

SurgePro™ TFT1

TURBINE FLOW TRANSMITTER DATA SHEET



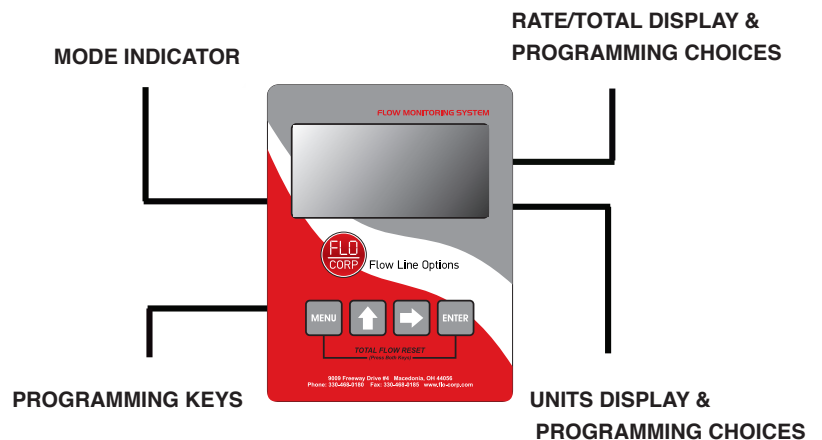
DESCRIPTION

The SurgePro Transmitter is a technologically advanced flow transmitter designed to be comprehensive, user-friendly, flexible and cost-efficient. This microprocessor-based display comes precalibrated by the factory when purchased with a SurgePro flow meter, or it can easily be configured in the field. The user may choose between the standard model which is programmed in seven simple steps and the advanced model which provides additional programming options. This unit is offered in six mounting configurations: meter, remote, swivel and hand-held, as well as a panel version and explosion-proof display allowing for flexible installation. This device, when paired with a rugged, reliable SurgePro TFM1 flow meter, will provide dependable and accurate flow information for many years to come. This device may also be used with almost any flow sensor that outputs a low-amplitude AC signal.

FEATURES & BENEFITS

- Display rate and/or total
- Large 8 digit display for easy viewing (meter, remote and swivel mount plus hand-held versions)
- Battery-powered unit utilizes one “D” size 1.5 volt alkaline battery for 3½ years of service
- Loop-powered, 4-20mA version available
- User friendly front panel programming
- Ten point linearization (Advanced model only)
- NEMA 4 enclosure suitable for outdoor monitoring (meter, remote and swivel mount)

WIRING CONNECTIONS



TECHNOLOGY

The SurgePro transmitter accepts a low-frequency input, such as the input from a SurgePro flow meter, to calculate flow rate & total. These calculations are then displayed in user selected units of measurement. All SurgePro flow transmitters come pre-calibrated from the factory if ordered with a SurgePro flow meter. However, they can be easily reconfigured in the field. This unit is available in a battery-powered or loop-powered version. The battery version utilizes one “D” size, 1.5 volt alkaline battery that provides up to 3½ years of service. The loop-powered unit offers a 2-wire 4-20mA output for electronic integration. The meter mount, remote, swivel and hand-held monitors are equipped with a large 8-digit by 3/4” numerical LCD making extended range viewing in run mode and prompts variables in programming mode. Additionally, the user can choose between displaying rate, total or alternating between both rate and total.

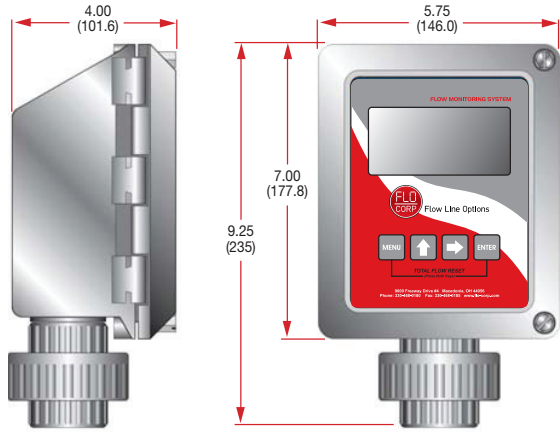
SPECIFICATIONS

LCD Display	Rate & total, fixed or toggle modes of operation ; 8 digit, 3/4" numeric (top line); 8 character, 3/8" alphanumeric (bottom line)
LCD Display: Panel Mount & XP Models Only	Rate & Total, fixed or toggle modes of operation; 8 digit, 1/2" numeric (top line) 8 character, 1/4" alphanumeric (bottom line)
Power	Battery: 1 "D" size 1.5 VDC alkaline battery Loop-Powered: 4-20 mA, two-wire current loop
Power Consumption	Battery: Less than 1 milliwatt (~3.5 years on 1 "D" battery) Loop-Powered: 23 mA maximum
Pulse Output Signal	One pulse for each increment of the least significant digit of totalizer. Pulse Type: Opto-isolated open collector transistor Max Voltage: 30 VDC Pulse Width (ON State) 20 ms/max pulse rate 25 Hz Current: (ON State) 0.9 V drop @ 5.0 mA or 0.7 drop @ 0.1 mA
Inputs	Magnetic pickup Frequency Range: 1 to 3500 Hz Trigger Sensitivity: 30 mV p-p Over Voltage Protected +/- 30 VDC
Frequency Measurement Accuracy	± 0.1%

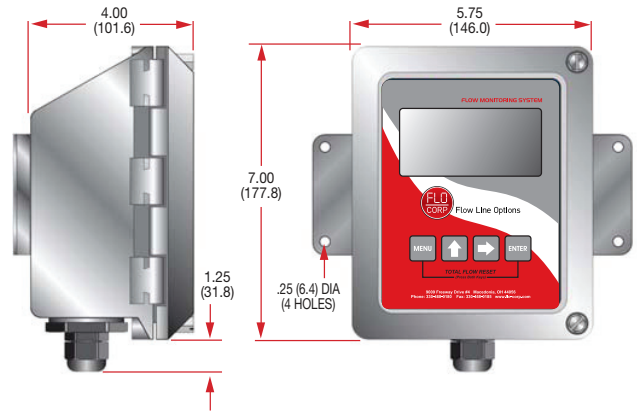
Analog Output: Loop Powered Version	4-20mA
Operating Temperature	-22°F (-30°C) to 158°F (70°C)
Humidity	0-90% non-condensing
Enclosure Rating	NEMA/UL/CSA Type 4X (IP66)
Certifications	Class I, Division 1, Groups C & D
CSA Intrinsically Safe	Class II, Division 1, Groups E,F & G IEC 61326-1
CSA Hazardous Locations (XP model only)	Class I, Division 1. Groups B,C & D Class II, Groups E,F & G Class III, Type 4, T6 @ 70°C
Units of Measure (standard version)	GPM/gallons, LPM/liters, M3PD/ cubic meters, BPD/ barrels
Units of Measure (advanced version)	Gallons, Oil Barrels, Liters, Cubic Meters, MGal, Cubic Ft, MLiters, Acre Ft, Liquid Barrels, Lbs, Kgs
Time Intervals (advanced version)	Day, Hour, Minute, Second

Note: Please Consult Factory for Special Requirements

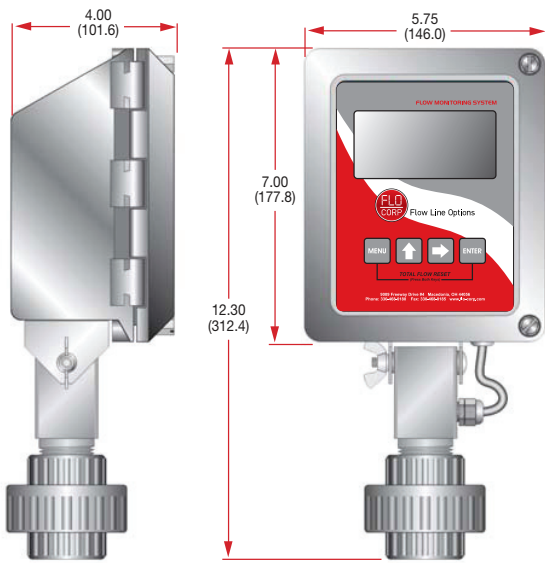
DIMENSIONS



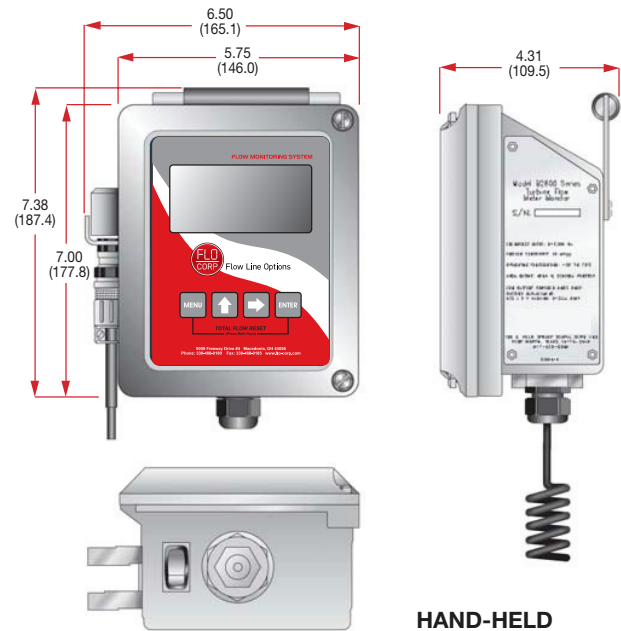
METER MOUNT



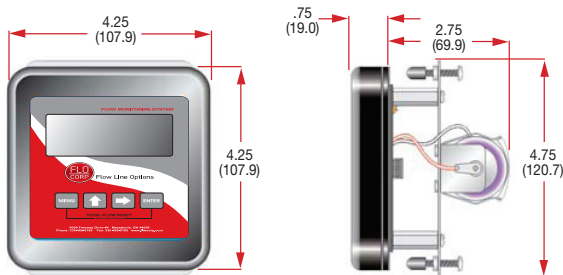
REMOTE MOUNT



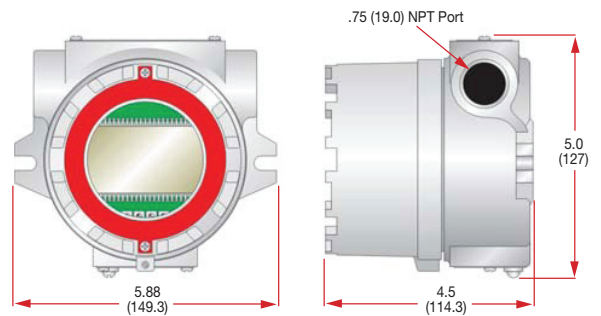
SWIVEL MOUNT



HAND-HELD



PANEL MOUNT



EXPLOSION-PROOF

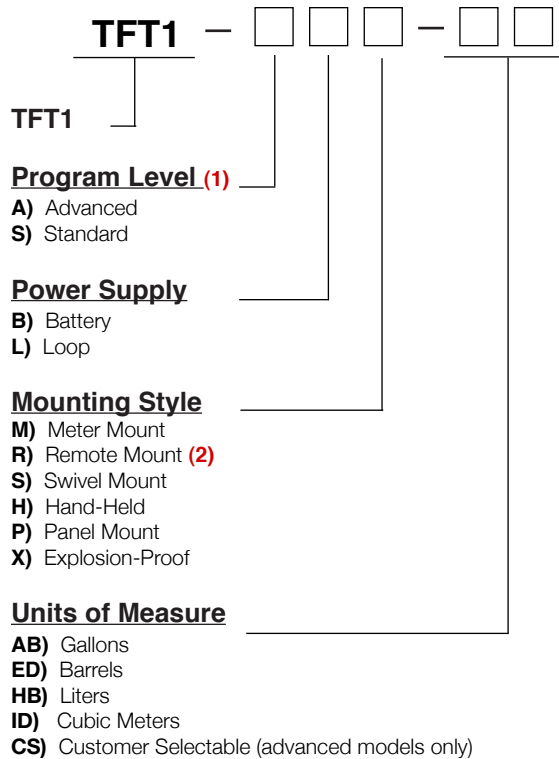
Ordering Information

FLO-CORP MODEL NUMBER BUILDER

For Assistance Call **877.356.5463**

Use the diagram below, working from left to right to construct your FLO-CORP Model Number.
Simply match the category number to the corresponding box number.

Example: TFT1-SLM-AB *TurboFlo TFT1 Turbine Flow Transmitter, standard program level, loop power supply, meter mount style, measuring gallons.*



Ordering Notes:

- (1) Select the best configuration based on your requirements.
- (2) Remote Mount option requires TFA-220-221 cable.