

Emission Monitoring Capabilities



Tyco Environmental Systems offers a complete range of point level, particulate and gas emission monitoring solutions across a multitude of industrial applications. With thousands of successful installations worldwide, Tyco Environmental Systems understands the specific requirements of industry, and can tailor an effective solution for even the most challenging application.

Overview:

To ensure that a plant or process is environmentally sustainable many companies (across numerous industries) utilise Tyco Environmental Systems emission monitors, for both gas and particulate, to ensure plant optimisation. Tyco Environmental Systems has extensive experience in the pollution control industry, and can offer several alternatives to maximise plant efficiency. Tyco Environmental Systems' continuous monitoring systems take the guesswork out of environmental management, providing accurate data for reporting purposes and minimising the risk of costly environmental licensing infringements. Gas and particulate monitors also double as preventative maintenance tools, determining optimum efficiency levels in combustion processes and maximising the life of baghouse filters.

Capabilities:

- Application analysis and specification.
- Manufacture.
- Servicing and planned maintenance.
- Total turnkey solutions.
- Remote monitoring and alarming.
- Project management.
- Report generation.



Product Range:



The **CPA1000** is a continuous opacity and dust monitor. Using patented "Flood LED" technology, the CPA1000 achieves the highest levels of stability and accuracy with no moving parts in the optical measurement, providing exceptional reliability. The unit is TUV certified and exceeds US EPA specifications. Features include easy calibration, minimal moving parts, and drift and zero alignment check. A local control unit adjacent to the instrument allows for convenient operation and configuration of the instrument. It also conducts periodic calibration using a built-in audit mechanism, accepts standard optical filters and zero alignment can be confirmed without removing the instrument from the stack.

The **COA2000** is a continuous, fully-integrated, stand-alone flue gas oxygen analyser. The unit has outstanding flexibility and ease of use at best practice levels. The COA2000 combines the measurement probe with the electronics, display and controls into a single unit, offering operators full control, calibration and diagnostics information. It also features simple, push-button user interface with LED display.



- Aluminium*
- Automotive*
- Beverage*
- Building Materials*
- Cement*
- Chemical*
- Coal*
- Dairy*
- Defence*
- Food*
- Glass*
- Iron & Steel*
- Lead-Zinc*
- Manufacturing*
- Marine*
- Mineral Processing*
- Mining*
- Nuclear*
- Oil & Gas*
- Petrochemicals*
- Pharmaceuticals*
- Pipelines*
- Plastics*
- Power Generation*
- Pulp & Paper*
- Ship Loading*



The **PGA3000** portable gas analyser is a lightweight (6kg) portable emission monitor with diverse capabilities. A single unit can offer rapid on site measurements of up to 9 gases including O₂, CO, CO₂, H₂S, NO_x, SO_x and hydrocarbons. The unit can calculate combustion efficiency, and can compute environmental calculations as well as flow rates. This highly portable unit is designed for maximum up time and ease of use. Memory storage is up to 1000 records. Reliability is assured with built-in diagnostics and 'no fuss' maintenance.

The **CGA4000** continuous gas analyser series are a range of extractive gas monitors that offer value and performance in gaseous stack monitoring of combustion emissions including O₂, CO, CO₂, NO_x and SO_x. They are designed to interface with company systems and can offer a complete range of probe and sample solutions. These systems use extractive technology to obtain gas samples, utilising a self-calibration method to maintain accuracy. The instrument is specifically designed to operate unattended with self-diagnostic checks occurring continuously to maintain system accuracy and operability.



The **CGA4200** is a compact self-contained CEM system, designed for external mounting, even in extreme weather conditions. The sensor module in the CGA can be fitted with up to 6 sets of temperature-controlled measuring cells, that provide excellent stability and linearity for all sample control and measurement functions, ensuring that it is extremely easy to operate and maintain. It can accept inputs from a diverse range of sample probes. The standard ChillerProbe™ has an integrated gas dryer, for optimum sample integrity. Modbus digital communications, 8 current-loop outputs and 10 alarm relays are fitted as standard. Additional relay and current-loop inputs and outputs can easily be added using plug-in modules.

Several particulate emission monitors, including the advanced **EMP7**, are available. The EMP7 is a simple, self contained 4-20mA output device for measuring particulate flow from stacks. It has several advantages that make it popular with companies who demand efficiency, reliability and accuracy in an affordable particulate monitor. It can operate continuously, indicating the condition and efficiency of a gas cleaning system. Coupled with an iso-kinetic test the absolute output can be calibrated to measure mg/m³ or mg/s. This one probe device can also compensate for velocity fluctuations, and maintain calibration and accuracy. Run Time Diagnostics and Power Up Diagnostics ensure the instrument is operating correctly monitoring its own functionality and process conditions, reporting any regularities through predefined 4-20mA "blimps". Being totally software based is expected to show that the EMP7 is superior in both reliability and accuracy compared to existing products.



CONNECT V5 is a leading environmental reporting, controlling and managing software system designed to enable users to reduce costs by optimising plant operations. Based on true client server architecture, CONNECT provides maximum flexibility, proven reliability, quick installation and easy to manage functionality. Unique features like true DCS style redundancy, scalability and valuable packaging policies differentiate CONNECT from its competitors. CONNECT systems are only sold one way – complete and ready to go. All of the features, protocols and drivers are included, and because it is sold as one

comprehensive package, it is tightly integrated and built to perform. Unlike other PC-based environmental monitoring and control systems, CONNECT was designed from its beginning to handle all of the needs of large and complex enterprises in a single, integrated system whilst maintaining high performance and reliability. CONNECT enables plant managers to seamlessly link plant level information to business planning systems and, through the Internet, to remote users, devices and customers.

- Aluminium*
- Automotive*
- Beverage*
- Building Materials*
- Cement*
- Chemical*
- Coal*
- Dairy*
- Defence*
- Food*
- Glass*
- Iron & Steel*
- Lead-Zinc*
- Manufacturing*
- Marine*
- Mineral Processing*
- Mining*
- Nuclear*
- Oil & Gas*
- Petrochemicals*
- Pharmaceuticals*
- Pipelines*
- Plastics*
- Power Generation*
- Pulp & Paper*
- Ship Loading*