

Zūm™ Wireless Battery-Powered Vacancy Sensor

- > Zūm™ wireless ceiling-mount vacancy sensor
- > Passive infrared motion detection
- > 360 degrees, 500 sq ft (46.5 m²) coverage
- > Half mask and perforated mask included
- > Detects room vacancy
- > Automates control of Zūm dimmers, switches, and load controllers to reduce energy usage^[1]
- > Turns lights off when the room is vacant
- > 10-year battery life using included 9 Volt lithium battery
- > Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution^[2]
- > Grace occupancy feature
- > Discreet, low-profile appearance
- > Meets UL® 916 standard for energy management equipment
- > Meets CEC Title 24 energy efficiency standards^[3]
- > Meets ASHRAE® 90.1 energy efficiency standards^[4]
- > ICC® International Energy Conservation Code® compliant^[5]

A Zūm™ vacancy sensor offers a cost-saving solution for reducing energy usage in rooms equipped with a Zūm commercial room lighting system. The **ZUMMESH-PIR-VACANCY-BATT** is a passive infrared vacancy sensor designed for ceiling mount installation in areas up to 500 square feet or 46.5 square meters. It communicates wirelessly with a Zūm **dimmer**, **switch**, or **load controller** to turn lights off automatically when the room is vacant.^[1] Up to eight vacancy sensors may be employed for increased coverage.

The ZUMMESH-PIR-VACANCY-BATT is battery powered and completely wireless. It operates for up to ten years or more on a single 9 Volt lithium battery (included). Zūm Mesh wireless technology affords easy “pair and play” setup and integration as part of a complete Zūm commercial room lighting system.^[2]

Featuring passive infrared (PIR) technology, the ZUMMESH-PIR-VACANCY-BATT employs a highly sensitive specialized lens that divides the field-of-view into sensor zones. The sensor detects motion when a warm body passes between zones, achieving dependable motion detection with superior immunity to false triggering from vibrations, inanimate objects, or movement in an adjacent corridor. The detection sensitivity is adjustable for optimum performance. Timeout can be set anywhere from 30 seconds to 30 minutes to maintain occupied status during short periods of inactivity. A half mask and perforated mask are included to customize the coverage area.

The ZUMMESH-PIR-VACANCY-BATT includes grace occupancy, so if the lights turn off while someone is in the room, they can be turned back on by simply waving a hand within the 15 second grace period.

Please refer to the *Zūm Lighting Control System Setup Guide (Doc # 7957)* for additional information.



SPECIFICATIONS

Sensing

Sensor Technology: Passive infrared

Coverage Area: 500 square feet (46.5 square meters)

Coverage Pattern: 360 degrees (half mask and perforated mask included)

Major Motion Area: 150 to 500 square feet (13.9 to 46.4 square meters)

Minor Motion Area: 0 to 150 square feet (0 to 13.9 square meters)

Note: A maximum of eight vacancy sensors is permitted per room; do not combine vacancy sensors with occupancy sensors in the same room.

Wireless Communications

RF Transceiver: Zūm Mesh 2-way RF, 2.4 GHz ISM Channels 15, 20, 25, or 26 (channel auto-selected), IEEE 802.15.4 compliant

Range: 50 ft (15 m) to nearest peer-to-peer mesh network device(s), subject to site-specific conditions and individual device capabilities^[2]

Note: A maximum of 32 Zūm Mesh wireless devices is permitted per room.

Controls & Indicators

Sensitivity: (1) Knob (behind cover), adjusts PIR sensitivity from low to high

Timeout: (1) Knob (behind cover), adjusts timeout from 30 seconds to 30 minutes

Test: (1) Pushbutton (behind cover) for test mode, room setup, factory reset, and battery condition

Status: (1) Red and (1) green LEDs for test mode, room setup, factory reset, and battery condition

Power

Battery: (1) Ultralife® U9VL-J-P 9 Volt 1200 mAh lithium disposable battery (included)

Battery Life: 10 years under normal operating conditions

ZUMMESH-PIR-VACANCY-BATT Züm Wireless Battery-Powered Vacancy Sensor

Environmental

Temperature: 32° to 104° F (0° to 40° C)

Humidity: 0% to 95% RH (non-condensing)

Construction

Housing: Plastic, removable cover, white finish

Mounting: Ceiling surface mount, 3 inch (76 mm) screw spacing

Dimensions

Height: 1.19 in (31 mm)

Diameter: 4.38 in (112 mm)

Weight

Without Battery: 3.5 oz (98 g)

With Included Battery: 4.8 oz (135 g)

Compliance

UL Listed for US & Canada, CE, IC, FCC Part 15 Class A digital device, UL 60730-1, UL 916, CEC Title 24 [3], ASHRAE 90.1 [4], IECC [5]

MODELS & ACCESSORIES

Available Models

ZUMMESH-PIR-VACANCY-BATT: Züm Wireless Battery-Powered Vacancy Sensor

Available Accessories

ZUMMESH-JBOX-5A-LV: Züm J-Box Load Controller, 0-10V Dimmer, 5A, 100-277V

ZUMMESH-JBOX-16A-LV: Züm J-Box Load Controller, 0-10V Dimmer, 16A, 100-277V

ZUMMESH-JBOX-20A-SW: Züm J-Box Load Controller, High Inrush Switch, 16A, 100-277V

ZUMMESH-JBOX-20A-PLUG: Züm J-Box Load Controller, Plug Load Switch, 20A, 100-240V

ZUMMESH-5A-LV: Züm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V

ZUMMESH-5A-SW: Züm Wireless Wall-Box Switch, 5A, 100-277V

Notes:

1. Item(s) sold separately. Refer to each product's spec sheet for more information.
2. "Züm Mesh" refers to the peer-to-peer wireless mesh network within a room composed of dimmers, switches, load controllers, keypads, and sensors. AC-powered Züm Mesh devices function as routing nodes, which effectively extend the range of the wireless network within the room. The ZUMMESH-PIR-VACANCY-BATT and other battery-powered devices only function as leaf nodes and do not extend range. Networks composed predominantly of battery-powered devices may require additional AC-powered devices, such as the ZUMMESH-JBOX-PSU, to serve as supplemental routing nodes to fill any gaps in coverage. Refer to the "Installation and Setup of Crestron RF Products, Best Practices" guide (Doc #6689) for additional guidelines.
3. This product is part of a California Energy Commission Title 24 compliant solution. Refer to <http://www.energy.ca.gov/title24/> to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at <http://www.crestron.com/about/partner-info/commercial-lighting-consultants>.
4. This product is part of an ASHRAE 90.1 compliant solution. Refer to <https://www.ashrae.org/> to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at <http://www.crestron.com/about/partner-info/commercial-lighting-consultants>.
5. This product is part of an International Energy Conservation Code compliant solution. Refer to <https://www.iccsafe.org/iecc/> to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at <http://www.crestron.com/about/partner-info/commercial-lighting-consultants>.

This product may be purchased from an authorized Crestron dealer or distributor. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at <http://www.crestron.com/about/partner-info/commercial-lighting-consultants>. For assistance with incorporating this product into a design or specification, please contact the Commercial Lighting Consultant Hotline via email at clcdesign@crestron.com or by calling 888-330-1502.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

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