FOX MODEL FT2A FLOW METER PROCUREMENT SPECIFICATION

1. 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 keypad will be employed for user programming. Input parameters shall be protected by use of a password. Nonvolatile memory will retain the last totalizer value 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 will be FM (U.S.) & FMc (CANADA) approved for Class I, II, III, Division 2, Groups A, B, C, D, E, F, G, T4A hazardous locations. NEMA 4X and CE approved.
8. 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.
9. Accuracy shall be ±1.0 percent of reading, ±0.2 percent of full scale and repeatability ±0.2 percent of full scale over an operating temperature range of -40°F to 250°F.
10. All wetted parts are to be 316SS utilizing an all welded design. Other alloys will optionally be available.
11. All electronics to be mounted in a single NEMA 4X enclosure. Input power will be 24VDC or 100-240VAC, 50-60 Hz.
12. USB serial communication port is standard; the following communication options are also available: RS485 Modbus, BACnet MS/TP, Profibus-DP, DeviceNet, or Ethernet Modbus TCP.
13. The manufacturer shall provide an NIST-traceable calibration certificate for the instrument.
14. The flow meter will have internal self-diagnostics without requiring external equipment to evaluate meter performance.
15. The instrument will be the Model FT2A 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