % of reading whichever is greater

Zero drift: 24 hours: < 0.5 ppb

7 days: < 0.5 ppb

Span drift: 24 hours: < 0.5 % of reading or < 0.5 ppb whichever is greater

Response time: 60 seconds to 95 %

STPreference: 0 °C, 20 °C, 25 °C at 101.3 kPa

Sample flow rate: 725 cc/min
Temperature range: 0 - 40 °C

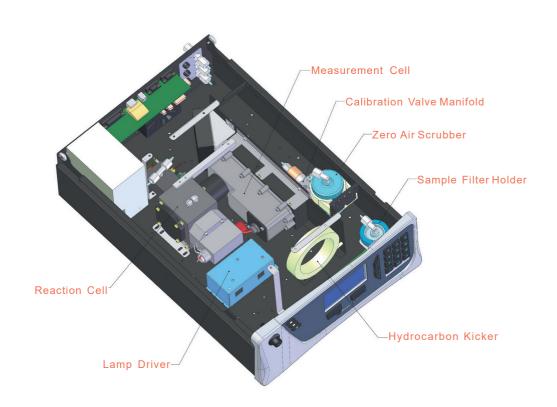
Power: 100 - 240 VAC,50 - 60 Hz (autoranging)

Power consumption: 255 VA (max at start-up)

180 VA (nominal)

Dimensions: 429 x 175x 638 mm

Rack spacing: 3.5 RU
Weight: 18.1 kg





Communication

- •#1 RS232port (supports all protocols*)
- #2 RS232port (supports all protocols* & multidrop)
- USBport (Advanced protocol only)
- Bluetooth (Advanced protocol only)
- TCP/IPnetwork port (optional, supports all protocols*).
- * Available protocols: Modbus (RTU/TCP), Bayern Hessen, EC9800 or Advanced

Communication analog & digital I/O port:

- 3 x analog outputs (current or voltage),
 12 bit resolution user definable range
 (between two user specified points)
 Currentrange: 0 20 mA, 2 20 mA or 4 20 mA
 Voltage range: 0 5 V, 0 10 V (voltage offset of 0 V, 0.25 V or 0.5 V)
- 3 x analog inputs (scalable), 0 5 V, 16 bit resolution
- •8 x logic level digital control inputs
- •8 x open collector digital status outputs.

Data logging

- 8 GBremovable USBflash memory drive that stores the internal data logger, event log, automatic/manual configuration backup & automatic/manual parameter listsave
- Internal data logger (can log up to 12 of 200+ parameters)
- Logger interval (1 second to 24 hours)
- Storage capacity ~ 10 years (set to 1 minute interval).

Options & accessories

- •TCP/IPNetwork Port
- Bluetooth
- Dual Sample (particulate) Filter
- High Pressure Span (for direct cylinder calibration)
- High Pressure Zero (for direct cylinder calibration)
- Test Lamp (for PMTdiagnostics)
- Internal DC Pump (long life, low power, minimal maintenance)
- Metric Fitting Kit (to connect 6 mm tube to rear ports)
- 19" Rack Mount Kit
- External Pump (240 or 110 VAC)
- Annual Maintenance Kit
- Printed User Manual (a soft copy of the user manual is supplied on USBwith each analyser).





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