

Rosemount XE10 Continuous Emissions Monitoring System (CEMS)

Simplifying environmental compliance



Reliable Regulatory Emissions Reporting

Staying ahead of increasingly stringent emissions monitoring regulations requires a reliable system that can meet the mandated availability throughout the system lifetime. Emerson's Rosemount XE10 Continuous Emissions Monitoring System (CEMS) is a standardized solution certified to the European emissions directives EN 14181 and EN 15267-3 (QAL1) and complies with the U.S. environmental legislation. It is equipped with automated calibration to facilitate zero and span gas drift checks required for Quality Assurance Level 3 (QAL3) procedures, giving you the peace of mind you need for ongoing compliance and reliable performance.

Cost-efficient, Integrated Solution

- Compact, modular solution
- Low cost of procurement and operation
- Simple and fast to configure
- Continuous, extractive measurement of up to five gas components (CO, NO_x, SO₂, CO₂ and O₂)
- Can accommodate multi-component gas measurements in one analyzer
- Expandable and can be configured with up to 3 analyzer modules to accommodate different measurement components and ranges
- Secure, remote access simplifies operation and configuration
- Operation at ambient temperature (5 to 40 °C) without HVAC eliminates the need for installation in temperature-controlled environment, reducing cost of ownership

Certified System

- EN15267-1 / EN15267-2 / EN15267-3 (QAL1) certified
- EN 14181 standards compliant. Supports QAL3 drift test with integrated, automatic calibration and validation
- CSA/Sira MCERTS certified
- TÜV Rheinland/Umweltbundesamt certified
- U.S. EPA 40 CFR Part 60 and 40 CFR Part 75 compliant



Reduce risk and complexity with an integrated, certified solution backed by application expertise and support services from a single-source provider.



For more information, visit [Emerson.com/RosemountXE10](https://www.emerson.com/RosemountXE10) or contact your local Emerson Sales Representative



Rosemount XE10 Continuous Emissions Monitoring System

Complete System with Gas Sampling, Sample Conditioning and Gas Analyzer

Gas Sampling

- Heated sample gas probe with DIN DN65 PN6 flange at 180 °C
- Heated PTFE sample gas line at 180 °C
- Low temperature interlocks for the sample gas probe and heated line to avoid condensation in the sample gas lines
- Two-stage sample gas cooler with peristaltic pumps. No need for H_3PO_4 injection to avoid cooler loss of SO_2
- 2 μm fine filter and coalescing filter protect the analyzer from contaminations
- Internal sample gas pump with a bypass and a needle valve for sample gas flow adjustment

Gas Analysis

- The modular system can consist of one or up to three configurable analyzer modules equipped with paramagnetic or electrochemical sensors as well as non-dispersive infrared (NDIR) and non-dispersive ultraviolet (NDUV) photometers
- Up to five components can be measured in one analyzer:

CO	0 - 75 (150)* mg/m ³ to 3000 mg/m ³
NO _x or NO	0 - 150 mg/m ³ to 2000 mg/m ³
SO ₂	0 - 150 mg/m ³ to 2500 mg/m ³
CO ₂	0 - 25%
O ₂	0 - 25%

* (150) mg/m³ per the German QAL1 certificate

System Options

- Sample gas probe with weather protection or blow back option
- ATEX sample gas probe and heated sample gas line
- NO₂ converter with metal-based material at 400 °C for efficient NO_x emissions monitoring
- O₂ measurement with paramagnetic module or electrochemical sensor
- Swing frame cabinet for easy front side access
- Glass condensate vessel with level alarm
- Junction boxes for seamless installation
- Calibration gas line from cabinet to probe



Leverage Global Service Capabilities From a Partner You Can Trust

- CEMS start-up and commissioning services
- CEMS installation services in accordance with Quality Assurance Level 2 (QAL2)
- Service contracts and support for CEMS Annual Surveillance Test (AST)

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