Self-Contained Wireless Spill Prevention Solution

Side-Mount High Level Switch Included

The OleumTech® HLS High Level Switch Transmitter is a side tank mounting solution for detecting high liquid level conditions. The HLS Transmitter can also report transition counts. The HLS includes the side mountable switch and float with a welded 2-inch NPT adapter, making it a complete ready-to-deploy solution. The HLS utilizes on-delay exception reporting method and users can set the debounce filter ranging from 20 ms to 2000 ms to control just when the high level detection occurs. As a safety measure, regardless of state change, this device reports to the wireless gateway every five minutes. This ultra-low-power transmitter is powered by a replaceable battery pack that provides up to a 10-year life.1

Reliable, Scalable, and Safe

The field-proven wireless transmitter communicates with an assigned wireless gateway within the OTC Wireless Sensor and I/O Network creating a highly scalable network, accommodating virtually any I/O requirement.

The OleumTech Wireless Transmitter is certified for use in Class I, Division 1 (Zone 0) hazardous locations. It is intrinsically safe, designed not to cause a spark, and can be serviced without being removed from a process.
Technical Specifications

HARDWARE FEATURES
- Device Functionality: High Level Sensing Wireless Transmitter (Side Mount)
- Embedded Controller: Ultra-Low Power RISC Microcontroller with Internal FLASH (Field Upgradeable)
- Configuration: Standard RS232 Serial / BreeZ* Software for PC
- Input: Single Actuation Point
- Power Source: Self-Contained, Internal 3.6 Vdc Lithium Battery
- Internal Battery Life: Up to 10 Years, Based on User Defined Reporting Intervals
- Device Diagnostics: Health Tags: Battery Voltage, Received Signal Strength Indication (RSSI), RF Refresh, RF Timeout

WIRELESS COMMUNICATIONS
- Type: 900 MHz / 915 MHz
  - 900 MHz: FHSS (Frequency Hopping), AES Encryption 256-bit (900 MHz), 128-bit (915 MHz)
  - 2.4 GHz: DSSS (Direct-Sequence), AES Encryption 128-bit
  - 868 MHz: LBT (Listen Before Talk), AFA (Adaptive Frequency Agility), AES Encryption 128-bit
- Bit Rate: 900 MHz: 9600 bps / 115.2 kbps; 2.4 GHz: 250 kbps; 868 MHz: 80 kbps
- Output Power (Max): 900 MHz: 10 mW; 2.4 GHz: 63 mW; 868 MHz: 25mW
- Receiving Sensitivity: 900 MHz: Up to 7500 Feet (2.3 km) with Clear Line of Sight
- RF Range: 2.4 GHz: Up to 5.7 Miles / 9.2 km with Clear Line of Sight
- 868 MHz: Up to 5.2 Miles / 8.4 km with Clear Line of Sight

CERTIFICATIONS & COMPLIANCE
- EMC/EMI: FCC Part 15 (USA), IC ICES-003 (Canada), ACMA (Australia)
- Safety: Class I, Division 1, Groups A, B, C, D T3C; Ex ia IIC T3
- ATEX: Sira 13ATEX2142X; Ex ia IIC T3 Ga; II 1 G
- IECEx: SIR 13.0054X; Ex ia IIC T3 Ga

MECHANICAL SPECIFICATIONS
- Dimensions: 29” (W) x 13” (H) x 4.25” (D) / 737mm (W) x 330mm (H) x 108mm (D)
- Package Dimensions: 13.44” (W) x 20.19” (H) x 7.75” (D) / 341mm (W) x 513mm (H) x 195.58mm (D)
- Package Weight: ~10 lbs / 4.5 kg
- Connection Fitting: 2” NPT Male (Pipe Plug)
- Enclosure Casing Material: Type 4X Aluminum; IP66
- Mating Assembly: Stainless Steel 316

GENERAL SPECIFICATIONS
- Operating Conditions: Ambient Temperature (Class I, Division 1 / Zone 0): -40 °F to 158 °F (-40 °C to 70 °C)
- Humidity: 0 to 99 %, Non-Condensing
- Switch Temperature Range: -40 °F to 248 °F (-40 °C to 120 °C)
- Switch Pressure Rating: 426.7 PSI
- Warranty: 2-Year Parts and Labor
- Country of Origin: USA

ORDERING INFORMATION
- Model Numbers: SM5000-HLS (900), SM5010-HLS (915), SM5400-HLS (2.4), SM5020-HLS (868)
- Wirelessly Connects To: OTC Wireless Gateway
- Configuration Cable: SX1000-CC2, 20-ft All-in-One Configuration Cable
- Replacement Battery: Use OleumTech SX1000-BP3 Only

Networking Diagram

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