Lifetime Power® Wireless Temperature and Humidity Sensor

- **No batteries to replace**
- **No wires to install**
- **Powered wirelessly**

The Lifetime Power Wireless Temperature and Humidity Sensor (WSN-1002) is a battery-less sensor, with an integrated, omni-directional antenna, that is powered wirelessly by radio waves for applications such as HVAC control, building automation, and industrial monitoring. It reports accurate temperature and humidity measurements in real-time to Powercast’s WSG-101 Building Automation System (BAS) Gateway.

The WSG-101 gateway receives data from up to 100 sensor devices and interfaces to a wide range of standard BAS protocols including BACnet, Metasys, Modbus, LonWorks, and XML.

**KEY FEATURES**
- Internal temperature and humidity sensors
- Powered and communicated wirelessly
- Automated configuration
- Internal antennas
- Integrated mounting flanges

**BENEFITS**
- No batteries and no wiring
- Maintenance-free operation
- Simple configuration and deployment
- No interference with or from Wi-Fi
- Multiple units powered from a single power transmitter (TX91501)
The document contains information about the Lifetime Power® Wireless Temperature and Humidity Sensor, model WSN-1002. It includes specifications such as:

- **Radio**: IEEE 802.15.4, 2.4GHz
- **Approvals**: FCC Part 15 and Industry Canada
  - Contains FCC ID: OA3MRF24J0MA
  - Contains IC: 7693A-24J40MA
- **Antennas**:
  - Rx – 915MHz, 2dBi internal, 360°
  - Tx – 2.4GHz, internal, 360°
- **Transmit Power**: 0 dBm
- **Range**:
  - Power – 20-30 feet line of sight
  - Data – 120 ft indoor in typical commercial office building
- **Accuracy**:
  - Temperature: +/- 1°F (50-100°F)
  - Humidity: +/- 3% (10-90)
- **Power**: RF energy (915MHz) from Powercaster transmitter
- **Enclosure**: ABS, UL94-SVA rating, Bone color
- **Configuration Port**: USB mini-B connector for connection to WSG-101 BAS Gateway
- **Mounting**:
  - Wall mount, vertical, indoors
  - Face toward power transmitter
  - Optimal mounting height: 7 ft.
- **Dimensions**: 6.50x2.88x1.13 in. (excluding flanges)
- **Environment**: -20°C to 50°C, indoor use only
- **Transmitted Data for BAS**: Node ID, Temperature, Humidity, RSSI, Power Transmitter ID
- **Weight**: 0.5 lbs.

The document also mentions related products, such as:

- WSN-1001: T/H sensor, directional 6dBi Rx antenna
- WSN-1003: Light sensor, directional 6dBi Rx antenna
- WSN-1004: Light sensor, omni-directional 2dBi Rx antenna
- WSN-1005: T/H sensor, 4 external 10K RTD ports, directional 6dBi Rx antenna
- WSN-1006: T/H sensors, 4 external 10K RTD ports, omni-directional 2dBi Rx antenna

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