

# SIEMENS



## PROCESS INSTRUMENTATION

# Best-in-class flow measurement performance in hazardous locations

Digital innovation in ultrasonic flow – SITRANS FS230.

[usa.siemens.com/clamp](http://usa.siemens.com/clamp)

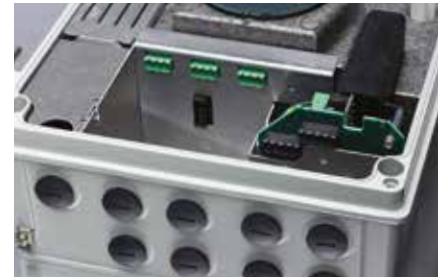


By combining the new SITRANS FST030 transmitter with time proven SITRANS FSS200 transducers, Siemens has developed an exceptional clamp-on ultrasonic flow measurement solution: the SITRANS FS230. Suitable for virtually any liquid application, the FS230 offers outstanding cost savings without sacrificing the high levels of accuracy, ease of use and reliability required to run your hazardous FM Class 1 Div 1, 2 or non hazardous processes at peak efficiency.

The FS230 flow system has been designed to deliver market-leading accuracy and 100Hz data update speed while ensuring unmatched noise immunity and simplicity in use. Based on a digital platform and driven by a powerful flow measurement algorithm, the FS230 features a range of innovations that will enhance your process operations.

### **Ingenuity for high precision and reliability**

At the heart of the innovative SITRANS FST030 transmitter is the PerformancePLUS™ algorithm for fast and reliable signal processing, and the



#### Simple to use

Experience easy handling with a large, fully graphical display. Intuitive navigation, a built-in pipe configuration menu and multiple setup wizards offer you full support from the very first moment.

#### Service in a flash

Enjoy the benefits of the innovative SensorFlash®. In addition to storing all settings, calibration data and certificates, it provides comprehensive audit trails with quick information transfer for more efficient service and less downtime.

#### Fully customizable

Take advantage of a broad range of program-mable I/O, communication, Ex approval (pending) and NAMUR options – then configure your alarms, 3 totalizers and up to 6 different views at once.

Digital Sensor Link (DSL), the system digitizes the ultrasonic signal at the earliest stage of measurement for a strong signal-to-noise ratio.

The results provide: high accuracy of 0.5 to 1.0% of flow rate and repeatability of 0.25% according to ISO 11631 additionally the stable zero point stability has a very high resistance to process and ambient noise.

The 100Hz data update rate of the FST030 transmitters brings you the ultimate in diagnostic and error handling efficiency, meeting API standards for proving flow meters in the field. Smart pipe configuration menu optimizes sensor placement and compensates for non-standard piping installations, such as flow profile anomalies.

#### Unique support tools and tailoring

The SITRANS FST030 transmitters offer user-friendliness and customization options at every stage of installation, commissioning and every day operation.

The SensorFlash® microSD card gives you access to product data, certificates, operating instructions and audit trails directly from a PC or via the transmitter's USB port, and also simplifies the transfer configuration between devices.

The graphical user interface features an intuitive menu navigation with the ability to display up to 6 user-configurable parameters on the same screen, along with a comprehensive set of diagnostic tools to improve monitoring and streamline operations.

#### Additionally, the FST030 provides:

- Low power consumption of 10 W or less for improved energy efficiency
- Easily accessible USB user interface for quick set up, data retrieval and increased servicing up time
- Compliance with current electro-mechanical compatibility (EMC) standards CE conformity marking, low voltage directive, WEEE and RoHS

- Optional commissioning and other support packages from Siemens experts.

#### High performance, low maintenance

To cover the widest possible range of applications and challenges, Siemens offers 3 different types of clamp-on ultrasonic sensors SITRANS FSS200 in multiple sizes: WideBeam® (High Precision), Universal and High Temperature.

Sensor Selection	Universal	High Temp.	Wide Beam
Homogeneous liquids with moderate aeration	X	X	X
Moderately aerated liquids and multiple products		X	X
Liquid temperatures from -40 to 450 °F		X	
Steel pipes and liquid temperatures from -40 to +250 °F			X
Non-steel pipes and liquid temperatures from -40 to +250 °F	X		
Steel pipes with diameter/wall thickness ratio above 10	X		
Improved stability and repeatability on steel pipes			X

#### Legal Manufacturer

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