

# WSN-1201

## Lifetime Power® Wireless Sensor – 915MHz

The WSN-1201 Lifetime Power Wireless Sensor is a battery-powered, multi-sensor device for applications such as HVAC control, building automation, energy management, and industrial monitoring. The WSN-1201 measures and transmits temperature, humidity, dew point, light level, external temperature or contact closure measurements once per minute. It has a small form factor, is wall mountable, and has an operating life that exceeds 25 years with the pre-installed battery.

Data is transmitted to a WSG-102 wireless gateway or repeater, which extends operation to unlimited distance. The WSG-102 gateway receives data from up to 100 sensor devices and interfaces to a wide range of standard BAS protocols including BACnet, Modbus, LonWorks, and Metasys N2. SNMP and XML protocols are available for IT systems.



### KEY FEATURES

- Multiple sensor options
- 25+ year battery life
- No calibration, stable long-life performance
- Small form factor with internal antenna

### BENEFITS

- Maintenance-free: No battery replacement
- Easy installation: No wiring or conduit
- No interference with or from Wi-Fi
- Off-site or on-site configuration

## Temperature, Humidity, Dew Point, External Temperature, Light level, and Contact Closure

### SPECIFICATIONS

|                             |                                                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part Numbers</b>         | WSN-1201- <u>X</u> - <u>Y</u> X=Type, Y=Battery<br><u>Type</u><br>T = Temperature<br>THD = Temp, Humidity, Dew Point<br>T2XT = Temp + 2 External 10K ports<br>L = Light Level<br>C = Contact Closure / Digital Input (2 ports)<br><br><u>Battery</u><br>N = 25+ year non-replaceable<br>R = replaceable |
| <b>Radio</b>                | 902-928MHz, internal antenna                                                                                                                                                                                                                                                                            |
| <b>Regulatory Approvals</b> | FCC Part 15 and Industry Canada<br>Contains FCC ID: OA3MRF89XAM9A<br>Contains IC: 7693A-89XAM9A                                                                                                                                                                                                         |
| <b>Transmit Range</b>       | 300 ft. indoors to WSG-102 in a typical commercial office building                                                                                                                                                                                                                                      |
| <b>Accuracy</b>             | Temperature: ± 1°F (50-90°F)<br>Humidity: ± 3% (10-90%RH)<br>Dew Point: ± 4% (50-90°F, 10-90%RH)<br>Light: ± 5% (0-10,000 lux)<br>Thermistor ports: 10K Type 2, 10 bit resolution                                                                                                                       |
| <b>Power</b>                | (-N) 25+ year Li battery, non-replaceable<br>(-R) 3xAAA, replaceable<br>15 year battery life with Energizer L92                                                                                                                                                                                         |
| <b>Enclosure</b>            | ABS, UL94-5VA rating, Bone or Black color                                                                                                                                                                                                                                                               |
| <b>Configuration Port</b>   | Internal USB mini-B connector for connection to WSG-102 gateway                                                                                                                                                                                                                                         |
| <b>Mounting</b>             | Wall mount, vertical, indoor use only                                                                                                                                                                                                                                                                   |
| <b>Dimensions</b>           | (-N) 4.2 x 2.1 x 1.1 inches<br>(-R) 4.2 x 2.1 x 1.7 inches                                                                                                                                                                                                                                              |
| <b>Operating Temp.</b>      | (-N) 0 to 90°F, indoor use only<br>(-R) 0 to 120°F, indoor use only                                                                                                                                                                                                                                     |
| <b>Storage Temp.</b>        | -20 to 120°F                                                                                                                                                                                                                                                                                            |
| <b>Transmitted Data</b>     | Node ID, Sensor readings, and battery voltage once per minute (non-configurable)                                                                                                                                                                                                                        |
| <b>Weight</b>               | 3.3 oz.                                                                                                                                                                                                                                                                                                 |

### RELATED PRODUCTS

|                     |                                            |
|---------------------|--------------------------------------------|
| <b>WSN-1202-CO2</b> | Wireless CO2 transmitter                   |
| <b>WSN-1202-DP</b>  | Wireless Differential Pressure transmitter |
| <b>WSG-102</b>      | Wireless Gateway / Repeater                |
| <b>WSN-1101</b>     | 2.4GHz version                             |

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### Data Reporting

The WSN-1201 wireless sensor reports its data to the WSG-102 Gateway in the following forms:

#### **WSN-1201-T** - Temperature

**S1** – Temperature (°F)

#### **WSN-1201-THD** - Temperature, Humidity, and Dew Point

**S1** – Temperature (°F)

**S2** – Humidity (%RH)

**S3** – Dew Point (°F)

#### **WSN-1201-T2XT** - Temperature & Two External Temperature

**S1** – Temperature (°F)

**S2** – External Temperature – 10K Type 2 Thermistor (°F)

**S3** – External Temperature – 10K Type 2 Thermistor (°F)

#### **WSN-1201-L** - Light Level

**S1** – Ambient Light Level (lux)

#### **WSN-1201-C** - Contact Closure

**NOTE:** Sensor DOES NOT report on change of state.

**S1** – X1 Current State (0 = open, 1 = closed)

**S2** – Count of X1 state changes during last period

**S3** – Percent of time X1 is closed during last period

**S4** – Reserved

**S5** – X2 Current State (0 = open, 1 = closed)

**S6** – Count of X2 state changes during last period

**S7** – Percent of time X2 is closed during last period

**S8** – Reserved

For additional sensor configurations, please contact Powercast.