

IDEAL INDUSTRIES, INC.

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915 MHz Wireless Sensor System - 1201 Sensors

The 1201 Series IDEAL Wireless Sensors are battery-powered, multi-sensor devices for applications such as HVAC control, building automation, energy management, industrial monitoring and data centers. The 1201 Series 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 G2 Series wireless gateway or repeaters, which extends operation to unlimited distance. The G2 Series 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.



Temperature



Humidity/Dew Point



Light Level



Dry Contacts

Wireless Sensor

- Multiple sensor options
- 25+ year battery life
- No calibration, stable long-life performance
- Small form factor with internal antenna
- Maintenance-free: No battery replacement
- Easy installation: No wiring or conduit
- No interference with or from Wi-Fi
- Off-site or on-site configuration
- 3-Year Warranty



Gateway/Repeater

- Supports up to 100 devices
- Connects to virtually any BAS
- Integrated antenna
- No interference with or from Wi-Fi
- 24VAC/DC power
- 3-Year Warranty



Specifications

| | |
|----------------------|---|
| Part Numbers | 58-N-1201- X - Y X=Type,Y=Battery <u>Type</u> T = Temperature TH = Temperature + Humidity TX = Temperature + 2 External Temp 10K ports L = Light Level C = Contact Closure / Digital Input (2 ports) <u>Battery</u> N = 25+ year non-replaceable R = replaceable |
| Radio | 902-928 MHz, internal antenna |
| Regulatory Approvals | FCC Part 15 and Industry Canada Contains FCC ID: OA3MRF89XAM9A Contains IC: 7693A-89XAM9A |
| Transmit Range | 300 ft. indoors to G2 Gateway/Repeater in a typical commercial office building |
| Accuracy | Temperature: ± 1°F (50-90°F) Humidity: ± 3% (10-90%RH) Dew Point: ± 4% (50-90°F, 10-90%RH) Light: ± 15% (0-1,000 lux) Thermistor ports: 10K Type 2, 10 bit resolution |
| Power | (-N) 25+ year Li battery, non-replaceable (-R) 3xAAA, replaceable 15 year battery life with Energizer L92 (included) |
| Enclosure | ABS, UL94-5VA rating, Bone color |
| Configuration Port | Internal USB mini-B connector for connection to G2 Gateway/Repeater |
| Mounting | Wall mount, vertical, indoor use only |
| Dimensions | (-N) 4.2 x 2.1 x 1.1 inches (-R) 4.2 x 2.1 x 1.7 inches |
| Operating Temp. | (-N) 0 to 90°F, indoor use only (-R) 0 to 120°F, indoor use only |
| Storage Temp. | -20 to 120°F |
| Transmitted Data | Node ID, Sensor readings, and battery voltage once per minute (non-configurable) |
| Weight | 3.3 oz. |

Specifications

| | |
|---------------------|---|
| Frequency | 902-928MHz |
| Approvals | FCC Part 15 and Industry Canada Contains FCC ID: OA3MRF89XAM9A Contains IC: 7693A-89XAM9A |
| Antenna | Internal, 360° pattern |
| Range | 300 ft. indoor in typical commercial office building |
| Power | 24VAC/DC, removable terminal block |
| Configuration Ports | USB Type B - PC Interface USB Type A - Sensor Interface |
| Network Port | Ethernet, RS-485 or FTT-10 |
| Enclosure | ABS plastic, UL94-5VA rating, color - bone |
| Mounting | Wall mount, vertical, indoors |
| Dimensions | 6.6" x 4.4" x 1.75" |
| Environment | 0 to 120°F, indoor use only |
| Weight | 8.5 oz. |

See reverse side for ordering information.

915 MHz Wireless Sensor System

Ordering Information

| Wireless Sensor | |
|-----------------------|--|
| 58-N-1201-T-N | Wireless temperature sensor, 25+ year battery |
| 58-N-1201-TH-N | Wireless temperature and humidity/dew point sensor, 25+ year battery |
| 58-N-1201-TX-N | Wireless temperature sensor, 25+ year battery – internal temperature, 2 external 10K RTD ports |
| 58-N-1201-C-N | Wireless dry contact closure (2 inputs), 25+ year battery |
| 58-N-1201-L-N | Wireless light level sensor, 25+ year battery |

*Substitute suffix -N with -R for replaceable battery version (1201 Series only).

| Gateway/Repeater | | |
|------------------------|--|-----------|
| Part Number | Protocol | Interface |
| 58-G2-BACNETIP | BACnet®/IP | Ethernet |
| 58-G2-MODBUSTCP | Modbus TCP | Ethernet |
| 58-G2-SNMP | SNMP | Ethernet |
| 58-G2-XML | XML | Ethernet |
| 58-G2-BACNTMSTP | BACnet®/MSTP | RS-485 |
| 58-G2-METASYSN2 | Metasys® N2 | RS-485 |
| 58-G2-MODBUSRTU | Modbus RTU | RS-485 |
| 58-G2-LON | LonWorks® | FTT-10 |
| 58-G2-SERIAL | Serial Gateway/Repeater | USB |
| Related Products | | |
| 58-PS-24V-T | 24V Power Supply | – |
| 58-N-1202-CO2-R | Wireless CO ₂ transmitter | – |
| 58-N-1202-DP1-R | Wireless Differential Pressure transmitter +/-2" w.c./+/- 500pa | – |

BACnet® is a registered trademark of ASHRAE.

Metasys® is a registered trademark of Johnson Controls, Inc.

LonWorks® is a registered trademark of Echelon Corporation.

Sensor Data Reporting

| Sensor Type - 1201 Series | | | | | | |
|---------------------------|-------------|----------------------------------|---------------------------------------|--|--|-------------------------|
| | Temperature | Temperature, Humidity, Dew Point | Temperature Internal w/ Dual External | Contact Closure | Light | |
| Sensing Points | S1 | Temp F° | Temp F° | Temp F° Internal | X1 Current State 0=open, 1=closed | Ambient Light Level Lux |
| | S2 | | Humidity % RH | Temp F° External 1 using 10K Type II Thermistor | Count of X1 state changes during last period | |
| | S3 | | Dew Point F° | Temp F° External 2 using 10K Type II Thermistor | % of time X1 is closed during last period | |
| | S4 | | | | | |
| | S5 | | | | X2 Current State 0=open, 1=closed | |
| | S6 | | | | Count of X2 current state changes during last period | |
| | S7 | | | | % of time X2 is closed during last period | |
| | S8 | | | | | |

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