i-Vu® Building Automation System
Wireless Pro-F Sensor

Part Number: WS-THMDOF-C-902

The i-Vu® Building Automation System provides everything you need to access, manage, and control your building, including the powerful i-Vu user interface, plug-and-play BACnet controllers, and state-of-the-art Carrier equipment.

As part of Carrier's wireless sensing line, wireless Pro-F sensors are used to measure temperature, humidity and occupancy in a space. Because there are no wires to run, they can be added to your building easily.

Wireless sensors work in conjunction with a wireless adapter, which enables wireless communication between the sensors and an i-Vu® BACnet controller in the space. By sensing temperature, humidity and occupancy wirelessly, our i-Vu controllers can make smart decisions to optimize the control of heating, cooling, and lighting systems in the building, providing optimum occupant comfort and energy efficiency.

Features and Benefits

- Easy to install
- Communicates on the Rnet sensor network via a wireless adapter
- Can be installed up to 60' away from wireless adapter
- Enables wireless sensing on new or retrofit projects
- Wireless software included for quick and easy sensor pairing

Comprehensive Capabilities

- Temperature, relative humidity and motion sensing
- Includes Fahrenheit (°F) and Celsius (°C) toggle button
- Includes heating and cooling setpoint adjustment
- Includes fan control
- Includes digital display

i-Vu® Wireless System Benefits

- Wireless and battery-less space sensors (assuming sufficient lighting exists in space)
- Maintenance-free capacitors power the sensors during unlit periods for up to 4-days without a light source
- No repeaters or amplifiers required for zone-based applications
- Can coexist on Rnet with Carrier's wired ZS sensors
- Single-zone controllers can support a total of 5 sensors
- Multi-zone controllers can support up to 15 sensors

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Specifications

Power supply	Solar harvesting, internal energy storage
Supplemental battery	Two SAFT LS-14500 AA 3.6V batteries. Not user replaceable. Under normal conditions, life expectancy is 5 to 10 years
Maximum operating life	Up to 4 days with no light power or battery
Time to fully charge	Depends on available lux. Full charge in 8 hours @ 1000 lux or 24 hours @333 lux
Temperature sensor measuring range	32° to 104°F (0° to 40°C)
Humidity sensor	0% to 100%, ±3% RH typical 5% drift per year
Motion sensor	Panasonic AMN42122 - Effective detection range: 16.4 ft. (5 m) maximum
Protocol	Customized version of EnOcean®
Radio frequency	902 MHz (North America)
Transmission range	Typically, 60 ft. (18.29 m) maximum from wireless adapter, assuming sensor and wireless adapter are separated by no more than 1 drop ceiling or 2 walls (drywall with metal studs)
Transmission interval	Configurable in SensorBuilder. The sensor transmits: • On change of sensed value, and • At a regular interval (heartbeat). The default is every 15 minutes
Change of value threshold	Configurable in SensorBuilder. The temperature must change by at least .288°F (.156°C) (the default) for the sensor to send a change of value
Minimum illumination strength	150 lux, constant
Degree of protection	IP50
Operating environment	32° to 122°F (0° to 50°C) 5% to 95% relative humidity (non-condensing)
Housing	ABS plastic, traffic white color
Weight	0.22 lb. (.10 kg)
Dimensions	3.7 in. W x 6.24 in. H x .79 in. D| 9.4 cm W x 15.85 cm H x 2 cm D
Compliance	**United States of America**: FCC CFR 47, Chapter 1, Subchapter A, Part 15, Subpart B Class B Contains FCC ID: SZV-STM300U UL-916 (PAZX) Energy Management Equipment **Canada** Industry Canada Compliant, ICES-003, Class B cUL Listed UL 916,PAZX7, Energy Management Equipment **Europe**: CE EN50491-5-2:2009; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment EN50491-3:2009 Part 3: Electrical safety requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) Low Voltage Directive: 200695/EC RoHS Compliant: 2011/65/EU **Australia and New Zealand**: C-Tick Mark AS/NZS 61000-6-3

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Controls Expert Locator:
www.carrier.com/controls-experts