

SITRANS FUS1010 Clamp-on Water Flowmeters

Dual mode of operation makes Siemens clamp-on ultrasonic flowmeters suitable for virtually any flow application within the water industry.



The SITRANS FUS1010 clamp-on ultrasonic flowmeters from Siemens are suitable for a wide variety of water industry applications. Among others, these include complete leak detection systems for distribution systems, irrigation and chemical dosage applications. Clamp-on meters from Siemens have dual mode capabilities making them suitable for measurement of both homogeneous liquids as well as liquids with aeration; a feature that usually requires two separate meters.

This makes them ideal for the diverse types of fluid measurement tasks found in the majority of the

applications and installations in water treatment plants:

- Water extraction
- Chemical dosing
- Backwash flow monitoring
- Flocculation tank flow metering
- Distribution network monitoring
- Leak detection
- Conservation studies
- Water billing
- Water consumption monitoring
- Irrigation

The meters are available in both permanent and portable models and since it is not necessary to cut the pipe or shut down operations to install a

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clamp-on flowmeter, they are quickly mounted and easily commissioned. In addition, the transducers are installed on the outside of the pipe minimizing maintenance expenses and preventing deposits from forming inside the pipe.

Dual mode of operation

Clamp-on meters from Siemens offer unique dual mode capabilities using WideBeam transit time and Doppler ultrasonic technology engineered for a diverse range of flow applications.

WideBeam transit time operation is the preferred mode for relatively homogeneous liquids found in filtration and disinfection applications. Accuracy is up to 0.5% of the flow.

Doppler operation, on the other hand, is the preferred measurement method for liquids with extensive aeration such as oxidized water. Doppler accuracy is up to 1% of the flow.

Having both modes of operation ensures suitability for virtually any water application. The system can automatically switch from one mode of operation to the other as conditions change, eliminating the need to alternate between meters when aeration and solids vary.

Flexible product offering

Siemens clamp-on flowmeter systems for the water industry range from simple single meter installations to complete flowmeter systems.

SITRANS FUS1010 provides accurate, non-intrusive flow measurement in full pipes and is dual mode field

programmable. It is particularly suitable for high precision dosage of chemicals such as fluoride found in numerous fresh water treatment applications. The FUS1010 is available in single, dual or optional four channels allowing measurement of four independent pipes.

SITRANS FUP1010 is like FUS1010 but it is available in a rugged submersible portable enclosure. The FUP1010 system is frequently used as part of inflow studies, or as portable or permanently installed meters and is offered in both single as well as dual channel versions.

The FUP1010 is also available as an all inclusive water Check Metering Kit. It is capable of measuring practically all conductive or non-conductive clean or moderately aerated liquids or liquids with suspended solids. This basic feature paired with the meter's portability makes it the perfect choice for performance check or verification of any type or brand of flowmeters installed anywhere in a wastewater plant.

Accuracy is 0.5 to 2% and repeatability on the better side of 0.015%.

SITRANS FUS1020 is a basic flowmeter that provides affordable high performance for many flow measurement applications. WideBeam transit time operation is provided with both single and dual channel versions.



Using the SITRANS FUP1010 water Check Metering Kit offers several advantages:

- Verifies the performance of any type or brand of flowmeter anywhere in a water treatment plant
- Measurement of practically all liquids found in the water industry
- Easily measures high precision dosage applications
- Field use is facilitated by meter portability and 1 hour quick charge for 4 hours of normal operation
- Delivered as an all inclusive kit with all the equipment needed to conduct performance and verification tests (cables, multiple transducers, flow computer etc.).
- Accuracy typically around 0.5 to 2%

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SITRANS FUS1010 Clamp-on Wastewater Flowmeters

The versatility of the Siemens clamp-on ultrasonic flowmeters designed for flexibility and easy installation enhances the performance of any wastewater application.



The versatility of the Siemens SITRANS FUS1010 clamp-on ultrasonic flowmeters makes them suitable for virtually every application in the wastewater industry. Among others, these include complete flow data acquisition and leak detection systems for treatment plants, collection and distribution systems.

Clamp-on meters from Siemens can be used for both homogeneous liquids as well as liquids with extensive suspended solids or aeration making them ideal for measuring the diverse types

of fluids found in wastewater treatment plants:

- Raw sewage
- Primary sludge
- Return activated sludge
- Mixed liquor
- Waste activated sludge
- Thickened sludge
- Digested sludge
- Chemical additives
- Effluent

The meters' flexibility is further strengthened by the availability of both permanent and portable models. Since it is not necessary to

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cut the pipe or shut down operations to install a clamp-on flowmeter, they are quickly mounted and easily commissioned. In addition, the transducers are installed on the outside of the pipe minimizing maintenance expenses and preventing deposits from forming inside the pipe.

Dual mode of operation

In addition to flexibility, the clamp-on meters offer state-of-the-art WideBeam transit time and Doppler ultrasonic technology engineered for the diverse range of flow applications.

WideBeam transit time operation is the preferred mode for relatively homogeneous liquids found in primary sludge and mixed liquor applications. Accuracy is up to 0.5% of the flow.

Doppler operation, on the other hand, is the preferred measurement method for liquids with extensive suspended solids or aeration. Such conditions are typically relevant for measuring thickened and digested sludge. Accuracy with Doppler mode is 1 to 2% of the flow.

Having both modes of operation ensures suitability for virtually any wastewater application. The dual channel meter automatically switches from one mode of operation to the other as conditions change, eliminating the need to alternate between meters when aeration and solids vary.

Flexible product offering

Siemens clamp-on flowmeter systems for the wastewater industry range from simple single meter installations

to complete flowmeter systems. SITRANS FUS1010 provides accurate, non-intrusive flow measurement in full pipes. It is field programmable for both WideBeam transit time and Doppler for quick adaptation to changing conditions. The FUS1010 is offered with optional four channels allowing measurement of four independent pipes with only one flow computer reducing overall ownership costs.

SITRANS FUP1010 is like the FUS1010 except that it comes in a rugged submersible portable enclosure. The FUP1010 system is frequently used as part of infiltration and inflow studies, or as portable or permanently installed meters at treatment plants or in collection systems.

The FUP1010 is also available as an all inclusive wastewater check metering kit. It is capable of measuring practically all conductive or non-conductive clean or moderately aerated liquids or liquids with suspended solids. This basic feature paired with the meter's portability makes it the perfect choice for performance check or verification of any type or brand of flowmeters installed anywhere in a wastewater plant.

Accuracy is typically around 0.5 to 2% and repeatability on the better side of 0.015%.

SITRANS FUS1020 is a basic flowmeter that provides affordable high performance for many flow measurement applications. WideBeam transit time operation is provided with both single and dual channel versions.



Using the SITRANS FUP1010 wastewater check metering kit offers several advantages:

- Verifies the performance of any type or brand of flowmeter anywhere in a wastewater plant
- Measurement of practically all liquids found in the wastewater industry
- Field use is facilitated by meter portability and 1 hour quick charge for 4 hours of normal operation
- Delivered as an all inclusive kit with all the equipment needed to conduct performance and verification tests (cables, multiple transducers, flow computer etc.).
- Accuracy is typically around 0.5 to 2%

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