

PRESSURE SCOUT-LR

LoRaWAN® Intrinsicly Safe Wireless Pressure Sensor

PRESSURE ALARM REPORTING
CLASS 1 DIVISION 1 (PENDING)
EASY TO INSTALL
LOW COST ALTERNATIVE
HIGH PERFORMANCE & LONG BATTERY LIFE
REMOTE WIRELESS CONFIGURATION



FEATURES

- Powers integrated pressure sensor and radio for years with an internal battery
- Class 1 Division 1 Intrinsically safe system (pending)
- Rugged design for outdoor environments
- LoRaWAN® Radio for up to 10 mile range (SignalFire 900MHz proprietary radio available)
- ½" NPT Process connection standard
- Rapid pressure sampling with configurable alarms and report by exception
- Extremely low power and long battery life
- Reports Maximum, Minimum and Average pressures when configured for rapid pressure sampling
- Class A LoRaWAN® device. May be configured remotely via downlink messages
- Local or remote zeroing

PRESSURE SENSOR

PERFORMANCE AT 77°F / 25°C

Accuracy: ±0.25% BFLS; ≤ ± 0.5% BFLS (>10,000 PSI)

Stability (1 year): ±0.25% FS, typical

Over Range Protection: 2X Rated Pressure, Minimum

Burst Pressure: 5X or 40,000 PSI (whichever is less)

Pressure Cycles: >100 Million

Process Connection: 1/2" NPTM 316L Stainless Steel Standard
F250C Autoclave for pressure >10,000 psi
Other process connections/material available

Standard Pressure Ranges: 0-100 psi, 0-500 psi, 0-1000 psi, 0-3000 psi, 0-5000 psi, 0-10,000 psi, 0-15,000 psi, 20,000 psi

Low Pressure Ranges: 0-2 psi, 0-20 psi

THERMAL LIMITS

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

Compensated Range: 5°F to 150°F (-15°C to +65°C)

TC Zero: <±1% of FS

TC Span: <±1% of FS

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LoRaWAN® Inherently Safe Wireless Pressure Sensor

TECHNICAL SPECIFICATIONS

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

Humidity: 0% – 100% condensing

Power: “D” Cell Lithium battery pack. Field replaceable.
Class 1 Division 1 certified.

Battery Life: 2 -10+ years depending on sample and reporting frequency. *Battery Life Examples: 5-second pressure sample interval with a 1-minute reporting interval = 2 years. 5-minute sample and reporting interval = 10 years*

Data Format

UpLink Data: Current Pressure, Max, Min and Average pressure sent at the configure report interval

Device information: including battery voltage, firmware revision, sensor span, sample and report interval and alarm settings are sent at join and once every 12-hours

DownLink Data: The sample and report interval and alarm settings may be configured remotely

Transmit Data by Exception: Configurable minimum and maximum alarm pressure thresholds, pressure sample rate 1 seconds minimum.

Inherently Safe: Class 1 Division 1, Temp Code T3, Groups C&D. (certification pending)

Internal Diagnostics: Battery voltage, signal strength, error conditions

LoRaWAN Radio:

LoRaWAN compliant radio: supports Adaptive Data Rate (ADR)

Data Update Rates: User-selectable. 1 minute to 12 hours.

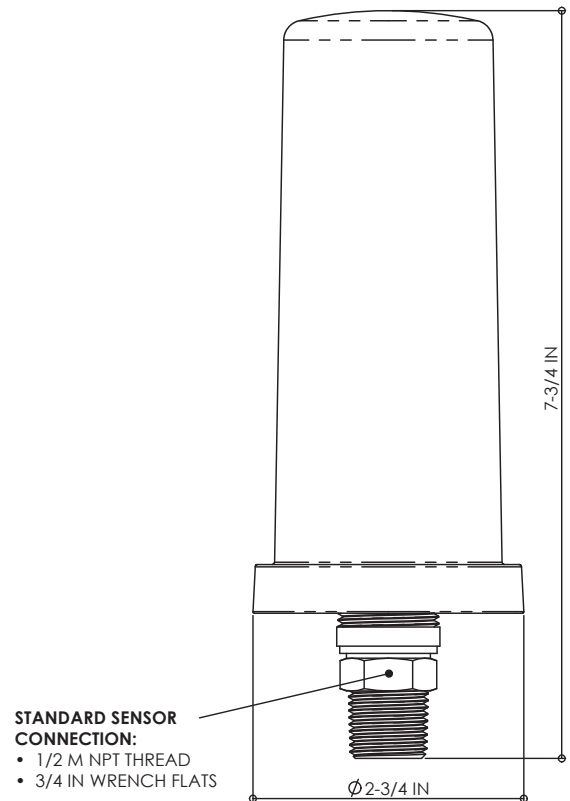
Range: Up to 10 miles (line of sight)

Radio Power: 19 dBm

Receive Sensitivity: -130 dBm

Radio Frequency: 902–928 MHz, LoRaWAN 1.0.4 compliant, OTAA provisioning, license-free ISM Band Compliant with FCC Part 15 and Industry Canada.

DIMENSIONS



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HOW TO ORDER

PRESSURE SCOUT WITH LoRaWAN® RADIO

