



PROCESS INSTRUMENTATION

Level Measurement from A to Z

usa.siemens.com/level

With a complete level portfolio built on global experience in the field, Siemens has a level measurement solution for every application. And because no single technology can address all industrial needs and challenges, Siemens offers a full range of contacting and non-contacting instrumentation for continuous and point level measurement.

SIEMENS

The right instrument for your level application



Radar

With the complete range of radar level transmitters available from Siemens, you have the freedom to choose the right solution for liquid, solids or slurry applications. Siemens level measurement instruments are easy to set up with the aid of graphical, menu-driven display wizards, eliminating the need for troubleshooting and ensuring your devices will be operational in a matter of minutes.

SITRANS LR250 family

Siemens' signal processing technology uses sophisticated algorithms to distinguish between true signal reflections from the material and obstructions vessels. This makes the SITRANS LR250 the right fit for simple to complex level applications. Your result: reliable and accurate performance every time.

Process conditions in oil and gas, chemical, and hygienic industries

Range and materials: up to 65 ft; stainless steel, PTFE or PP sensor

Measurement types: Level, distance, space, volume

Communications: 4-20 mA, HART, PROFIBUS PA



SITRANS LR100 series

For those level applications with less stringent conditions, but where high performance is a must even in constricted spaces, the SITRANS LR100 series of compact radar transmitters with Bluetooth technology answers the call. The custom micro-chip technology built into these devices delivers extremely high sensitivity to detect even the weakest of signals. Additionally, these transmitters handle condensation quite well and allow for maximum vessel or tank utilization since there is no blanking (or dead zone) requirement. This allows you to measure right up to the sensor reliably, avoiding costly overspills.

Universal applications with Bluetooth connectivity

Range and materials: up to 98 ft; PVDF sensor

Measurement types: Level, distance, space, volume, open channel flow

Communications: 4-20 mA, HART, Modbus RTU



SITRANS LR560

When dealing with solids level applications, SITRANS LR560 is the easiest-to-use solids radar transmitter on the market. With its 4-degree narrow beam and short wavelength, it performs reliably on solids from practically any installation location. It is the right fit for long-range level applications, especially in dusty environments. Buildup on its lens can be cleared out easily using the standard built-in air purge port included with this high-performance transmitter.

First choice for powder and bulk solids

Range and materials: up to 328 ft; coated or stainless steel flange; PEEK or PEI sensor

Measurement types: Level, distance, space, volume

Communications: 4-20 mA, HART, PROFIBUS PA



Guided wave radar

For measuring level, interface or both, SITRANS LG guided wave radar technology offers quick and easy setup with local four-button programming and menu-driven quick start wizards to save you time and money. With rod and flexible cables, these instruments can be used in hygienic as well as extremely high pressure and temperature level applications.

Liquids, solids, hygienic and extreme conditions

Range and materials: up to 246 ft; extensive range of sensor materials available

Measurement types: Level, distance, space, volume

Communications: 4-20 mA, HART, Modbus RTU, PROFIBUS PA, FOUNDATION Fieldbus



SITRANS LUT400



HydroRanger 200



SITRANS LT500
HydroRanger



SITRANS LVS



SITRANS LVL

SITRANS LPS



Pointek CLS and
SITRANS LCS

Ultrasonic

Siemens non-contacting ultrasonic sensors and transmitters have active face technology that reduces material buildup and provides trouble-free performance. These level instruments benefit from our field-proven echo processing algorithms to guarantee the highest possible reliability.

Control beyond just level

Level controllers are the right match when you want more than strictly level measurements. Siemens level and pump controllers feature many attributes that can truly help to optimize your process, including pre-programmable features, datalogging, extra inputs and outputs, extensive pump routine cycles to choose from, energy savings schemes and full communication options. They can be connected to either ultrasonic or radar sensors depending on application requirements and technology preference.

Model	LUT400 High accuracy with digital transceiver	HydroRanger 200 First choice for ultrasonic level w/ control	LT500 HydroRanger First choice for 80GHz radar sensors
Technology	Ultrasonic	Ultrasonic	Ultrasonic, radar, any 4-20 mA level device
Range	Up to 196 ft, transducer dependent	Up to 50 ft, transducer dependent	Sensor dependent
Communication	4-20 mA, HART	4-20 mA, Modbus RTU, PROFIBUS DP, PROFINET, Ethernet/IP, Modbus TCP	4-20 mA, HART, Modbus RTU, PROFIBUS DP, PROFIBUS PA, PROFINET

Point level

Protect your investments, people, process, equipment and business with SIL certification and global approvals.

There is a switch for every application, with options as simple or sophisticated as the application demands. Siemens point level devices are the answer when implementing a good engineering practice and are used as an alternate backup technology for high- or low-level detection, interface, or dry run protection. Point level switches make for a valuable investment because they can reduce maintenance, improve safety, and prevent material spills.

Siemens' comprehensive portfolio offers reliable and precise point level detection. The wide selection includes rotating and vibrating level switches as well as capacitance switches that are cost-effective and suitable for all industries. They can be used in liquid and slurries applications that are prompt to collect buildup and exposed to high temperature and pressure. When used with solids materials, they can detect very light or pneumatically conveyed materials with extremely low bulk density.

SITRANS LVS	SITRANS LVL	SITRANS LPS	Pointek CLS and SITRANS LCS
Vibrating point level switches for dry powder, fine grain, and granular bulk solids with densities from 0.3 to 1.9 lb/ft ³	Vibrating point level switches for liquid and slurry and pump protection. Ideal for use in confined spaces.	Rotary paddle switches for point level detection of powder and granular solids with bulk densities as low as 0.94 lb/ft ³	RF capacitance switches for level detection in interfaces, solids, liquids, slurries, foam and demanding conditions

Proven in countless installations in every industry imaginable, Siemens level instruments do what you need them to do – from the simplest to the most extreme applications found in harsh environments. Main technologies combined with point level technologies make for a sensible choice that deliver peace of mind.

Measuring everything that matters:

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Siemens Process Instrumentation offers best-in-class measurement and seamless integration into your automation system. We are the total solution provider for flow, level, pressure, temperature, weighing, positioners and more.

Legal Manufacturer

Siemens Industry, Inc.
100 Technology Drive
Alpharetta, GA 30005
United States of America

Telephone: +1 (800) 365-8766
usa.siemens.com/pi

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