Greater transparency
and smarter decisions
for your business

Your One-Stop Shop for process instrumentation, process analytics, and digital solutions – Short Product Overview

SIEMENS

Measuring everything that matters

Siemens offers a complete service package as well as all measuring instruments to assist you in engineering, designing, supplying, installing and commissioning measurement solutions for complete industrial plants. Our "one-stop shop" concept supports selection of all process instrumentation and analytics all the way to integration with your process control system. Additional industrial components and systems are easily incorporated into the overall plant and ensure smooth process flows.

Every second, you rely on critical process data. With SITRANS IQ Guard you can always be certain that measured values are correct and your devices are healthy.

Whether process instrumentation, process analytics, valve positioners or weighing and dosing systems, our solutions meet the requirements of process industries such as chemicals, oil and gas and hydrocarbon processing, water and wastewater, pharmaceuticals, mining, aggregates, cement, pulp and paper, food and beverage or shipbuilding.

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Process Instrumentation

Process Analytics

Digital Solutions

Everything flows: **SITRANS F**

Whether measuring gases, liquids or steam – choosing the right flowmeter is decisive for productivity. The SITRANS F family provides the perfect solution. With five distinct flow measurement technologies – electromagnetic, coriolis, ultrasonic, vortex, and differential pressure – our portfolio is the ideal match for every application and medium.

Electromagnetic

SITRANS FM family offers pulsed DC electromagnetic flow sensors that provide accurate and reliable measurements for conductive liquids. They are tailored for various industries, including water and wastewater (FMS500), process and general (FMS300) and food & beverage and pharmaceuticals (FMS100). Compatible with SITRANS FM transmitters (FMT020 and MAG6000i) for complete flow metering solutions. Suitable of zero upstream-downstream installations.

SITRANS FMT020 is a next-generation electromagnetic flow transmitter built on a robust 4-wire platform and fully backward compatible with existing sensors. Its compact, robust enclosure protects the large, graphical, rotatable display in challenging environments. Advanced diagnostics include embedded self-tests, SENSORPROM memory, and a Bluetooth-enabled Verificator for external verification. Available with variety of communication options and ability to simultaneously measure volumetric flow, flow velocity and electrical conductivity.

SITRANS FM MAG 8000/MAG 8000 CT are battery-operated water meters with a long lifespan, advanced communication and diagnostics with embedded self-testing. Suitable for zero upstream and downstream installations.

SITRANS FM MAG 8000 IIoT Wireless Communication Module is a communication system consisting of a hardware part combined with a web-hosted application for device management, measurement data transfer, external pressure transmitter configurability and remote qualification certificate.

SITRANS FM MAG 8000 LoRaWAN Wireless Communication Module is a module to connect the MAG 8000 to LoRaWAN public or private networks. Embedded Bluetooth and SITRANS mobile IQ help to commission to module and the MAG 8000.

SITRANS FM TRANSMAG 2 is designed for heavy-duty applications in mining slurries and the pulp and paper industry, featuring stable zero point, no moving parts, and comprehensive self-diagnostics.

SITRANS FM100 is a stainless steel solution for small to medium flows with simultaneous flow and temperature measurements, dosing capability, easy local operation, bidirectional measurement, and IO-Link communication support, suitable for standard applications.

SITRANS Verificator is a highly advanced instrument for complex verification and performance checks. It monitors the general operating conditions of the flowmeter, including the sensor's magnetic integrity. This compact portable device is easy to use and can be fully operated via SITRANS mobile IQ. Traceable according to international standards through a yearly calibration.

Ultrasonic

SITRANS FSS100 sensor kit is designed for retrofitting on existing water pipelines up to DN 2400. It pairs via FS DSL with transmitters FST020 and FST030, providing high inline accuracy. Allows single-path, two-path, and four-path installation.

SITRANS FS120 combines FSS100 insertion sensors with the FST020 transmitter to provide reliable, cost-effective flow measurement using single-path sensor technology. Its lightweight housing and built-in disturbed flow compensation make it an ideal choice for standard industrial applications.

SITRANS FS130 with FSS100 sensors and an advanced FST030 transmitter is a premium solution that offers superior accuracy through its versatile 1-4 path sensor configuration. It provides advanced I/O capabilities and an FS-DSL option. The rugged wall-mount or industrial housing and a variety of Ex certifications ensure reliable operation in the most demanding industrial environments.

SITRANS FSS200 is a versatile clamp-on sensor family offering high-precision, universal, and high-temperature sensors suitable for various applications, including oil, gas, water, and challenging liquids.

SITRANS FS220, equipped with FSS200 sensors and FST020 transmitter, suits basic measurements with only single-path sensor measurement for applications in municipal utilities, water/wastewater, energy, HVAC, and the chemical industry, using WideBeam® transit time technology.

SITRANS FS230 with FSS200 sensors and FST030 transmitter provides advanced and high-accuracy measurements for various liquids, oil and gases in industrial applications. It features Ex zone housing options and WideBeam® transit time technology. It allows direct 1-2 sensor path installation or 3-4 path installation in combination with the FS DSL.

SITRANS FS290 is a portable clamp-on system featuring the FST090 ultrasonic flow transmitter and SITRANS FSS200 portable sensors, designed for easy pipe flow checking, with a wide temperature and wall thickness range, long-lasting battery power, and advanced features for monitoring and communication.

SITRANS FST070 transmitter facilitates flowmeter solutions with full system control integration into Siemens SIMATIC world. In combination with the FS DSL and the FSS200 sensors, it is an alternative architecture for seamless automation integration.

Coriolis

Two transmitter versions, **SITRANS FCT020 standard** and **SITRANS FCT040** advanced, provide a choice of performance, measurement functions, housing material, output types and a long service life with low maintenance costs and reliable performance. Transmitters can be combined with sensors in compact or remote installation.

SITRANS FCS100 is the smallest sensor for highly accurate measurement at the lowest flows. The dual tube design compensates for fluctuations in density, temperature, pressure and environmental conditions.

SITRANS FCS500 is a flexible, cost-effective sensor with superior turndown and lowest pressure drop. An ideal solution for highly accurate flow and density measurements. Features such as concentration measurement or the Tube Health Check function are available. It is designed and certified for food & beverage and pharmaceutical applications.

SITRANS FCS600 offers the most robust and durable design for high performance in demanding and critical applications, such as high pressure or temperature. It meets the highest hygienic and safety requirements. The box-in-box design makes the product highly resistant to external mechanical influences and suitable for harsh environments.

SITRANS FCS700 delivers best-in-class accuracy and most flexible installation at high flow rates. Also, with low flow rates, it offers unmatched accuracy, resulting in an outstanding turn-down ratio and maximizes flexibility from engineering to final operations.

Vortex

SITRANS FX330 enables precise measurement of steam, gas, conductive and non-conductive liquids, with integrated compensation for enhanced accuracy, increased turndown ratio, and SIL 2 safety compliance, along with cost-effective energy calculation and remote functionality.

Differential pressure

SITRANS FPS230/FP330 offers a streamlined and versatile solution with a single pressure transmitter for comprehensive measurement needs, including pre-mounted flowmeters, ensuring easy traceability in ordering.

Takes pressure off your business: **SITRANS P**

SITRANS P offers a comprehensive set of measurement tools for relative, differential, and absolute pressure. With high accuracy and durability, this modular system prioritizes user-friendly operation, functionality, and safety.

Pressure measurement

SITRANS LH100/LH300 are durable submersible sensors for hydrostatic level measurement, suitable for various liquids, including corrosive substances, and can be installed in 1" pipes.

SITRANS P200/210/220 offers single-range pressure measurement with stainless steel or ceramic sensors, converting measurements to 4–20 mA or 0–10 V signals. Available also with IO-Link interface.

SITRANS P300 provides versatile pressure measurement with various process connections and communication options, meeting EHEDG, FDA, and 3A standards, and integrating flush-mounted pressure measuring cells.

SITRANS P320/420 is the first safety pressure transmitter with remote commissioning, supporting digitalization, and compliance with IEC 61508 SIL 2/3, featuring user-friendly displays, a maintenance-friendly design, and FM approval for reliability.

Because every degree matters: **SITRANS T**

SITRANS T excels in temperature measurement, even in extreme conditions. It's versatile family, available as individual units or complete measuring points, offers precise connections to thermocouples or resistance thermometers and quick error-preventing parameterization with SIMATIC PDM software.

Compact and Head Transmitter

SITRANS TH100 is an affordable and compact Pt100 single-input transmitter with 4–20 mA signal support.

SITRANS TH320 is a versatile universal single-input transmitter supporting various inputs, including RTD/TC/mV and resistances, with HART 7 compatibility and SIL 2/3 certification for comprehensive functionality.

SITRANS TH420 is a versatile universal dual-input transmitter with hot backup, supporting RTD/TC/mV inputs, HART 7 and Profibus PA compatibility, and SIL 2/3 certification in combination with HART 7 for high reliability.

SITRANS TH100slim is a cost-effective Pt100 single-input transmitter with a 4–20 mA output, designed for easy welding onto compact thermometers in a stainless steel enclosure.

Rail Transmitter

SITRANS TR320 is a versatile and compact universal single-input transmitter supporting various inputs, with HART 7 compatibility and SIL 2/3 certification for accurate and reliable measurements.

SITRANS TR420 is a versatile universal dual-input transmitter with hot backup, supporting multiple inputs and offering enhanced reliability for critical applications with HART 7 compatibility and SIL 2/3 certification.

Field Transmitter

SITRANS TF320 is a temperature field transmitter configurable for various applications, with redundancy options, SIL 2/3 certification, HART 7 compatibility, and different protection types.

SITRANS TF420 is a temperature field transmitter configurable for various applications, with redundancy options, HART 7 and Profibus PA compatibility, SIL 2/3 certification (in combination with HART 7) and different protection types.

Temperature Sensors

SITRANS TS100 and TS200 are versatile temperature sensors, ATEX and IEC EX approved for Zone 0 operation, and customizable through a modular design.

SITRANS TS300 is a clamp-on temperature sensor with an EHEDG-compliant design, ideal for the food, beverage, and pharmaceutical sectors, with replaceable measuring inserts.

SITRANS TS500 temperature sensors offer versatile temperature measurement for pipes and vessels in various environments, with a modular system that includes thermowell options and compatibility with transmitters or displays, meeting diverse requirements.

SITRANS TSthermowell offers extensive application coverage with customizable options, ensuring high stability through top-tier materials and quality controls.

A new level of experience: **SITRANS L and more**

Siemens provides a complete range of level measurement devices for every application built on its global experience in the field. With the knowledge that no single technology can address the needs of all industrial challenges, Siemens offers a full range of contacting and non-contacting instrumentation for continuous and point level measurement.

Radar level measurement

SITRANS LR100 series offers hassle-free level measurement with a compact 80 GHz radar transmitter, suitable for liquid and solid applications, featuring Bluetooth® wireless technology for easy setup via the Siemens SITRANS mobile IQ App.

SITRANS LR500 series is your first choice for radar level measurement. Featuring 80 GHz, this series has a solution for your liquid and solids applications. Advanced technology with diagnostics, our most advanced signal processing and easy-to-use Bluetooth wireless technology via SITRANS mobile IQ app.

Ultrasonic level measurement

SITRANS Probe LU240 is a cost-effective and compact intelligent level solution ideal for liquid chemical inventory management, small process vessel monitoring, and environmental industry level measurements.

Echomax transducers are durable ultrasonic transducers compatible with Siemens ultrasonic controllers, designed for hazardous environments, and equipped with a self-cleaning face for reliable performance in harsh conditions with potential buildup.

Level controllers

SITRANS LT500 is the next evolution of level, flow, and pump controllers for radar and ultrasonic transmitters, transducers – or any 2-wire 4–20 mA device. It is the first choice for any level controller application and features single and dual point measurements, 6 relays, and Modbus RTU, HART, PROFIBUS DP, PROFIBUS PA and PROFINET.

Continuous capacitance

SITRANS LC300 is an ideal level controller for standard and industrial applications in various industries, including chemicals, hydrocarbon processing, food and beverage, mining, aggregate, and cement.

Guided wave radar

SITRANS LG240 is designed for use in hygienic and corrosive applications.

SITRANS LG250 is a highly flexible solution suitable for various liquid level and interface applications.

SITRANS LG260 is ideal for measuring the level in medium-range solids applications such as grains, plastics, and cement.

SITRANS LG270 offers configuration options for extreme conditions, including high-temperature and high-pressure applications.

All versions include features like automatic buildup adjustment, remote display options, 2 mm accuracy, backlight with a full graphic display, SIL 2/3 approval options, field-replaceable probes, quick setup wizards, and a USB service port option.

Hydrostatic

SITRANS LH100 and SITRANS P320 are versatile instruments suitable for diverse applications within the chemical and petrochemical industries, known for their exceptional resistance to extreme chemical, mechanical stress, and electromagnetic interference.

Gravimetric

SIWAREX WP321 is a technology module designed for the SIMATIC ET 200SP distributed I/O system, facilitating level measurements in silos and bunkers and providing convenient integration of platform scales directly into the automation environment.

Point level detection

SITRANS LPS200 is a rotary paddle switch capable of detecting solids with low densities, offering motor protection, SIL 2 certification for reliability, and options for fail-safe rotation monitoring and alarming.

SITRANS LVL100 and LVL200 are vibrating level switches designed for liquid and slurry applications, offering high, low, and demand level alarms, pump protection, and a wide application range, including high temperatures and pressures, hygienic versions, various enclosure materials, SIL 2/redundant SIL 3 options, and remote testing capabilities.

SITRANS LVS100, LVS200, and LVS300 are vibrating level switches known for their best-in-class sensitivity detection, capable of detecting solids with low densities down to 5 g/l, and designed to handle and monitor buildup. They also offer options for detecting solids interfaces within liquids.

RF Capacitance

SITRANS LCS050 and LCS100 are level sensors suitable for detection in constricted spaces, featuring 1/2 inch process connections, IO-Link communication, M12 connectors, and offering Sensguard protection for harsh environments. They also provide various options for customization to meet specific application needs.

Pointek CLS200 and CLS300 are level sensors designed for demanding conditions with high pressures and temperatures, including aggressive applications with very high temperatures and pressures. They offer SIL 2 options, Smart PROFIBUS versions with digital displays, and the capability for remote operation via PROFIBUS for status and function testing. Additionally, they can remotely detect buildup and monitor other process condition changes.

Always in pole position: **SIPART Positioners**

As the interface between control system and valves, positioners play an important role in ensuring reliability and optimal performance in process plants around the world. Our proven and smart portfolio with the SIPART PS2 and SIPART PS100 precisely controls the entire range of valves and masters even special tasks with absolute reliability.

Positioners

SIPART PS100 is a compact and robust valve positioner with one-push initialization for fast commissioning. It offers various valve positioning modes, features a non-corrosive sound absorber for harsh environments, and provides a plain-text display with status icons. It also allows for various individual customizing possibilities.

SIPART PS2 is a versatile positioner suitable for linear and part-turn actuators, offering various enclosure options including polycarbonate, aluminum, and stainless steel. It includes an Ex d explosion-proof version and supports communication via 4...20 mA, PROFIBUS PA, FOUNDATION Fieldbus, or HART. It also provides an integrated booster option for controlling large drives and is known for its low operating costs due to minimal air consumption.

More smart functions, more possibilities
Both, SIPART PS100 and PS2, allow for remote operation and monitoring via Bluetooth and SITRANS mobile IQ App. Both positioners are equipped with a non-contacting sensor for durable operation. Additionally, SIPART PS2 offers an extensive range of functions and diagnostic capabilities, including optional pressure sensors for improved valve diagnostics, predictive maintenance support, regular partial stroke tests for emergency shutdown valves, Fail in Place and Fail Safe modes for safety, and Valve Performance Tests (VPT) for on-site assessment of valve maintenance needs.

The positioner with remote control electronics is designed for use in environments with high-energy radiation.

The positioner with various external position transmitters provides easier access to valves located in challenging locations.

Early detection protects your process

Process protection devices can be used as early-warning systems to avoid costly interruptions and breakdowns of equipment. They detect flow problems, blockages, screen faults, machinery slowdowns or burst filter bags. Their rugged construction makes them impervious to dust, dirt, buildup and moisture.

Acoustic sensors

SITRANS AS100 detects high-frequency acoustic emissions from solids, signals flow/no flow or high/low flow, and is compatible with SITRANS CU02 for signal processing, providing relay and analog outputs for connection to a process or PLC.

SITRANS DA400 is an acoustic analyzer designed for monitoring oscillating displacement pumps, offering simultaneous monitoring of up to four independent delivery valves with easy configuration and operation locally or via PROFIBUS DP/PA.

Motion sensors

SITRANS WM100 is designed for detecting the motion of rotating, reciprocating, and conveying equipment, featuring a heavy-duty alarm switch.

SITRANS WM300 MFA offers motion failure alarm, differential speed detection, and non-contacting tachometer functions with multiple alarms, intuitive programming, and an on-board display for ease of use.

Milltronics MFA 4p provides plant protection by detecting motion absence, underspeed, or overspeed conditions with probes suitable for hazardous, high-temperature, and harsh environments, including MSP or XPP probes.

Process controllers

SIPART DR controllers are highly reliable and user-friendly, featuring comprehensive hardware that can be easily upgraded for specific applications with optional input/output modules and communication plug-in modules like RS 232/RS 485 or PROFIBUS DP.

Process recorders

SIREC D200, D300, and D400 display recorders provide continuous process monitoring, maintenance, optimization, and troubleshooting solutions for various industrial needs.

First-class solutions **for almost any weighing task**

The flexible design of our products makes it possible to implement weighing solutions from simple platform scales and gravimetric level measurement up to highly complex automatic scales with minimal conversion costs. Using SIWAREX load cells and electronic modules for weighing systems together with Siemens Milltronics belt scales and SITRANS weigh feeders and solids flowmeters, you can design an optimal system for practically every task.

SIWAREX weighing electronics for SIMATIC

SIWAREX WP231 is a versatile weighing module designed for level monitoring in silos and bunkers, platform scales, and hazardous areas. It seamlessly integrates with SIMATIC S7-1200 and can be programmed in TIA Portal or operated without SIMATIC CPU. It holds legal-for-trade certification (OIML R-76) for precision weighing applications.

SIWAREX WP241 is a versatile weighing module designed for belt scale applications, offering features like a simulation mode for testing, full integration into SIMATIC S7-1200 and TIA Portal, and the flexibility to operate without a SIMATIC CPU. It provides various factory-provided interfaces, including Modbus TCP/IP and Modbus RTU, as well as digital and analog connections for seamless integration.

SIWAREX WP251 is a versatile weighing module designed dosing and filling control. It integrates seamlessly with SIMATIC S7-1200 and TIA Portal, offers standalone operation, and provides various interfaces. It's certified for legal trade applications and supports multi-range/multi-interval scales up to 3x3000d precision.

TM SIWAREX WP321 ST is an adaptable technology module for silo and bunker level measurements. It integrates with platform scales in automation systems, offers a high sample rate (up to 600 Hz), and is compatible with SIMATIC ET 200SP I/O. It allows easy commissioning, rapid solution development, and seamless integration into PCS 7 for improved control and monitoring.

TM SIWAREX WP341 HF is an ultra-compact weighing electronics module with fast and precise performance, seamlessly integrated into the ET 200SP system. It's suitable for continuous belt weighing and can connect to various controllers via SIMATIC ET 200SP Interface Modules for versatile applications.

TM SIWAREX WP351 HF is an ultra-compact weighing electronic module known for its precision, seamless integration with various controllers, fast performance, and versatility in applications such as filling, bagging, dosing, and more. It's certified according to OIML standards and can be integrated into PCS 7 systems for enhanced control and monitoring.

TM SIWAREX WP361 HF is an ultra-compact weighing electronics module with fast and precise performance, seamlessly integrated into the ET 200SP system. It's suitable for loss-in-weight scales and can connect to various controllers via SIMATIC ET 200SP Interface Modules for versatile applications.

TM SIWAREX WP521 ST and WP522 ST are ideal for platform scales, silo/bunker level monitoring, and hazardous areas. They are technology modules compatible with the SIMATIC S7-1500 Advanced Controller family. WP521 ST is a single-channel design for one-scale systems, while WP522 ST is a two-channel design for two-scale systems.

Digital junction box

SIWAREX DB is a remote diagnostic solution that simplifies load cell service and connects to SIMATIC systems via SIWAREX WP weighing electronics. It offers comprehensive monitoring of the weighing process, including error detection, and can connect up to four load cells per scale. This digital solution is rugged, with an IP66 rating, and can be easily retrofitted into existing plants by replacing analog junction boxes with SIWAREX DB.

Weighing terminals

SIWAREX WT231 and WT241 are standalone solutions with touch panel interfaces and various factory-provided interfaces like Modbus TCP/IP and Modbus RTU. They are independent of automation systems, making them ready-to-use for various applications.

BW500/L and SF500 cater to a range of belt scale applications. BW500/L offers basic operation, while BW500 and SF500 add advanced control functions.

IIOT Weighing solutions

SIMATIC IOT SG-Shield simplifies digitalizing weighing applications, enabling remote monitoring of strain gauge cell measurements. It digitalizes analog data, sends it to the cloud via the SIMATIC IOT2050 gateway, and stores it in Insights Hub. OEMs can opt for an RS485 interface with a standard protocol. Ideal for various industries with specific requirements.

Belt scales

Milltronics belt scales are the ideal solution for continuous bulk solids weighing in various industries. They offer reliability, easy installation, and market-leading performance under tough conditions, providing accurate measurements and overload protection.

Weigh feeders

These products offer maximum weighing accuracy, reliability, and low maintenance, making them ideal for optimizing mixing, process sequences, and balance calculations in various customer-specific designs.

Solids flowmeters

These products provide dust-tight inline weighing solutions for continuous measurement of dry bulk materials, free-flowing powders, granulates, and critical functions like batch loading and mixing processes.

Load cells

SIWAREX WL200 load cells are suitable for hazardous areas, offering a large measuring range from 0.3 kg to 500 t, hermetically sealed for durability. They come with options for redundancy and high-temperature applications, featuring smart-design fastening parts for easy installation and a high degree of protection (IP). These load cells are certified in accordance with OIML R-60.

Information **where it is needed**

Supplementary components enhance your operations through seamless wireless communications, remote displays and remote monitoring solutions. Data capturing and alarming anywhere, at anytime? Remote monitoring is your answer. Opening up new communications options? WirelessHART meets that challenge. Whatever your need, Siemens' supplementary components are here to help.

Remote Terminal Units

SIMATIC RTU3000C is a compact remote terminal unit designed for remote measuring points, offering easy configuration through a web browser. It supports flexible power supply options, connects to various process instrumentation, and ensures secure communication via mobile wireless or LAN. It operates in an extended temperature range and offers multiple versions to suit different needs, including optional GPS and modem integration for enhanced functionality and connectivity.

Remote digital displays

SITRANS RD100 is a loop-powered display suitable for various applications, including level, flow, pressure, temperature, and weighing. It's versatile and can be used in different environmental conditions, offering a simple setup and installation process.

SITRANS RD150 is a remote display designed for 4 to 20 mA and HART devices, offering basic HART instrument configuration using HART commands. It provides user-friendly operation with a backlit menu-driven display, four buttons, and flexible mounting options.

SITRANS RD200 and RD300 are versatile and feature-rich remote displays suitable for various applications, including flow rate, total, and control. They work well with most field devices, offer data logging and display via free RD software, feature sunlight-readable displays, and provide standard serial communications output (Modbus RTU). Additionally, they support pump alternation control, linearization, square root, and math functions.

IE/PB Link simplifies communication between PROFINET and PROFIBUS networks, treating PROFIBUS DP slaves as PROFINET IO devices, facilitating parameter assignment via SIMATIC PDM. Two versions available: IE/PB LINK PN IO for standard use and IE/PB LINK HA optimized for the process industry in harsh conditions, supporting redundant AS as PROFINET IO controller.

For efficient **gas composition analysis**

The analysis of process gases is very complex. To obtain exact results on the composition of the gases, the measurement results must be very precise. Whether innovative analysis technology or in-depth knowledge of your application – we support you when it comes to efficient process analysis in compliance with strict legal requirements.

Extractive Continuous Process Gas Analytics

ULTRAMAT 23 is a versatile gas analyzer for standard applications, including emissions monitoring. It combines UV and IR technologies for measuring various gases, requires minimal maintenance, and uses ambient air for calibration, eliminating the need for extra gases.

ULTRAMAT 6 is a versatile gas analyzer suitable for emission monitoring and process control, including corrosive gases. It can measure up to four infrared-sensitive components in one unit and is approved for Safety Integrity Level 2 (SIL 2).

ULTRAMAT/OXYMAT 6 is a compact 19" gas analyzer that combines the features of ULTRAMAT 6 and OXYMAT 6, approved for Safety Integrity Level 2 (SIL 2).

CALOMAT 6 is an approved gas purity measurement device suitable for hazardous areas, capable of measuring gas component concentrations in binary or quasi-binary mixtures, with applications spanning various industrial processes and safety levels up to SIL 1.

CALOMAT 62 is purpose-built for measuring hydrogen and noble gases in corrosive environments, particularly chlorine, utilizing the thermal conductivity principle (TCD) for accurate and reliable measurements.

FIDAMAT 6 is an ideal solution for measuring total hydrocarbon concentration in the air or gas mixtures with high boiling points, making it suitable for various applications, from emission control to analyzing hydrocarbon traces in pure gases or high hydrocarbon concentrations, even in the presence of corrosive gases.

OXYMAT 6/61 is an oxygen analyzer suitable for standard applications and can operate with ambient air as the reference gas, delivered to the analyzer unit by the built-in pump. It is approved to Safety Integrity Level 2 (SIL 2).

OXYMAT 64 is a specialized analyzer designed for measuring trace oxygen in the ppm range, making it suitable for applications in air-separation systems or technical gas production.

SIPROCESS UV600 is a UV gas analyzer designed for measuring very low concentrations of gases like NO, NO_2, SO_2, or H_2S. It can simultaneously measure up to three components and determine the total NOx concentration without additional devices.

SIPROCESS GA700 series offers gas analysis solutions with wall and rack enclosures featuring IP65 protection, ATEX and IEC Ex approvals. These systems are suitable for various hazardous area classifications, including Zone 1 and Zone 2 for flammable gases, as well as Zone 2 for non-combustible gases. The 19" rack-mounted version is operational in Zone 2 with suitable outer housing for both combustible and non-combustible gases.

Physical measurements in the flow

In situ analyzers enable the measurement of physical properties directly in the flow of the actual process gas line. This means gases can also be measured under extreme conditions. Gas measurements with diode lasers are characterized by exceptional selectivity and flexibility. Integrated reference gas cells for line locking ensure extremely stable operation and long maintenance intervals.

In-Situ Continuous Gas Analyzers

SITRANS TDL is a versatile platform designed to accommodate various types of diode lasers, enabling the measurement of numerous gases including O_2, CO, $CO+CH_4$, CH_4, NH_3, H_2O, HCl, HF, as well as NO, NO_2, SO_2, certain hydrocarbons, and more complex molecules like propylene and acetylene. Its robust design makes it suitable for operation under tough process conditions, withstanding temperatures up to 1100°C and high pressures. Among its latest features are a long optical path length of over 30 meters and air blanketing during O_2 measurements.

SITRANS SL is designed for oxygen measurements in harsh environments, offers reliable measurements even in the zero range using patented technology, and is suitable for use in SIL 1 safety systems according to IEC 61508/IEC 61511.

LDS 6 gas analyzer is designed for measuring NH_3, HCl, HF, H_2O, CO, or CO_2 in flue gas, making it suitable for applications such as monitoring gas levels before and after gas purification. Measurement of NH_3, HCl, H_2O are emission monitoring certified according to EN15267 QAL1. With one central unit, it is possible to measure in the same time the same gas at up to 3 different locations in the plant.

Standardized system solutions for various industries

The same application is required time and again in different branches of industry. To minimize effort, we have developed standardized system solutions for industry-specific applications. These complement the range of individual system solutions. Ready-to-use systems also help minimize the technical risk for customers.

Analytical Application Sets

Set CEM CERT provides reliable and continuous emission measurement for various components in industrial processes. This modular system is easy to operate, certified according to industry standards, and supports multiple analyzers for accurate monitoring.

Energy: Set GGA is a standardized and cost-effective set to control hydrogen-cooled turbo generators. It uses two CALOMAT 6 to monitor the hydrogen concentration used in cooling the blades.

Biogas: Set BGA offers a TÜV-tested, four-component ULTRAMAT 23 gas analyzer system for the safe monitoring of key biogas components such as CH_4, CO_2, O_2, and H_2S. Its modular design supports multiple measuring points and ensures durability in industrial environments.

Who can always measure smarter? You can.
With **SITRANS IQ Guard**
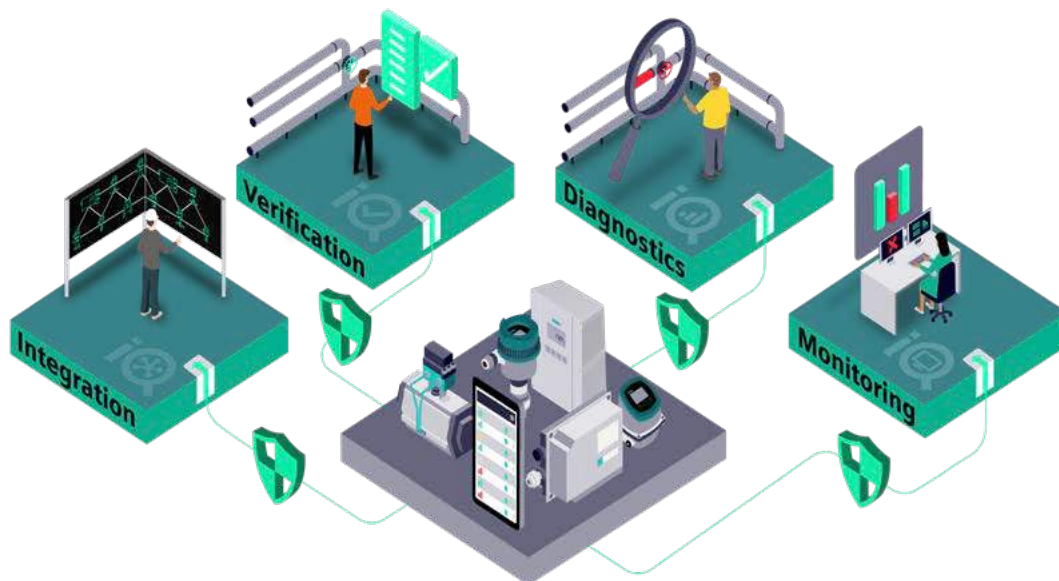
Every second, you rely on process data. How can you always be certain that measured values are correct? That your devices are healthy? And when is the right time for maintenance? SITRANS IQ Guard bundles it all: integration, verification, diagnostics, monitoring. Based on smart field devices, advanced analysis software, and easy plug-and-play on your field devices. Find out more: siemens.com/iqguard

SITRANS SCM IQ offers intelligent condition monitoring for mechanical plant assets, detecting potential equipment failures and enabling predictive maintenance. It monitors vibrating or rotating components like pumps, compressors, and gearboxes, using SITRANS MS200 multisensors and a SITRANS CC220 industry gateway for data collection. With artificial intelligence, it predicts failures and provides event-related warnings, ensuring uninterrupted plant operations.

SITRANS SSE IQ (Soft Sensor Engine) is a is a virtual measurement technology combining a unique Artificial Intelligence approach and process expertise. It enables the accurate prediction of measurement results, e.g. combustion emissions, without the need of having a dedicated physical sensor.

SITRANS ASM IQ (Analyzer System Manager) is a comprehensive monitoring and optimization solution for process analyzers. It offers monitoring of all analyzer-related assets, analysis of measurement values and device data for anomalies, execution and evaluation of validation/calibration data, maintenance management, and KPI reporting.

SITRANS AID IQ is an on-premise solution designed for predicting maintenance needs for Siemens Analyzers. It provides diagnostic data for evaluating the health status of each analyzer, analyzes this data to predict potential device downtime, offers service recommendations, and allows access via HMI or a web-based application.

SITRANS mobile IQ is a free app for easy commissioning, parameterization, and monitoring of Bluetooth-enabled field instrumentation via a smartphone or tablet. It automatically detects and displays supported field devices, offers quick commissioning or detailed setup, and displays device status and selected measurements. It supports the following devices:

- SITRANS FMT020
- SITRANS Verficator
- SIPART PS100 and PS2
- SITRANS Probe LU240
- SITRANS LR100 and LR500 series
- SITRANS FM MAG 8000

Download the SITRANS mobile IQ app for free from either the App Store or Google Play using the QR codes below.

Seamless data flow throughout the entire lifecycle of your plant

Empower your data! Clever, integrated engineering tools and solutions such as COMOS and SIMIT let you take control – and greatly increase the efficiency of processing and manufacturing plants.

SIMIT
The SIMIT simulation platform enables comprehensive tests of automation applications and provides a realistic training environment for operators even before the real startup. This creates opportunities for process optimization and know-how retention, which results in a reduced commissioning time and significantly shortened time-to-market.

COMOS
COMOS is the engineering tool from Siemens for the entire lifecycle of your plant. Through direct integration of our PIA Lifecycle Portal, we guarantee the seamless integration of our field devices in the engineering environment. We can offer you the field devices best suited to your processes, properties and measuring requirements.

PIA Lifecycle Portal
This portal helps you select, size and configure your ideal piece of instrumentation. Interfaces to COMOS and exports to the online ordering portal of Siemens: the Industry Mall (mall.industry.siemens.com). You are able to track the lifecycle of your instrument, see warranty and extended exchange option information as well additional information such as factory certificates (for example for calibration or validation).

SITRANS Library
- Easy use of device-specific functions and data from devices of the SITRANS and SIPART product families, such as dosing or totalizer functions in solutions with SIMATIC PCS 7
- Library with device-specific function blocks, block symbols and faceplates
- Fully compatible with SIMATIC PCS 7 Standard Advanced Process Library (APL) throughout the entire lifecycle, from engineering to running of the plant