1. The flow meter shall operate on the Constant Delta Temperature (Constant ∆ 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 ±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.

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: 831-337-5786, Email: sales@foxthermal.com, Website: www.foxthermal.com