

FCI Future-Ready ST100 Air/Gas Flow Meter At WEFTEC 2013

Ideal for Applications in Aeration Systems, Digester Gas and Disinfection Gases



San Marcos, CA — Process, plant and instrument engineers visiting [WEFTEC 2013](#) Booth 3944 will learn more about the advanced [ST100 Flow Meter](#) and other helpful solutions to flow metering, conditioning and switching challenges from [Fluid Components International \(FCI\)](#).

FCI's ST100 Flow Meter features the industry's widest choice of communication options with 4-20 mA analog, frequency/pulse, alarm relays and fully-approved digital communications: HART, Foundation Fieldbus, Modbus and Profibus. It is ideal for service in clean water and waste treatment plants, including applications for aeration systems, digester gas and disinfection gases.

The ST100 Flow Meter combines superior flow sensing performance with the most feature- and function-rich electronics available today. A truly "future-ready" thermal mass gas flow meter, the ST100 is designed with a plug-in card replacement that can be changed out by technicians in the field to adapt to a plant's changing network communication needs.

Developed with a unique graphical, multivariable, backlit LCD display that provides more information than any other thermal flow meter available, the ST100 Flow Meter brings new meaning to the term "process information". Its sophisticated readout continuously displays all process measurements and alarm status, and it has the ability to query for service diagnostics.

The feature-rich ST100 Flow Meter measures gas mass flow rate, total flow, temperature and pressure depending on model family. It can store up to five unique calibration groups to accommodate broad flow ranges, differing mixtures of the same gas and multiple gases, and obtains up to 1000:1 turndown. Also standard is an on-board data logger with an easily accessible, removable 2-GB micro-SD memory card capable of storing 21 million readings.

-MORE-

ST100 Flow Meters can be calibrated to measure virtually any process gas, including wet, mixed and dirty gases. The basic insertion style air/gas meter features a thermal flow sensing element that measures flow from 0.25 to 1000 SFPS (0.07 NMPS to 305 NMPS) with accuracy of ± 0.75 percent of reading, ± 0.5 percent of full scale.

Offering service up to 850°F (454°C), the rugged ST100 Flow Meter is designed for rugged industrial process and plant applications. Both integral and remote (up to 1000 feet [300 meters]) electronics versions are available. The ST100 is agency approved for hazardous environments, including the entire instrument, the transmitter and the enclosure. Instrument approvals include: FM and FMc: Class 1, Division 1, hazardous locations, Groups B, C, D, E, F, G; ATEX and IECEx: Zone 1, II 2 GD Ex d IIC T4; The rugged enclosure is NEMA 4X/IP67 rated.

Other Solutions

In addition to the ST100 Flow Meter, FCI also offers a range of smaller line air/gas flow meters. They include the **ST50 Air/Gas Flow Meter** for compressed air and the **ST51 Flow Meter**, which is designed specifically for the measurement of biogases. They are both well suited for air/gas measurement in wastewater aeration treatment ponds and anaerobic digester gas systems.

The FCI exhibit booth will include the **FLT93 Switch** with FlexSwitch[®] technology for the measurement of flow or level and temperature. The FLT93 Switch is a reliable solution for protecting pumps in water treatment plants where it provides rapid sensing of dry-running conditions that cause unnecessary shutdowns and maintenance.

In crowded water and waste treatment plants, FCI's **VIP Flow Conditioner** (Vortab Insertion Panel) neutralizes flow profile irregularities caused by elbows, valves, blowers, compressors, and other flow disturbances that commonly occur in piping and duct runs and cause flow meter inaccuracies. The VIP provides a swirl-free, symmetric and repeatable flow profile that flow meters require for accurate measurement.