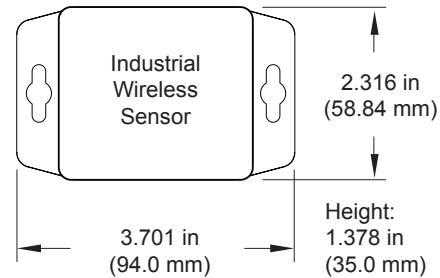


# SOMAX

## Industrial Wireless Pressure Sensor



### General Description

The SOMAX wireless pressure sensor measures pressure from a 5 volt pressure transducer and transmits the pressure measurement to the gateway. This solution combines a standard pressure transducer interfaced to a SOMAX wireless radio.

- Measure pressure with 50 or 300 PSIG transducers (others available upon request)
- Measure non-caustic liquid or vapor pressures
- Pressure transducer is NEMA 4X (IP66), CE rated

### Principle of Operation

By connecting the wireless pressure sensor to a pressurized gas, liquid or vapor supply line, it can measure the pressure within the line and send data to SOMAX for monitoring and notifications. The data is stored online and can be reviewed and exported as a data sheet or graph. User customization allows you to set notifications and alerts from the system so you can know immediately if pressure is above or below an optimal range.

### Example Interfacing

- Compressors/Compressed Air Lines
- Water Supply Lines
- Pumping Systems
- Irrigations System Pressure
- Industrial Process Monitoring
- Trash Compaction Equipment

### Features of SOMAX Sensors

- Wireless range of 1,000+ feet through 12-14 walls \*
- Frequency Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Improved power management for longer battery life \*\* (10+ years on AA batteries)
- Encrypt-RF™ Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- Onboard data memory / storage (up to 512 readings per sensor)
  - 10 min heartbeats = 3.5 days
  - 2 hour heartbeats = 42 days
- Over-the-air updates (future proof)

\* Actual range may vary depending on environment.  
\*\* Battery life is determined by sensor reporting frequency and other variables. Other power options are also available.

## ALTA Industrial Wireless Pressure Meter - Technical Specifications

Supply Voltage	2.0 - 3.8 VDC (3.0 - 3.8 VDC Using Power Supply) *	
Current Consumption	0.2 $\mu$ A (Sleep Mode) 0.7 $\mu$ A (RTC Sleep) 570 $\mu$ A (MCU Idle) 2.5 mA (MCU Active) 5.5 mA (Radio RX Mode) 22.6 mA (Radio TX Mode)	
Operating Temperature Range (Board Circuitry and Battery)	-40°C to +85°C (-40°F to +185°F) **	
Included Battery	Max Temperature Range:	-40°C to +85°C (-40°F to +185°F)
	Capacity:	1800 mAh
Optional Solar Feature	Solar Panel:	5VDC / 30mA (53mm x 30mm)
	Charging Temperature Range:	0°C to 45°C (32°F to 113°F)
	Max Temperature Range:	-20°C to 60°C (-4°F to 140°F)
	Included Rechargeable Battery:	600 mAh / >2000 Charge Cycles (80% of initial capacity)
Integrated Memory	Up to 512 sensor messages	
Wireless Range	1,000+ ft. non-line-of-sight	
Security	Encrypt-RF™ (256-bit key exchange and AES-128 CTR)	
Weight	13.3 Ounces	
Enclosure Rating	NEMA 1, 2, 4, 4x, 12 and 13 rated, sealed and weather proof	
UL Rating	UL Listed to UL508-4x specifications (File E194432)	
Certifications	900 MHz product; FCC ID: ZTL- G2SC1 and IC: 9794A-G2SC1. 868 and 433 MHz product tested and found to comply with: EN 300 220-2 V3.1.1 (2017-02), EN 300 220-2 V3.1.1 (2017-02) and EN 60950.	



11175 Cicero Dr.  
Suite 100  
Alpharetta GA 30022  
800-673-0961  
www.somax.com