

## Engineering Specifications

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1. The transmitter shall be microprocessor based and field selectable for pH, ORP, Conductivity or Flow measurements.
2. The transmitter shall have a 2 line, 16-character LCD configuration display on the front panel.
3. The transmitter shall have a Manual Test Mode to test the 4-20mA output.
4. The transmitter shall have an isolated 4-20mA output, selectable to track the process or the process temperature. (If the sensor has a temperature device). This output shall be scalable through the entire measuring range.
5. The transmitter shall have the following calibration methods:  
pH: 2-point automatic buffer recognition: 2-point manual buffer input.  
ORP: 1-point manual buffer input.  
Conductivity: 1-point manual buffer input. Dry-Cal; Input of sensor constant.  
Flow: K-factor input:
6. The transmitter shall have field selectable temperature sensor inputs. These shall be selectable between 300NTC Thermistor, 3000NTC Thermistor, and PT1000 RTD.
7. The transmitter, when configured for pH or ORP shall be selectable for AquaMetrix five-wire differential electrode sensors with replaceable salt bridge or conventional combination style pH or ORP electrodes. Conductivity shall use AquaMetrix MS, or AM series conductivity cells. Flow shall use a variety of paddle-wheel flow sensors.
8. The transmitter shall have a 1/4 DIN, NEMA 4X polycarbonate enclosure. It shall come supplied with a universal mounting kit for surface mounting, panel mounting, and pipe mounting. (SHARK<sub>TX</sub>)
9. The transmitter shall be the SHARK<sub>TX</sub> manufactured by AquaMetrix Inc.