



## FOX MODEL FT1 FLOW METER PROCUREMENT SPECIFICATION

1. The flow meter shall operate on the Constant Delta Temperature (Constant  $\Delta T$ ) thermal mass principal.
2. A DDC-Sensor™, or direct digitally controlled sensor, shall be standard.
3. The Gas-SelectX® menu will offer pre-programmed and selectable gases and gas mixtures.
4. 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.
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.
6. One 4-20mA output programmable for flow rate or temperature is required - HART communication option; a second output for pulse, RS485 Modbus RTU, or BACnet MS/TP option is selectable.
7. The flow meter shall have a built-in microprocessor allowing field programmability of the 4mA setting, 20mA setting, pulse output setting, pipe diameter, zero flow cutoff, standard temperature and pressure (STP) and alarm settings.
8. The flow meter shall have approvals from CE, FM/FMc, ATEX, and IECEx for use in potentially explosive atmospheres.
9. The flow meter shall measure gas flows over a velocity range of 15-25,000 standard feet per minute. Sensor response time shall be 0.8 seconds for a one (1) time constant.
10. In an operating temperature range of -40°F to 250°F, accuracy shall be  $\pm 1.0$  percent of reading,  $\pm 0.2$  percent of full scale for air and nitrogen calibrations;  $\pm 1.5$  percent of reading,  $\pm 0.5$  percent of full scale for other gases. Repeatability shall be  $\pm 0.2$  percent of full scale.
11. All wetted parts are to be 316SS utilizing an all welded design.
12. All electronics to be mounted in a single NEMA 4X enclosure. Input power will be 12-24VDC.
13. USB serial communication port is standard; the following communication options are also available: RS485 Modbus RTU or BACnet MS/TP.
14. The manufacturer shall provide an NIST-traceable calibration certificate for the instrument.
15. The flow meter will have the CAL-V™ calibration validation feature and internal self-diagnostics without requiring external equipment to evaluate meter performance.
16. A CAL-V™ Calibration Validation Certificate can be printed upon completion of a CAL-V™ test initiated from the Fox FT1 View™ software.
17. The instrument will be the Model FT1 manufactured by Fox Thermal, 399 Reservation Road, Marina, CA 93933 Phone: 831-384-4300, Email: sales@foxthermal.com, Website: www.foxthermal.com