Thanks to the WideBeam ultrasonic transit-time measurement principle developed by Siemens, the SITRANS FS230 clamp-on ultrasonic gas flowmeter tolerates most wet gas conditions. Most competing meters would be incapable of operation in such challenging environments, but the SITRANS FS230 can perform accurate readings even when moisture is present. WideBeam technology has proven its accuracy and reliability in numerous field installations around the world.
The SITRANS FS230 clamp-on ultrasonic gas flowmeters provide several benefits:

- Transit-time technology ensures excellent accuracy and tolerance of most wet gas conditions
- Data extraction and analysis through AGA-8 compliant Si-Ware diagnostics tool and AGA-10 compliance for software accuracy verification
- Can be paired with Hi-Precision Mounts for permanent and direct burial installations
- Single-, dual- and four-path versions accommodate various flow profiles
- Easy installation and commissioning

The SITRANS FS230 is ideal for most natural, specialty and process gas industry applications, including:

- Check metering
- Lost and unaccounted for (LAUF) analysis
- Allocation
- Flow survey verification
- Production
- Storage
- Gas-fired power stations

As with any other clamp-on flow device from Siemens, it is not necessary to cut the pipe or shut down operations to install the flowmeter; the sensors are quickly and easily mounted on the outside of the pipe, minimizing maintenance expenses and preventing deposits from forming.

Quality-assured features
The Si-Ware diagnostic software provides the SITRANS FS230 with diagnostic capabilities that deliver crucial information about the application and meter performance. This data can be extracted and downloaded to a PC for thorough analysis and systems check.

For additional verification purposes, a speed of sound calculation in compliance with the American Gas Association's AGA-10 standard is incorporated into the software. In addition, an internal AGA-8 compliant table for fixed gas composition is available for standard volume computation.

When installation conditions require it, the sensors can be delivered in rugged stainless steel Hi-Precision Mounts enclosures for permanent direct burial. For additional protection the sensors can be sealed with denso couplant or RTV silicone.

A built-in Zeromatic Path function makes commissioning of the SITRANS FS230 particularly easy. After installing the meter, it interrogates the ultrasonic signal in order to update the zero offset value under normal operation. By doing this, the flowmeter can dynamically compensate for changing conditions that would normally result in zero drift. The Zeromatic Path is recommended for applications experiencing large temperature extremes.

The WideBeam principle
All SITRANS FS230 clamp-on flowmeters employ transit-time technology, in which the pipe wall is utilized as an amplifier to optimize the signal-to-noise ratio. This increases precision by reducing sensitivity to any change in the medium type or pressure. It also renders the flowmeter immune to most pressure-reducing valve noises. The WideBeam principle works with steel, aluminum, titanium and plastic pipes.

Flexible product offering
The SITRANS FS230 is available in three different enclosures (wall mount, wall mount explosionproof and compact explosionproof), and in single-, dual- or four-path versions. It offers a wide range of communication options, Modbus RTU/TCPIP, Ethernet IP, N2 and VT100 RS232.