

# Serinus Gas Analyzer Series



The new Serinus series is the next generation of gas analyzers from Ecotech, a leading manufacturer of environmental monitoring solutions. Completely redesigned and incorporating innovative technology, the Serinus series will deliver:

- Superior performance
- Low total cost of ownership
- Reduced maintenance intervals

Key features across the Serinus series include:

- Interchangeable components, consumables, spare parts and accessories, keeping operating and service costs low.
- A low carbon footprint due to reduced power consumption and operation over a wider temperature range.
- Use of zero volume fittings and flexible Teflon tubing improves system integrity.
- Redesigned electronics suite delivers greater stability and reliability.

The Serinus series have been designed with customers in mind. Building on Ecotech's renowned EC9800 series, the Serinus incorporates new features to make ambient and emissions monitoring even easier, including:

- Removable flash memory stores up to eight years of one minute data, including the ability to record up to 16 individual parameters, instrument settings, and event logs.
- Optional dual particulate filter can reduce scheduled on-site maintenance visits by up to 50%.
- Intuitive Quick Menu and easier to read Graphical User Interface (GUI) simplifies instrument operation.
- New advanced diagnostics protocol with detailed event tracking and convenient "Traffic Light" analyzer state indicator.
- Full remote control of instrument functions including calibrations, span/zero checks and diagnostics.

## General Specifications:

**Power:** 99-132, 198-264 VAC 47-63 Hz.  
**Dimensions:** 440 x 178 x 620 mm (w x h x d)  
**Temp. Range:** 5° - 40° C  
**STP Reference:** 0° C, 20° C, 25° C at 101.3 kPa  
**USB flash memory:** Inst. Data: 1, 3, 5, 10, 30, or 60 minute  
**Average data:** 1, 3, 5, 10, 15, 30 minutes, 1, 4, 8, 12, or 24 hours  
**Data Storage:** 8 years of 1 minute data  
**Options:** Internal low power pump (max. 6 watts)  
 External AC powered pump  
 Dual filter (particulate)  
 TCP/IP network communication.

## Communications:

**Comm. Ports:** USB port (digital communication)  
 TCP/IP Ethernet Network connection  
 RS232 Port 1: Digital Communication  
 RS232 Port 2: Multidrop port  
 25 pin I/O port  
**Analog Outputs:** Menu selectable current or voltage output 0-20 mA, 4-20 mA, or 0-5 VDC.  
 Menu selectable offset of 0%, 5%, or 10%.  
 Auto-ranging 0-20 ppm (0-200 ppm CO)  
**Analog Inputs:** 3 analog inputs, 0-5 V, 160 µV (resolution)  
**Digital Inputs:** 8 logic level inputs  
**Digital Outputs:** 8 open collector outputs



### Serinus 10 O<sub>3</sub> Analyzer

#### **US EPA approval EQOA-0809-187**

Method: UV absorption  
 Ranges: 0-20 ppm (Autoranging)  
 Noise: < 0.25 ppb  
 LDL: < 0.5 ppb  
 Linearity: < 1% of full scale  
 Precision: 0.5 ppb at < 100 ppb,  
 otherwise 0.2% of reading  
 Zero Drift: 24 hours: < 0.3 ppb  
 7 days: < 0.3 ppb  
 Span Drift: 7 days: 0.5 < 0.5% of  
 reading  
 Response Time: 30 seconds to 95%  
 Sample Flow Rate: 500 cc/min (optional  
 750cc/min)  
 Weight: 14.8 kg

### Serinus 40 NO<sub>x</sub> Analyzer

#### **US EPA approval EQOA-0809-188**

Method: Gas phase  
 chemiluminescence  
 Ranges: 0-20 ppm (Autoranging)  
 Noise: < 0.2 ppb  
 LDL: < 0.4 ppb  
 Linearity: < 1% of full scale  
 Precision: 0.4 ppb or 0.5% of  
 reading (whichever is  
 greater)  
 Zero Drift: 24 hours: < 0.4 ppb  
 7 days: < 1 ppb  
 Span Drift: 7 days: < 1% of reading  
 Response Time: 15 seconds to 95%  
 Sample Flow Rate: 600 cc/min  
 Weight: 21.2 kg

### Serinus 30 CO Analyzer

#### **US EPA approval RFCA-0509-174**

Method: Gas filter correlation  
 Ranges: 0-200 ppm (Autoranging)  
 Noise: < 20 ppb  
 LDL: < 40 ppb  
 Linearity: < 1% of full scale  
 Precision: 20 ppb or 0.1% of  
 reading (whichever is  
 greater)  
 Zero Drift: 24 hours: < 0.1 ppm  
 7 days: < 0.1 ppm  
 Span Drift: 7 days: < 0.5% of  
 reading  
 Response Time: 60 seconds to 95%  
 Sample Flow Rate: 1000 cc/min  
 Weight: 17.8 kg

### Serinus 50 SO<sub>2</sub> Analyzer

#### **US EPA approval EQOA-0809-186**

Method: UV fluorescence  
 Ranges: 0-20 ppm (Autoranging)  
 Noise: < 0.15 ppb  
 LDL: < 0.3 ppb  
 Linearity: < 1% of full scale  
 Precision: 0.5 ppb or 0.15% 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: 60 seconds to 95%  
 Sample Flow Rate: 750 cc/min  
 Weight: 18.1 kg