



Wio® High Level Switch

Single Point Switch

The WIO® High Level Switches are specifically designed for industrial liquid level sensing for spill/overflow prevention. Available in both, side-mount and top-mount packaging, these submersible level switches are ideal for point level sensing of refined fuels, crude oil products, chemicals, acids, caustics, lubricants, detergents etc.

The High Level Switches are self-contained and integrated with a battery-powered RF transmitter which immediately transmits wireless alarms when a set point level is reached (signaling overfill condition) or fluid level changes. These wireless switches are to be used with WIO Gateway products which connect to the RTU. The WIO System forms the foundation of wireless process control enabling automatic emergency shut-down of the dispensing pump.

Side mount offering is ideal for a single point liquid sensing with wireless alarming capability. Top mount versions come in wide range of options, up to 15 feet maximum probe length, and 1-or 2-stage switching. This versatility enables customizable actuation points of two separate specific gravity liquids, as in the case of sensing water in a gasoline or oil tank. The dual input High Level Switch is specifically designed to provide two alarms for added protection against over fills. Typically, one float is required for each point at which you need a switch action to occur.

The WIO® High Level Switches utilize a license free 902-928 MHz ISM bandwidth FHSS technology to reliably transmit wireless alarms. This eliminates installation costs of cable and conduit runs. With the WIO High Level Switches, installation time is now measured in minutes, not days or weeks.

LM5000-HLS
(Side Mount)

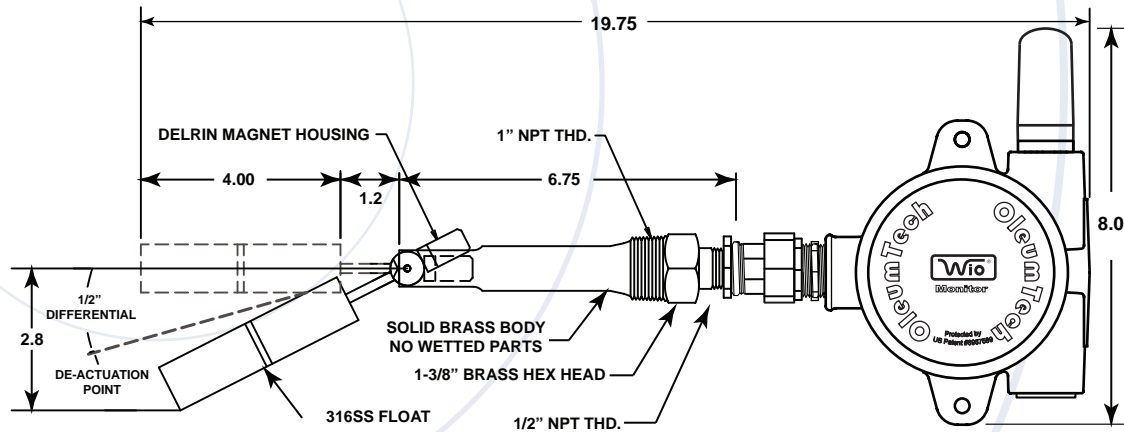


FEATURES & BENEFITS

- 100% Wireless Solution Enables Compliance to EPA's Spill Prevention Control Countermeasure (SPCC) Mandate
- Self-Contained, Battery Operated (up to 5 years)
- Modbus Communication Support
- Transmits Alarms Only On Switch Event to Conserve Battery
- Self-checking Software Continuously Monitors for Normal Operation
- Hermetically Sealed Magnetically Actuated Reed Switch
- 316 Stainless Steel for Corrosion Resistance
- Extreme Process Temperature and Pressure
- CSA & FM Approved (Class I, Division 1) for Hazardous Area Operation

TYPICAL APPLICATIONS

- Oil & Gas
- Industrial Process Control
- Chemicals
- Water/Wastewater
- Emergency Shut Down applications
- Remote Tank/Storage Alarm Monitoring Applications



SYSTEM HARDWARE

Embedded Controller: Ultra low power RISC microcontroller with internal FLASH (field upgradeable)

User's Interface: Standard RS232 serial interface

I/O Interface: 1 Input

WIRELESS COMMUNICATIONS

Type (Standard): 900 MHz: ISM, FSK, FHSS (Frequency Hopping Spread Spectrum)
(Optional): 2.4 GHz: DSSS (Direct Sequence Spread Spectrum)

Frequency: 902 - 928 MHz

Data Rate: 115.2 Kbps/9600 bps

Output Power: 1mW (default) up to 10 mW

Receiving Sensitivity: -100 dBm

Range: Up to 3,000 feet based on terrain and clear line of sight

Compliance: Complies with FCC Part 15



Complies with Canada IC requirements of CISPR 22

MECHANICAL SPECIFICATIONS

Monitor Dimensions: 5" x 8.5" x 4.25" (W x H x D)

Mounting Hardware: Direct Mount

Mounting Connection: 1/2" NPT

Probe Material: Float: 316 Stainless Steel

Body: Brass

Float Specific Gravity: 0.75

Pressure Rating: 1000 PSIG

ELECTRICAL SPECIFICATIONS

Power: Self-contained 3.6 volt lithium battery pack

Battery Life: Up to 5 years with typical usage

CERTIFICATIONS

Safety Intrinsically safe for use in hazardous environments.



Class I, Zone 0, Ex ia IIC T3

Class I, Zone 0, AEx ia IIC T3

Class I, Division 1, Group A, B, C & D T3C

Intrinsic Safety Entity Parameters

Voc: 3.9 Vdc Isc: 20 mA

CA: 1.5 µF La: 1 mH

GENERAL SPECIFICATIONS

Operating Conditions

Temperature: -34 to 70 °C (-30 to 158 °F)

Humidity: 0 to 99%, non-condensing

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