

ANALYTICAL PRODUCTS AND SOLUTIONS

Solutions for Process Analytics

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SIEMENS

Siemens Analytical Products and Solutions **Customized solutions for every task**

For more than 50 years, Siemens Analytical Products and Solutions has been working with its customers to develop and implement efficient, durable and economical life cycle solutions for defined analytical tasks. Together we have created solutions for optimizing processes, increasing reliability, and improving product quality and system availability for a wide variety of industrial sectors.

Around the world, we continue to gather, process and pass on our extensive knowledge and experience on applications – from specific knowledge of processes in the oil and gas, chemical, power and cement industries, for example, to knowledge of the analytical requirements in waste incineration plants. We can help you, whether the objective is process or quality control, safety or emission monitoring.

We consider the users of our solutions to be our partners: their tasks define the technology we must provide, and their needs are the first link in our chain of innovation. That's why we always maintain close contact with users in the industry, with industrial associations and with research facilities. In joint working groups, we develop proposals and collaborate with users to turn these ideas into innovative solutions.

In order to achieve those objectives, to the benefit of all partners, Siemens Analytical Products and Solutions offers and is involved already in the project definition phase with front-end engineering to determine the best possible analytical solution, in the installation and commissioning phase to ensure proper installation and functionality, during the operational phase with field service, remote monitoring programs, class room and on-site training all the way to end-of-life cycle legacy replacement strategy.



Siemens Analytical Products and Solutions – the basic principles of our corporate policy

Siemens Analytical Products and Solutions is a leading provider of process analyzers and process analysis systems. We offer our customers worldwide the best possible solutions for their applications, based on innovative analysis technologies, customized system engineering, sound knowledge of their application and professional support. And with Totally Integrated Automation, Siemens Analytical Products and Solutions is your qualified partner for efficient solutions that integrate process analyzers in automation systems in the process industry.

Our customers know they get a competitive edge with Siemens as a partner – and will be able to keep it. That's because we support them with:

- Application-oriented knowledge
- Customized solutions
- Powerful devices and systems
- Our international presence



Our solutions:

Innovation, plus a broad range of products.

Range of services

Users need to create efficient, safe and environmentally beneficial processes and expect us to support them in that task with an innovative range of services. At the same time, they need existing installations to remain fully operational over the long term and want to safeguard and beneficially utilize the investments they've already made.

These are reasonable expectations, and ones which Siemens Analytical Products and Solutions takes very seriously. They have long been reflected in our product policy. We work to provide innovative products based on state-of-the-art technology while at the same time ensuring compatibility, maintenance simplicity, availability spare parts and service. You can be sure that innovation and safeguarding your investments are much more than just slogans at Siemens Analytical Products and Solutions.





Measurement solutions

We know that our customer's need is not satisfied by just an analyzer. The need is a functional measurement solution which includes everything needed to satisfy your control, safety or monitoring requirements. Measurement systems can be standardized such as for the quality control of biogas generated from landfills or bio digesters. Or, Continuous Emission Monitoring Systems for environmental regulations compliance. And depending on the specific processes, a fully engineered measurement system solution consisting of many and various analyzers. Together with our customers, we assist in specifying and validating the requirements, engineering the appropriate economical and maintainable solution and providing commissioning and startup to ensure reliable long term performance.

Process Analytics Product Families











NOXMAT







Standard CEMS

Process Gas Chromatograph - MAXUM

In state-of-the-art process analyzers, the technology used is determined by the needs of the specific application. Device must be cost-oriented, functional, intelligent, space and energy-saving, maintainable, and must provide just the right amount of power to meet all needs – but not more. Siemens Analytical Products and Solutions offers a wide and innovative portfolio designed to meet all users expectations for comprehensive products and solutions. We combine an outstanding expertise in developing high performance analytical devices with a broad and deep application know-how from almost any process industry.

Synergy at work for the user – being the benchmark in process gas chromatograph, MAXUM provides unrivaled versatility with state-of-the-art analytical performance that's easy to maintain.

Process Gas Analyzers - Series 6

The Series 6 long time proven ULTRAMAT, OXYMAT, CALOMAT, and FIDAMAT gas analyzer family provide a complete series offering a wide variety of technologies and applications with fast response times and extensive diagnostic features.

ULTRAMAT 23

Multicomponent gas analyzer with an excellent price/ performance ratio and a unique AUTOCAL function for standard applications for up to 3 IR components as well as oxygen and hydrogen sulfide.

SIPROCESS UV600

UV absorption principle with true reference measurement for individual or simultaneous measurement of up to three gas components: NO, NO₂, SO₂ and H₂S.

NOXMAT 700

Utilizing principle of Chemiluminescence (CLD) for the measurement of NO or NOx in gaseous sample.

LDS 6 Laser Spectroscopy

For up to 3 measurement points, in-situ or extractive, fast and highly available process measurements, also at high temperature points, unaffected by dust or interference.

SITRANS SL Laser Spectroscopy

Single measurement point, for single component O₂, even for high temperature measurements.

Continuous Emissions Monitoring System (CEMS)

The standard CEMS is designed to monitor nitrogen oxides, carbon monoxide and oxygen in process boilers and furnaces according to 40 CFR 60.

Focus on sustainability into the future Our services and support

Support means customer service. For us, customer support means communicating knowledge – and is an essential part of our business relationship! Not even the best IT technologies can take the place of personal communications between individuals.

That's why Siemens Analytical Products and Solutions is so committed to providing dedicated Siemens contacts on site and in our Competence Centers. These contacts pass on to customers many decades, worth of knowledge in device engineering, applications and global solutions, and ensure that best practice sharing is truly put into practice. Our experienced staff is skilled in implementing efficient solutions for defined tasks using existing technology, while at the same time keeping costs within reason.

For us, service means just that! The actual purchase is only one of many deciding factors affecting the costs and benefits of a process analyzer or solution over its entire life cycle. Benefits such as device availability and measurement quality, as well as overall costs, are increasingly determined by the services necessary for planning, assembly, installation, maintenance and calibration. Siemens Analytical Products and Solutions is aware of these aspects and offers a comprehensive range of services worldwide from which users can select exactly what they require.

As an international company, we're available around the clock. To ensure effective service, we offer well-trained staff — available flexibly and at short notice — together with superior spare parts logistics. But, in addition, we also offer technical information on the Internet at all times and from any location, plus the support of specialists in Competence Centers, and the increased capability of the devices themselves to supply diagnostic information through the analyzers for remote servicing.

Equipment development and manufacture

By coordinating product development and manufacture based on the highest quality standards, we can ensure:

- Maximum cost-effectiveness
- Top analytical performance
- Maximum operational safety
- Minimal operating and maintenance costs

Quality always pays, especially over the entire life cycle of an installation, ensuring reliability for control and process optimization and safety for personnel and systems.



System setup

Beyond our excellent expertise we offer customized services and solutions from front-end engineering and design (FEED) up to fully air-conditioned analyzer shelters. Working together with users, our specialists plan analysis systems and implement them with state-of-the-art process. They use their own extensive experience to ensure that all details for the individual application are taken into account.

Our services include:

- · Consulting, design engineering and planning
- Support for obtaining approvals
- Individualized sample preparation
- Engineering and documentation
- Production in Houston, Karlsruhe and Singapore
- Communication and integration in control systems
- · Installation, commissioning and service
- Spare parts
- Training of plant personnel

Siemens Analytical Products and Solutions has consistently developed this expertise on all levels and is standing by around the world to provide you with analytics specialists with many years of experience and industry know-how.

Totally Integrated Automation

Process analyzers integrated in automation systems have long been a reality at Siemens. Process analyzers are part of a system's process instruments, and their measurement data is part of the information required for efficient and reliable system operation. Today, analytical devices are also expected to provide comprehensive solutions in fieldbus technology with end-to-end communications, engineering and data management. Process analyzers from Siemens Analytical Products and Solutions are equipped with interfaces to the latest communications systems and, as part of Siemens automation technology, are a component in the proven "Totally Integrated Automation" platform concept.

Presence and expertise:

Available for our customers around the world

As part of a future-oriented, globally active company, Siemens Analytical Products and Solutions maintains a global presence. It supports its customers through numerous subsidiaries with analyzer and service specialists around the world, with additional support coming from our five strategically located Analytical Competence Centers. Through this global network of competence Siemens ensures that its products, consulting services and system integration capabilities are available to its customers everywhere and at any time. In this way, Siemens Analytical Products and Solutions can offer products, systems and services around the world that are both consistent and customized.









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