SIEMENS
Ingenuity for life

Process Instrumentation

Small in price –
big on performance.

**Best-in-class solution for straightforward
flow measurement – SITRANS FS220.**

Minimize costs.
Maximize simplicity.

You know that your application would benefit from the addition of flow instrumentation, but you don't have the need – or the operating budget – for a high-end solution. At the same time, you want the assurance of optimal precision and usability.

Siemens – a trusted technology partner with satisfied customers around the world – brings you the SITRANS FS220 clamp-on ultrasonic flowmeter, providing the most essential measurement functions with superior accuracy, cost efficiency and ease of use. Built on the same architecture as other next-generation digital flow systems from Siemens, the FS220 combines the top-performing SITRANS FST020 transmitter with dependable SITRANS FSS200 clamp-on sensors.

SITRANS FST020 transmitter –
Unique support tools, leading reliability
The tried-and-trusted SITRANS FST020 transmitter has been upgraded to deliver enhanced performance, user-friendliness and options for customization. Driven by the powerful PerformancePLUS™ algorithm, it measures virtually any liquid with consistently high accuracy of 1% of flow rate, improved zero stability resulting in minimal need to set a zero point, and repeatability of 0.25% according to ISO 11631.

The removable SensorFlash® microSD card provides unique opportunities for data analysis and servicing, while SIMATIC PDM connectivity allows for trouble-free meter operation. And the transmitter is so simple to use every step of the way – from initial startup through day-to-day operation and servicing.

The FST020 transmitter also features:
• Patented pipe configuration menu that automatically adjusts for unfavorable upstream conditions

• Exceptional noise immunity and high-speed 100 Hz data update rate

• Compliance with current electromechanical compatibility (EMC) standards

• Optional commissioning and other service packages available directly from the PIA Life Cycle Portal, with 24/7 access to the worldwide network of Siemens technical experts

A sensor for every process: Siemens offers 3 different clamp-on sensors in multiple sizes that can be paired with the SITRANS FST020 transmitter. Choose from WideBeam® (High Precision), Universal or High Temperature.

The FS220 is designed for profit-optimizing flow measurement of liquid processes in a number of industries, including water and wastewater, power, HVAC and chemical.

SITRANS FSS200 sensors – High precision, low maintenance

The versatile FSS200 sensors ensure a long meter lifetime and low cost of ownership since they never touch the medium, have no moving parts and can be mounted on pipes as large as 10 m (394") without any cutting or process downtime. As a result, they are a perfect choice for installation on existing pipelines as well as for corrosive, toxic or high-pressure liquids. To cover the widest possible range of applications and challenges, three different types of sensors are available in multiple sizes.

The WideBeam® advantage

Siemens is a pioneer in the use of Lamb wave sensors for flow measurement. Our WideBeam® transit-time technology produces a strong, focused signal that strengthens the signal-to-noise ratio, reduces sensitivity to changes in temperature, density or viscosity and resists the effects of beam blowing. In comparison to conventional solutions using shear mode sensors, the SITRANS FS220 flowmeter is a market leader in handling applications containing high levels of aeration or suspended solids without any significant reduction in performance.

Customizable and easy to operate

The large graphical display features intuitive menu navigation, multiple setup wizards, and the ability to display up to 6 user-configurable parameters on the same screen as well as to customize 5 different views. The integrated SensorFlash® microSD card gives you access to all product data, certificates, manuals and audit trails directly from a PC or via the transmitter's built-in USB service port.

SITRANS FS220 clamp-on ultrasonic flowmeter	
Channels	Single channel
Communication	Modbus RTU, compatible with SIMATIC PDM
Enclosure rating	IP65 (NEMA 4X)
Display	Fully graphical display, 240 x 160 pixels
Power supply	100-240 V AC 15 VA max., 11.5-28.5 V DC 7.5W max.
Inputs	2x digital inputs for totalizer start/stop and reset
Outputs	1x 4 -20 mA, 1x relay, 1x pulse/frequency
Accuracy	±1.0% for velocities ≥0.3 m/s (1 ft/s)
Flow range	±12 m/s (±40 ft/s), bidirectional
Pipe size range	12.7 mm to 10 m (0.5" to 394")
Temperature range	Transmitter: -10 to 50 °C (14 to 122 °F) operating Sensors: -40 to 232 °C (-40 to 450 °F)
Approvals	UL, ULc, CE

**Measuring everything that matters:
siemens.com/processinstrumentation**

**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.**

Follow us on:

twitter.com/siemenssensors
facebook.com/siemenssensors
youtube.com/siemens