

Fluid Components International – Breaking News

New FCI ST50 Air/Gas Flowmeter Redefines Best Performance and Value In Its Class.

For Air, Compressed Air and Nitrogen Gas Measurement



San Marcos, CA

Designed with a thermal flow sensing element combined with an optimized feature set, the new ST50 Flowmeter from Fluid Components International (FCI) provides best-in-class value to redefine the flow measurement of air, compressed air and nitrogen gas in line sizes from 2 to 12 inches (51 to 305 mm) in many common applications.

Now process, instrument and plant engineers no longer have to trade-off between accuracy, installation, maintenance, and economy. The new ST50 is a no moving parts design flowmeter, and with prices beginning at \$995.00—it meets the challenge when compared to orifice plates, differential pressure, vortex shedding and other thermal instruments. It is ideal for use in municipal and industrial wastewater aeration control systems, industrial and commercial blower and dryer input/out air flow controls, industrial manufacturing burner and furnace air flow control, HVAC duct/damper control, and aeration flow control in lakes, ponds or aquaculture.

The new ST50 is an insertion-type flowmeter designed with a fully temperature-compensated thermal flow sensing element constructed with precision, lithography etched platinum RTDs embedded in FCI's patented equal-mass miniature diameter thermowells. Combining microelectronics with FCI's precise calibration, the ST50 achieves superior accuracy, fast response and virtually maintenance-free operation with negligible pressure drop. ST50 is available as a blind transmitter or with a large LCD digital display, which can be built-in (integral) with the main transmitter or provided as a remote readout that can be located up to 50 feet (15M) away. Whenever performance, long-life and total installed costs are all important process considerations, the ST50 offers the best flow instrument value in its class. Operating over a wide range, the ST50 measures air flow from 1 to 125 SFPS (0.3 to 38 NMPS), nitrogen from 1 to 150 SFPS (0.3 to 46 NMPS) and compressed air from 4 to 400 SFPS (1.2 to 122 NMPS). Accuracy is $\pm 2\%$ of reading, $\pm 0.5\%$ of full scale, with repeatability of $\pm 0.5\%$ of reading.

The versatile ST50 is field configurable for flow range in standard mass flow or volumetric engineering units. It features dual analog outputs, 4-20 mA and 0-10 Vdc, which are field assignable as flow rate or temperature and a RS232C I/O port. A 0-1kHz pulse output for totalizing flow is also available as an option. All configurations are easily user set in the field with any standard laptop or via a standard PDA with FCI's exclusive new wireless IR link option.

With its built-in wireless IR technology, the ST50 allows field technicians to obtain readings or make setting changes to units that are installed in hard-to-reach locations. Via the IR link and FCI's PDA software kit, ST50 users can perform configuration set-up or changes, read service/troubleshooting codes, as well as read all the measurement values. The wireless IR link also eliminates the need for proprietary programmers, which simplifies maintenance and reduces the overall cost of use.

Designed for long-life in outdoor and field installation conditions, the ST50's sensing element is constructed of stainless steel with Hast-C tips, and its electronics are housed in an all-aluminum, epoxy-coated enclosure that is NEMA 4X (IP66) rated. It withstands operational pressures up to 500 psig [34 bar (g)] and operates in media temperatures up to 250°F (121°C). The process connection is 1/2-inch MNPT or 3/4-inch MNPT with stainless steel or Teflon ferrule. It is available in three field adjustable U-length probes, 6", 12" and 18" (152mm, 305mm, and 457mm) to accommodate pipe sizes 2-12" (52 to 305mm) and a variety of mechanical installation requirements. Instrument powering options include both DC (12-36V) and AC (85-265V). The ST50 comes with a 1-year standard warranty.

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.