

## FOX MODEL FT3 FLOW METER PROCUREMENT SPECIFICATION

- The flow meter shall operate on the Constant Delta Temperature (Constant Δ T) thermal mass principal. The sensing elements shall consist of two platinum RTD's. The sensor's heated element shall operate a constant temperature of approximately 40°F above the gas temperature.
- 2. The flow meter shall have a built-in display of flow rate, flow total, temperature, and elapsed time. The read-out shall utilize a backlit LCD display consisting of two lines each 16 characters.
- 3. Two 4-20mA outputs are required; one output for flow rate and the second output is programmable for flow rate or process temperature. A pulse output is also required.
- 4. An optional non-resetting totalizer shall be available as required by air quality management districts.
- 5. A 4-key infrared keypad will be employed for user programming. Input parameters shall be protected by use of a password. Nonvolatile memory will retain totalizer and user parameters for up to seven (7) years.
- 6. The flow meter shall have a built-in microprocessor allowing field programmability of the 4mA setting, 20mA setting, pulse output setting, pipe/duct area, zero flow cutoff and alarm settings.
- 7. The flow meter shall measure gas flows over a range of 0-60,000 standard feet per minute. Sensor response time shall be 0.9 seconds for a one (1) Sigma change in velocity.
- 8. Accuracy shall be  $\pm 1.0$  percent of reading,  $\pm 0.2$  percent of full scale and repeatability  $\pm 0.2$  percent of full scale over an operating temperature range of  $-40^{\circ}$ F to  $250^{\circ}$ F.
- 9. All wetted parts are to be 316SS utilizing an all welded design. Other alloys will optionally be available.
- 10. All electronics to be mounted in a single NEMA 4X enclosure. Input power will be 24VDC or 100-240VAC, 50-60 Hz.
- 11. USB serial communication port is standard; the following communication options are also available: RS485 Modbus and HART.
- 12. The manufacturer shall provide an NIST-traceable calibration certificate for the instrument.
- 13. The flow meter will have CAL-V™ and Zero CAL-CHECK® calibration validation features to evaluate meter performance.
- 14. The flow meter will have approvals from CE, FM/FMc, ATEX, and IECEx for use in potentially explosive atmospheres.
- 15. The instrument will be the Model FT3 manufactured by Fox Thermal, 399 Reservation Road, Marina, CA 93933 Phone: 831-384-4300, Fax: 831-384-4312, Email: sales@foxthermal.com, Website: www.foxthermal.com