# **ZUMMESH-DIM Series**



# Zūm™ Wireless Wall-Box Dimmer

- > Zūm™ wireless wall-box dimmer
- > Pair and play with Zūm occupancy sensors, vacancy sensors, and daylight sensors<sup>[1]</sup>
- > Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution [2]
- > Single rocker switch and status LED
- > Forward phase dimming technology
- > Supports dimmable magnetic low-voltage halogen or LED, incandescent, and tungsten-halogen lighting loads
- > Rated 500 Watts at 120 Volts AC or 1200 Watts at 277 Volts AC [3]
- > Built-in air gap switch
- > Flying lead wiring connections
- > Standard 3-1/2 inch (89 mm) deep electrical box installation
- > Available in smooth black, white, almond, gray, or red finish
- > Matching decorator-style faceplate available separately

The Zūm<sup>™</sup> wireless wall-box dimmer (ZUMMESH-DIM Series) provides control of a single 120-277 Volt lighting load consisting of dimmable magnetic low-voltage halogen or LED, incandescent, and tungsten-halogen loads. It features a single rocker switch to enable simple on/off switching and dimming adjustment, with the ability to save one preset. Standard gang-box installation allows one or more units to be installed in a 3-1/2 inch (89 mm) deep electrical box (decorator-style faceplate sold separately).

Zūm Mesh wireless technology affords easy "pair and play" integration as part of a complete Zūm commercial lighting system. Energy-saving options are available to enable daylighting, occupancy or vacancy sensing, and centralized monitoring and management.<sup>[1]</sup>

## **Energy Efficiency**

Occupancy sensor, vacancy sensor, and daylight sensor connectivity drive the potential for significant energy savings. Lights will turn off automatically when the room is vacant and dim gradually according to the amount of natural daylight in the room. This reduces energy usage while maintaining a consistent light level for a comfortable workspace.

## **Pair and Play Setup**

Designed with flexibility and ease-of-use in mind, Zūm dimmers are pre-programmed with "pair and play" functionality. An installer can simply install the dimmer in a room along with Zūm occupancy or vacancy sensors and/or a daylight sensor, set up the room with a few quick button taps, and then use the dimmer to control the lights in the room – no programming required! Room setup can also be accomplished using the Zūm app if the room is equipped with a Zūm Network Bridge. The Zūm Network Bridge also enables centralize monitoring and management via a Zūm Floor Hub and Zūm Net Wireless Gateway. [1]



Model ZUMMESH-DIM-W-S shown. Faceplate sold separately.

# **Züm Mesh Wireless Technology**

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 2.4 GHz peer-to-peer mesh network topology, nearly every Zūm Mesh device acts as a "routing node," 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 the 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 50 feet (15 meters). [2]

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

# **ZUMMESH-DIM Series** Zūm™ Wireless Wall-Box Dimmer

# **SPECIFICATIONS**

## **Load Control**

**Dimmable Load Types:** Incandescent, tungsten-halogen, magnetic low-voltage (MLV transformer for halogen or LED)

**Line/Load Voltage:** 120-277 Volts AC, 50/60 Hz, dedicated neutral wire required

Load Rating: 500 Watts maximum @ 120 Volts AC [3];

1200 Watts maximum @ 277 Volts AC [3]

Minimum Load: 25 Watts

#### **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, AES-128 encryption Range (Typical): 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

Switch: (1) Rocker switch (spring return to center); press up to recall the locally saved preset (turns the lighting load on at the saved preset dim level), press down to turn the lighting load off, press and hold up or down to raise or lower the dimming level; also used for creating a preset, room setup, and factory reset

**Status:** (1) Green LED, indicates the lighting load is turned on; also used for creating a preset, room setup, and factory reset

Air-Gap Switch: (1) Latching switch, opens the air-gap to de-energize the load output

#### Connections

Hot: (1) 16 AWG (1.5 mm²) Class 1 flying lead, black, line power input Neutral: (1) 16 AWG (1.5 mm²) Class 1 flying leads, white, neutral Ground: (1) 16 AWG (1.5 mm²) Class 1 flying lead, green, ground Load: (1) 16 AWG (1.5 mm²) Class 1 flying lead, red, dimmed load output

# Environmental

Temperature: 32° to 104° F (0° to 40° C) Humidity: 10% to 90% RH (non-condensing)

# Construction

Composition: Plastic housing and front face with metal bracket Mounting: Mounts in a 1-gang (or larger) 3-1/2 inch (89 mm) deep electrical box (not included)

**Faceplate:** Requires a decorator-style faceplate (sold separately)

#### **Dimensions**

Height: 4.13 in (105 mm) Width: 1.75 in (45 mm) Depth: 1.80 in (46 mm)

### Weight

5 oz (142 g)

# Compliance

ETL Listed for US & Canada, IC, FCC Part 15 Class A digital device, UL 1472, CSA C22.2 No.184.1

#### **MODELS & ACCESSORIES**

#### **Available Models**

**ZUMMESH-DIM-A-S:** Zūm™ Wireless Wall-Box Dimmer, 120-277V, Almond Smooth

ZUMMESH-DIM-B-S: Zūm<sup>™</sup> Wireless Wall-Box Dimmer, 120-277V, Black Smooth

**ZUMMESH-DIM-GRY-S:** Zūm<sup>™</sup> Wireless Wall-Box Dimmer, 120-277V, Gray Smooth

ZUMMESH-DIM-RED-S: Zūm™ Wireless Wall-Box Dimmer, 120-277V, Red Smooth

**ZUMMESH-DIM-W-S:** Zūm<sup>™</sup> Wireless Wall-Box Dimmer, 120-277V, White Smooth

#### **Available Accessories**

**FP-G Series:** Decorator Style Faceplates

**ZUMMESH-OL-PHOTOCELL-BATT:** Zūm<sup>™</sup> Wireless Battery-Powered Daylight Sensor, Open-Loop

**ZUMMESH-PIR-OCCUPANCY-BATT:** Zūm<sup>™</sup> Wireless Battery-Powered Occupancy Sensor

ZUMMESH-PIR-VACANCY-BATT: Zūm™ Wireless Battery-Powered Vacancy Sensor

**ZUMMESH-JBOX-SIM:** Zūm<sup>™</sup> J-Box Sensor Integration Module

#### Notes:

- 1. Item(s) sold separately. Refer to each product's spec sheet for more information.
- 2. "Zūm Mesh" refers to the peer-to-peer wireless mesh network within a room composed of dimmers, switches, load controllers, keypads, and sensors. AC-powered Zūm Mesh devices function as routing nodes, which effectively extend the range of the wireless network within the room. 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.
- Load capacity is derated when installed with other devices in a multi-gang electrical box.
  Derating is as follows: 340W@120V or 800W@277V if installed adjacent to another device, 260W@120V or 600W@277V if installed between two devices.



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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 https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at https://www.crestron.com/Partners/Partnership-Programs/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 this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

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

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