

## PROFIBUS Thermal Flow Meters Support Wide Range of Process and Industrial Applications

*Ideal for Service in Chemical, Electric Power, Food/Beverage, Landfill, Oil/Gas, Manufacturing, Pharmaceuticals, Water/Wastewater*

**San Marcos, CA** — Process, instrumentation and plant engineers utilizing the PROFIBUS digital bus communications protocol in their facility's operations and needing to incorporate accurate, repeatable air/gas flow measurement into their monitoring and control need now look no further than the rugged, precision ST Series and MT Series Thermal Flow Meters from Fluid Components International (FCI).



FCI's advanced single point ST and multipoint MT mass flow meters combine highly accurate, repeatable thermal flow measurement performance with digital bus communications technology flexibility. FCI now offers the industry's widest choice of thermal meters available with PROFIBUS-PA and PROFIBUS-DP, in addition to HART, Foundation Fieldbus and Modbus, as well as standard 4-20mA or pulse communications.

PROFIBUS has become a leading global automation industry standard, which has been in use and growing in popularity for decades. The proven PROFIBUS communications protocol today connects millions of devices and automation systems in factories around the world. It is available in two protocol types: PROFIBUS-DP and PROFIBUS-PA, which are both available in FCI's thermal flow meters .

FCI's highly intelligent thermal mass flow meters, depending on the model, can be configured as either a field instrument PA type device or a system RS-485-based DP type device. The ST80 Series is available with both PROFIBUS-PA and PROFIBUS-DP, while the ST100A Series is available with PROFIBUS-PA. The MT100 Series is available with PROFIBUS-PA. In addition to flow rate, FCI's PROFIBUS compatible flow meters also provide totalized flow, temperature and instrument health diagnostics over the PROFIBUS communications link.

Depending on the model selected and the application, FCI's thermal mass flow meters offers accuracy up to  $\pm 0.75\%$  reading,  $\pm 0.5\%$  full scale, with repeatability of  $\pm 0.5\%$  reading percent of reading. The turndown ratio is normally factory set and field adjustable from 2:1 to 100:1 within calibrated flow range; up to 1000:1 possible with factory evaluation.

**ST80 Series Flow Meters**

The Model ST80 is a high performance, rugged thermal dispersion technology air/gas flow meter. It combines ultra-reliable, feature-rich electronics with innovations such as FCI's Adaptive Sensing Technology™ (AST) and an extensive selection of application-matched flow sensors. These sensors include FCI's wet gas flow element to provide a truly superior solution for industrial processes and plant applications. In addition to these features, the ST80 comes with a robust, rugged transmitter enclosure and the industry's broadest selection of process connections for ease-of-installation in virtually all pipe or duct configurations.

**ST100 Series Flow Meters**

The Model ST100A is high performance thermal dispersion technology gas flow meter that combines the industry's most feature- and function- rich electronics. This meter's versatile flow elements and process connections ensure the best possible measurements and effective installation. Multiple flow element options are available to optimize performance within a wide variety of application conditions and environments. With thermal dispersion there are no moving parts to foul or clog, which means there is virtually no maintenance required over an extremely long service life providing a lowest life-cycle cost.

**MT100 Series Flow Meters**

The MT100 Series is an insertion type, multipoint thermal flow meter designed for large diameter pipes, such as stacks and flues, and large rectangular ducts, such as air feed intakes and HVAC. These large pipe/duct applications are difficult for ordinary flow meters because of distorted flow profiles and lack of straight-run. The design of the MT100 places up to eight flow sensing points in the flow stream and averages them which results in a highly accurate and repeatable flow rate measurement in fluid temperatures up to 850 °F [454 °C].

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