

ZUMMESH-OL-PHOTOCELL-BATT

Zūm™ Wireless Battery-Powered Daylight Sensor, Open-Loop

- > Zūm™ open-loop, battery-powered daylight sensor
- > Ceiling or surface mounting
- > Auto-calibration within minutes with just the push of a button
- > Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution
- > Measures light level from natural daylight
- > 10-year battery life via two Lithium-ion AAA batteries
- > Local button lets users easily commission and calibrate the daylight harvesting system
- > Visible LED to indicate sensor status
- > Sleek, compact design

The Zūm™ ZUMMESH-OL-PHOTOCELL-BATT is a battery-powered, wireless, open-loop daylight sensor designed to provide superior natural light sensing and indoor lighting control in daylight harvesting applications. An internal photocell for open-loop daylight sensing effectively cuts costs while providing exceptional daylight sensing in new construction or retrofit applications. The ZUMMESH-OL-PHOTOCELL-BATT monitors natural daylight from windows and signals the lighting control system to raise or lower the lights according to natural light fluctuations, reducing energy usage while maintaining a consistent light level for a more efficient and comfortable workspace. The auto-calibration process discovers the optimal light settings in just a few minutes – one press of a button is all it takes to achieve reliable and energy-efficient daylight harvesting in any Zūm space!

Versatile Mounting

The battery-powered ZUMMESH-OL-PHOTOCELL-BATT daylight sensor can be mounted in a variety of places due to its wireless design. The sensor can be mounted to drywall with an anchor and screw, to a drop ceiling or lighting fixture with a magnetic strip, or in a temporary location with adhesive tape. For ceiling mounts, the entire daylight sensor snaps into a mounting plate that can rotate up to 40 degrees after being secured in place, allowing its position to be fine-tuned after installation. The ZUMMESH-OL-PHOTOCELL-BATT will not communicate with the wireless network unless a certain time or light threshold has been achieved. This ensures that the sensor does not draw on power unnecessarily and that the battery has a long lifespan.

Zūm Mesh Wireless Technology^[1]

Ultra-reliable Zūm Mesh wireless technology provides steadfast peer-to-peer RF communications within a commercial space without the need for physical control wiring, hubs, or gateways. Employing a Wi-Fi® friendly 2.4 GHz peer-to-peer mesh network topology, nearly every Zūm Mesh device acts as an “expander,” relaying wireless commands directly between Zūm Mesh devices to ensure that every command reaches its intended destination without disruption. Zūm Mesh is smart! Every Zūm Mesh device knows its purpose and just the right messages to communicate to other Zūm Mesh devices within the space. Each Zūm Mesh device that is added to space effectively increases the range and stability of the peer-to-peer mesh network by providing multiple redundant signal paths. Each Zūm Mesh device auto-negotiates its RF



channel to provide robust communication and is protected through AES 128-bit encryption. The wireless range between any two Zūm Mesh devices is typically up to 50 ft (15 m) indoors.

SPECIFICATIONS

Sensing

Light Sensitivity: 0-65535 lux (0-6089 foot-candles)

Wireless Communications

RF Transceiver: 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), default channel 15; IEEE 802.15.4 compliant

Zūm™ Mesh Range (Typical): 50 ft (46 m) indoor to nearest peer-to-peer mesh network device(s); Subject to site-specific conditions and individual device capabilities^[1]

Controls & Indicators

(1) Pushbutton on front of device for auto-calibration, Acquire mode, touch-settable ID (TSID) functions, and adjusting sensitivity

(1) Multi-color LED, indicates status during the acquiring process

Power Requirements

(2) AAA Lithium-ion batteries; 10 year battery life (under normal operating conditions); Batteries ship with sensor

Environmental

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

Humidity: 10% to 90% RH (non-condensing)

Enclosure

Housing: Plastic, white textured finish

Mounting: Mounts to a ceiling mounting plate;
Mounts in a ~3-1/2 in (88 mm) diameter hole created by the provided cutout template;
Includes mounting screws and integral toggle clamps

Dimensions

Height: 0.99 in (25 mm)
Diameter: 2.77 in (71 mm)

Weight

1.20 oz (34 g)

Standards & Certifications

CEC Title 24 2013 Compliant^[2]
ASHRAE 90.1-2016^[3]
IECC-2015^[4]
FCC

MODELS & ACCESSORIES

Available Models

ZUMMESH-OL-PHOTOCELL-BATT: Zūm Wireless Battery-Powered Daylight Sensor, Open-Loop

Available Accessories

ZUMMESH-JBOX-20A-SW: Zūm J-Box Zone Controller – Switching, 20A

ZUMMESH-JBOX-5A-LV: Zūm J-Box Zone Controller – 0-10V, 5A

ZUMMESH-JBOX-16A-LV: Zūm J-Box Zone Controller – 0-10V, 16A

ZUMMESH-JBOX-20A-PLUG: Zūm J-Box Zone Controller – Plug Load, 20A

ZUMMESH-5A-SW: Zūm Wireless Wall-Box Switch

ZUMMESH-5A-LV: Zūm Wireless 0-10V Wall-Box Dimmer

Notes:

1. Any Zūm Mesh device that provides expander functionality will effectively extend the range of the Zūm Mesh peer-to-peer network. Battery-powered Zūm Mesh devices, including the ZUMMESH-OL-PHOTOCELL-BATT, do not provide expander functionality. Wireless networks composed predominantly of battery-powered devices may require additional AC powered Zūm Mesh devices.
2. This product is part of Crestron T24-2013 compliant solutions. Reference the T24-2013 design guide for additional devices required for fully compliant solutions.
3. This product is part of Crestron ASHRAE 90.1-2013 compliant solutions. Reference the ASHRAE 90.1-2013 design guide for additional devices required for fully compliant solutions.
4. This product is part of Crestron IECC-2015 compliant solutions. Reference the IECC-2015 design guide for additional devices required for fully compliant solutions.

All design guides can be accessed via the Consultant Partner Portal at <http://www.crestron.com/about/partner-info/consultants-uplink>.

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.

For assistance with incorporating this product into a design or specification, please contact the Commercial Lighting Consultant Hotline 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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CAD DRAWINGS

