

## Industrial **Wireless Sensor Network (WSN)**

Ultra Long Battery Life, Long-Distance, *SensorManager.com* Internet Interface

### **UNIQUE BENEFITS**

Phase IV's revolutionary Wireless Sensor Network (**WSN**) leverages our 20 years of experience with ultra-low power wireless sensors. The result is highly flexible monitoring system with long range transmission distances and a batteries that last for years.

The flexibility of the **WSN** System's quick low-cost installation and simple data collection is ideal for enhanced automated monitoring. The system features an internet-based User Interface and email and text alerts based on easy to set sensor limits. A PC-based interfaced and custom web-based dashboards are also available to provide "at a glance" monitoring of critical processes and equipment. **Unplanned downtime is reduced and more efficient condition-based maintenance can easily be implemented.**



### **KEY FEATURES**



- Ultra-long battery life of 1 to 10 years—configuration dependent.
- Transmission range up to 300 feet to Ethernet receiver. Extend range with easy-to-install repeaters.
- Sensors configuration and monitoring via any web connected device.
- PC network interface for short-term monitoring.
- Custom packaging of sensor and receivers.
- Internet based data storage and custom report writing available. Local server implementations also available.
- Industrial enclosures are sealed for harsh or wet environment's.
- Miniature / custom enclosures for tight spaces or moving applications.
- GSM (cell phone) receivers do not need access to plant network.
- **Sensor Types:** Temperature (w/ or w/o tethered sensor), Pressure, Humidity, 3-Axis Vibration, Vibration Timer (machine runtime), AC Current, AC High Voltage, Strain/Stress/Load, IR Motion, Switch (contact or magnetic), Compass, Impact/Tilt, Light, Pulse Count, Carbon Monoxide, Battery Voltage. *Contact us if you have a different or custom need.*
- **Generic Industrial Sensors:** 4-20 mA, 0-1.25V. Sensor Manager web interface easily configures input to sensor units of measure. Powerful on-board battery can power the sensor, keeping it entirely wireless.

installed in minutes | long life | web-based alerts



## Industrial Wireless Sensor Network (WSN) Specifications



Use **SensorManager.com** to add sensors, configure sensors, set email or text alerts, and monitor sensor data.



Questions?  
Custom Requirements?  
Call 1-866-608-6168

### Physical

Sensor Size

Industrial Sensor Body: Metal 2.5 X 2.3 X 1.4 inches.

Mini Plastic: 1.3 x 1.3 x .5 in.

Water resistance (Industrial)

NEMA 1, 2, 4, 4x, 12, & 13.

### RF Specifications

Sensor Operating frequency  
Receiver Internet Connection  
Read/Write Range  
ID

915 MHz band (in USA).  
Ethernet , GSM (cell phone) , or USB for PC software  
Up to 300 feet in free air. Extended with repeater.  
Unique ID programmed in each sensor.

### Sensor Performance\*

Operating Temperature Range  
  
Temperature Accuracy  
Sensor Sampling Intervals  
Calibration

-20 °C to +85°C (-40 °F to +255 °F).  
Extended sensing ranges with tethered sensors.  
Typically ±1.0 °C to ±0.5 °C.  
Programmable from 1 seconds to 1 day.  
NIST traceable when required.

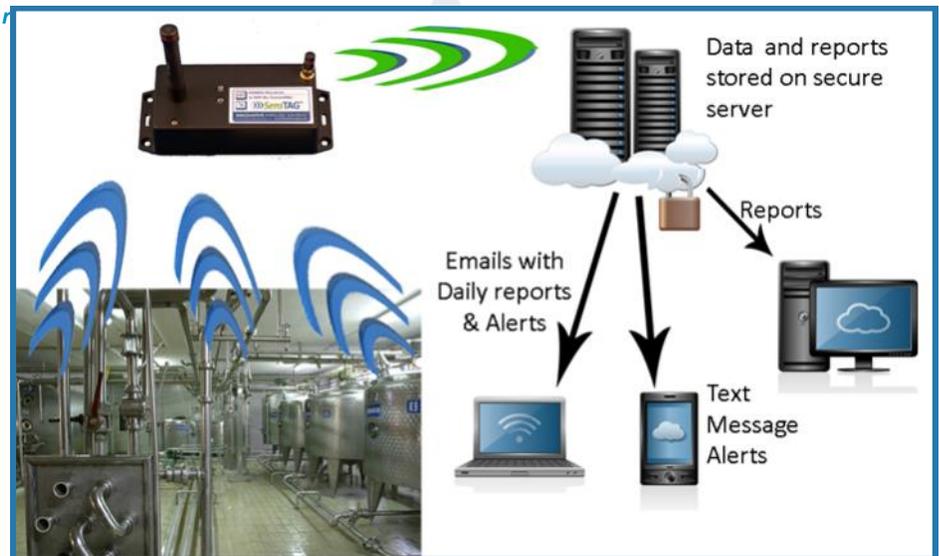
### Sensor Types

Full range of sensor types - *see front of flyer.*  
Temperature, pressure, humidity, voltage...

### Sensor Battery Life

1 to 15 years, depending on application and tag size.

\* *Wireless Sensor and data logger is highly configurable—contact us with your specific*



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