

## Rugged Multi-Point Flow Meter Supports Clean-Coal Electric Power Generation

**Ideal for Combustion Air Flow Monitoring, Air Monitoring To Low NOx Burners,  
Furnace and Boiler Control, Flue Gas Recirculation, CEMS Stack Monitoring**



**San Marcos, CA—October 7, 2008**—Process engineers at coal fired electric power plants will find the rugged MT91 Multi-Point Mass Flow Meter from Fluid Components International (FCI) delivers precision air/gas flow measurement with a highly intelligent flow sensor array packaged in a device that

operates at temperatures up to 850 °F (454 °C) while helping to minimize the effects of carbon dioxide (CO<sub>2</sub>) and other hydrocarbon-based greenhouse gases.

In electric power plants utilizing Power River Basin clean-burning low-sulfur coal, hot air, fuel gas, process gas and waste gas flow mixtures must be continuously monitored, controlled, treated and reported to ensure process efficiency and meet government clean air requirements. The MT91 Air/Gas Flow Meter's multi-point design provides highly precise flow measurement to support the optimization of air/gas mixtures in coal-fired power plants and other industrial processes for air pre-heater lines, air combustion processes and stack waste gas treatment of NOx, SO<sub>2</sub>, CO and others.

The combination of FCI's precision no-moving parts thermal mass flow sensor technology and its chromium carbide coated sensor assembly delivers superior flow measurement reliability with virtually no maintenance over years of service for an exceptionally low life-cycle cost. The MT91 is available with accuracy to  $\pm 2\%$  of reading with repeatability of  $\pm 0.5\%$  of reading, including operation in high temperature environments up to 850 °F (454 °C) in large line sizes greater than 24 inches.

FCI's MT91 flow meters are highly versatile, with a wide turndown range available from 5:1 to 100:1 and flow sensitivity from 0.25 SFPS to 150 SFPS (0,08 NMPS to 46 NMPS). With its smart digital flow transmitter and advanced thermal dispersion technology flow sensing element, the MT meets federal environmental requirements for CEMS, CFR40, Part 75.

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With up to 16 independent thermal mass flow sensor arrays designed into a variable probe length assembly, the MT91 Flow Meter is ideal for applications in the electric power and the chemical process industries. It also provides excellent flow measurement inside large line sizes of HVAC units, ducts or flue stacks, where unstable thermodynamic conditions make other flow meter techniques ineffective.

The MT91's flow sensor electronics incorporate a fully temperature-compensated design that is highly stable with almost no drift for excellent repeatability. The sensor assembly is available with flanged, threaded and retractable process connections with a NEMA/CSA Type 4X (IP66) junction box and installed at the desired location with a choice of popular process connections.

The smart flow transmitter for the MT Series features a powerful microprocessor-driven design for superior signal processing and data collection. This design includes a user-friendly menu-driven interface with LCD screen and keypad for programming the control, monitoring, display and driver/alarm functions. A nonvolatile EEPROM chip stores applications and calibration data, and protects this data in the event of a power disturbance.

The electronics package is connected remotely by cable to the flow element assembly up to 1000 feet (304m) away. RS232C and HART communication ports offer easy links with controllers or other field devices. Signal outputs available are 4-20 mA, 0-5 Vdc, 1-5 Vdc, and 0-10 Vdc.

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..