

TILT SCOUT

Intrinsically Safe Wireless Incliner Sensor

PATENT PENDING HATCH DETECTION MODE

EASY TO INSTALL/MAGNETIC MOUNTING

THIEF HATCH MONITORING

PUMP JACK MOTION MONITORING

LOCAL ZEROING AND LED STATUS

CERTIFIED FOR HAZARDOUS LOCATIONS



DESCRIPTION

The Tilt Scout is a wireless solid state inclinometer that measures an angle from horizontal with two modes: Hatch detection and Pump Jack detection. The Hatch detection mode enables monitoring of the opening condition (closed, cracked open, opened) of a hatch for environmental and safety concerns. The Pump Jack detection mode detects and reports if it is operating or moving. The Tilt Scout can also be applied to a variety of other applications where there's a need to detect an angle from horizontal.

FEATURES

- 3 Axis Accelerometer constantly monitors angle and reports status. Will report on state change.
- Hazardous Location Certified – Class 1 Division 1
- Rugged design for outdoor environments
- Magnetic mounting or with built-in installation holes
- Pushbutton zeroing
- Long battery life (greater than 5 years)
- Up to ½ mile range
- Built-in 900mHz radio and antenna
- Operates as a standard wireless node in the SignalFire network

BENEFITS

- Environmental and safety compliance
- Maintenance free non contact sensing
- Fast installation and setup. No tools required
- SignalFire wireless radio sends status to the Gateway
- Modbus or digital output alarming at Gateway available



What is a solid state accelerometer:

A semi-conductor capable of detecting the effects of gravity and acceleration. We use the same sensor included in most modern phones to detect its orientation.

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Intrinsically Safe Wireless Inclinometer Sensor (patent pending)

TECHNICAL SPECIFICATIONS

Operating Temp: -40 to +176°F (-40°C to 80°C)

Humidity: NEMA 4X Enclosure

Resolution: <0.1 degree

Power: Internal battery pack. Field replaceable.

Battery Life: Greater than 5 years

Data Interface: Wireless – available as Modbus registers at Gateway

Reporting: Will report every 10 minutes or immediately after a state change.

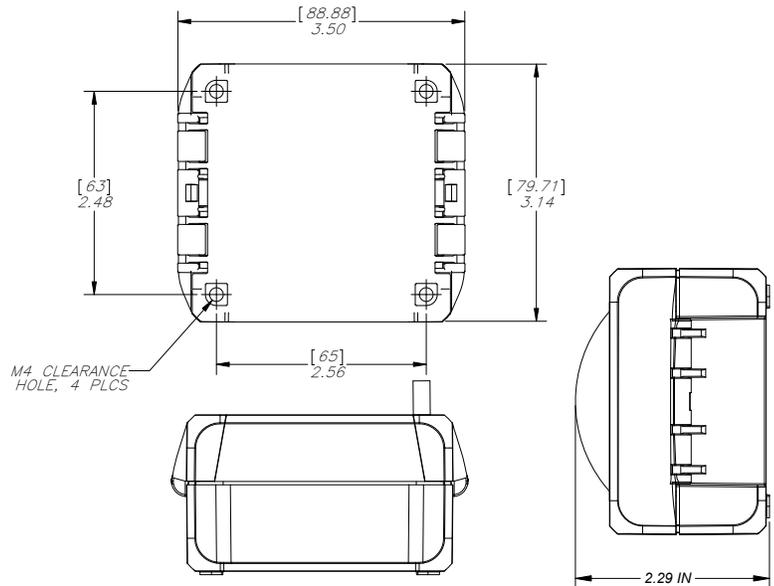
Radio Specifications:

- **Power:** 40 mW
- **Receive Sensitivity:** -109 dB
- **Encryption:** AES 128 bit
- **Frequency:** 902–928 MHz, FHSS, license-free ISM Band Compliant with FCC Part 15

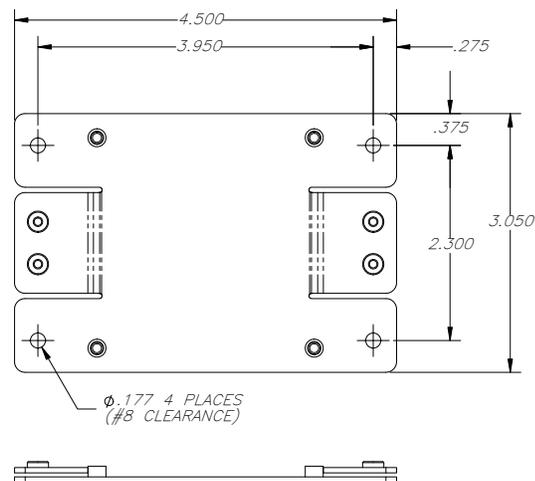
Range: Up to 1/2 mile

Intrinsically Safe: Hazardous Location Certified – Class 1 Division 1 is Temp Code T3, Groups C&D. Conforms to UL Std. 913, Certified to Can/CSA Std C22.2 No. 157

Internal Diagnostics: Battery voltage, signal strength, error conditions



BUILT-IN INSTALLATION HOLES AND OPTIONAL MAGNETIC MOUNTING BRACKET



SIGNALFIRE WIRELESS REMOTE SENSING SYSTEM™

The SignalFire system is a robust, authenticated, secure mesh network designed to give asset managers access to valuable process data. Easy to install and sensor-agnostic, it can interface with many sensor types such as flow, level, pressure, and temperature, and can control devices such as pumps, valves, heaters, fans, and lighting.