Remote Mountable Thermal Mass Flow Meter For Small Line Processes In Hazardous Areas Or Hard-To-Reach Locations

Ideal For Co-Gen Electric Power Turbines, Food/Beverage Chillers, Heat-Treating Systems, Pharmaceuticals, Specialty Chemicals and More

San Marcos, CA—November 25, 2008—Instrument and plant engineers who need to measure process gas, fuel gas, inert gas or waste gases as well as air in small line sizes will find the advanced ST75 Flow Meter from Fluid Components International (FCI) is now available in a remote mountable configuration for applications in hazardous areas or hard-to-reach locations.

Combining high accuracy with a rich feature set, the ST75 Flow Meter is designed for line sizes from 0.25 to 2.0 inches (6 to 51mm). The ST75 provides three unique outputs: the mass flow rate, totalized flow and media temperature. It is ideal for applications in a wide range of industries including chemical, electric power, food/beverage, advanced materials, pharmaceuticals, semiconductor and more.

The ST75 Flow Meter features accuracy to ±2% of reading with ±0.5% repeatability and includes media temperature compensation to ensure performance in rugged environments. Its precision flow element has a no-moving parts design that employs platinum RTD sensors embedded in equal mass thermowells with microprocessor electronics calibrated to laboratory standards for a wide range of gases including: natural gas, methane, nitrogen CO₂, argon, all inert gases, compressed air and more.

The ST75 Flow Meter operates over a wide flow range, from 0.01 to 559 SCFM (0.01 to 950 NCMH) depending on line size, which makes it equally well suited for low flow and high flow applications. For variable process conditions, the ST75 is factory preset to a wide turndown range at 10:1 to 100:1.

Remote mount flow meters are ideal in equipment crowded plants or hazardous factory areas where explosive, flammable or toxic gases may be present near the transmitter’s electronics.

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The ST75’s remote mount transmitter, which includes a full digital display, can be mounted up to 50 feet (15 meters) away from its thermal mass flow sensor in the process piping and connected via two 0.50-inch FNPT cables.

The ST75 Flow Meter's standard outputs are fully scaleable 4-20mA and 0-10V. They are user assignable to flow rate and/or temperature and a 0-1kHz pulse output of total flow. The instrument can be ordered for input power with either 18 to 36 Vdc or 85 to 265 Vac, with or without a built-in LCD digital display.

The ST75’s thermal dispersion technology provides direct-flow measurement for higher performance at a lower cost by eliminating the need for temperature sensors, flow computers, or other devices that are required with orifice plates, Venturis, Vortex shedding, and other meters. Its no-moving parts design ensures superior service life. There are no orifices or inlets to clog or foul, which significantly reduces scheduled maintenance and unplanned shut-downs.

The ST75’s rugged sensing element features all welded 316 stainless steel construction with Hastelloy-C tips. It is enclosed in a rugged, all-metal, dust and water resistant NEMA Type 4X (IP66) rated package designed for hazardous area installations. Approvals include: Class 1, Div. I Groups B, C, D. Div. II Group A, B, C; ATEX/IECEX Zone I, II 2 G Ex d IIC T6...T3; II 2 D Ex td A21, IP67 T90°...T300° (pending); FM/CSA/CRN and CE Marked.

Whether adding flow sensing to improve a process or replacing poorly performing or high-maintenance flow meters, the ST75 remote mountable flow meter provides an accurate, fast response and low-maintenance solution to small line size gas and air flow applications in hard to reach or hazardous locations.

Fluid Components International is a global company committed to meeting the needs of its customers through innovative solutions to the most challenging requirements for sensing, measuring and controlling flow and level of air, gases and liquids.