



# SITRANS FS220

The digital clamp-on ultrasonic flowmeter

## Product portfolio

### Next-generation replacement of the FST020

The SITRANS FS220 is the newest addition to our portfolio of next-generation digital flow measurement systems, and combines the top-performing FST020 transmitter with dependable FSS200 sensors.

The new FST020 transmitter is built on the same advanced digital platform as the FST030 clamp-on flow transmitter, but with fewer features and therefore a lower cost.

General benefits of clamp-on flow technology:

- No moving parts; virtually maintenance-free
- High accuracy and reliability
- Cost-efficient installation on existing pipelines
- High flexibility with mounting on pipes sizes >0.5"
- Measures almost any liquid



# Top highlights at a glance

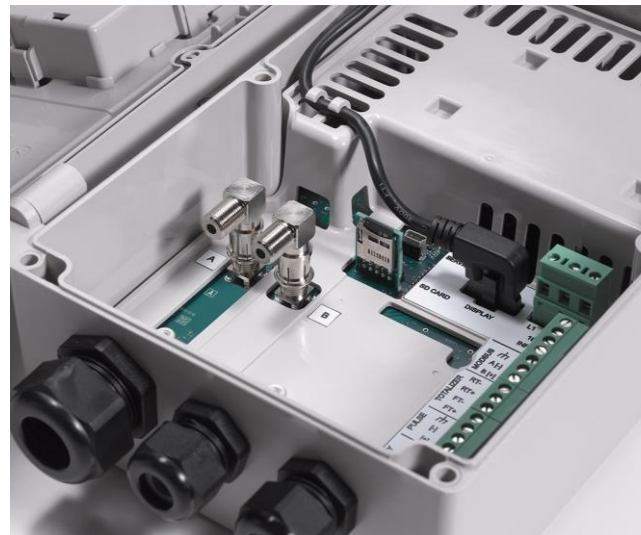
## Minimize costs. Maximize simplicity.

### High-performance measurement +

- 1% accuracy and  $\pm 0.25\%$  repeatability according to ISO 11631
- Patented upstream pipe configuration menu
- High zero point stability
- Market-leading handling of aeration and suspended solids

### Cost-efficient and highly flexible +

- Low cost of ownership with no moving parts and no fluid contact
- Minimized downtime due to on-pipe mounting, best-in-class service functions and network of experts
- Sensors can be mounted on pipe sizes up to 394" (10 m)



### Ultimate user-friendliness +

- Large graphical display with intuitive menu navigation & 4-button keypad
- SensorFlash® microSD card for data storage/collection and easy firmware updates
- Built-in mini USB connector for easy interfacing with PC
- SIMATIC PDM connectivity for trouble-free meter operation

### Unsurpassed customization options +

- Up to 6 user-configurable parameters on the same screen
- 5 different customizable views
- Multiple wizards for commonly used setups

# Product overview

## SITRANS FS220 flow system

|                             |  |                          |   |
|-----------------------------|--|--------------------------|---|
| <b>Approvals</b>            | UL, cUL, CE<br>(no HazLoc)   | <b>Measured Media</b>    | Conductive and non-conductive liquids   |
| <b>Accuracy</b>             | ±1% for velocities above 0.3 m/s and >10 diameters straight run  | <b>Temperature Range</b> | Transmitter: -10 to +50 °C (14 to 122 °F)<br>Sensors: -40 to +232 °C (-40 to +450 °F)   |
| <b>Repeatability</b>        | ±0.25% (based on ISO 11631)  | <b>I/Os</b>              | 1x 4-20 (passive only)<br>1x frequency/pulse<br>1x relay<br>1x input for start/stop totalizer<br>1x input for reset totalizer |
| <b>Pipe Size Range</b>      | 12.7 mm to 10 m (0.5" to 394")   | <b>Communication</b>     | Modbus RTU (compatible with SIMATIC PDM)  |
| <b>Wall Thickness Range</b> | 0.64 to 76.2 mm (0.025 to 3.0 in)  |                          |   |
| <b>Pipe Material</b>        | Any sonically conductive material (steel, plastic, aluminum, glass, ductile iron, copper); lined pipes |                          |   |

# Features and benefits

## SITRANS FS220: Advanced capabilities, simplified design

| Feature / Function   | Benefit  |
|--|--|
| <ul style="list-style-type: none"> <li>• Easy commissioning wizard with help text</li> </ul>   | <ul style="list-style-type: none"> <li>• Makes programming and configuration quick, easy and time-saving</li> </ul>  |
| <ul style="list-style-type: none"> <li>• SensorFlash® microSD card – onboard storage of setup files, certificates, calibration sheets, audit trails and opportunities for data analysis</li> </ul> | <ul style="list-style-type: none"> <li>• All safe in one place; no worries about losing critical information</li> <li>• Easily accessible as a mass storage device through USB service port (not available in the US)</li> <li>• Process optimization</li> </ul> |
| <ul style="list-style-type: none"> <li>• Menu-selected patented upstream pipe configuration</li> </ul>   | <ul style="list-style-type: none"> <li>• Improved accuracy in less-than-ideal upstream piping conditions</li> </ul>  |
| <ul style="list-style-type: none"> <li>• 6 configurable main display options with 5 different views</li> </ul>   | <ul style="list-style-type: none"> <li>• See what you want to see, not what we think you should see</li> </ul>   |



# Ordering options

Configuration  
7ME3570-xxx

SITRANS FST020 Transmitter



SITRANS FSS200 Sensors

High Temperature Sensors



Universal Sensors

High Precision Sensors

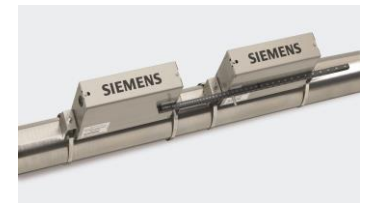
SITRANS FS220 flowmeter



Standard Frames



Sensor Cables



High Precision Mounts



Magnetic Mounting Frames



Sensor mounting



Sensor Cables



Options

# Built-in flexibility

## Target industries and applications



### Potable water treatment

- Source intake
- Low/high lift pump well
- Elevated water storage
- Network distribution



### Wastewater/reclamation

- Raw sewage
- Activated sludge
- Reclaimed water



### HVAC/power

- Condenser water
- Cooling tower flow
- Distribution lines

# I Thank you for your attention!

**For further information and support, please contact:**

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