

# ZUMMESH-OD-KOM

## 0-10V Dimmer, 2 Channels, 1 Feed, Zūm® Outdoor Wireless Communications, Knock-Out Mount



- *Uses Zūm® Outdoor self-forming and self-restoring wireless mesh network*
- *Remote control, scheduling, and sensor configuration*
- *In-node scheduling: custom schedules are programmed to the node, with RTC (Remote Time Clock) built into each controller, schedules run with or without wireless connectivity*
- *Built-in power monitoring*
- *Sensor inputs for motion and light sensing with 12VDC output for sensors*
- *Two 0-10V dimming outputs*
- *Linear continuous dimming - high resolution dimming (100+ steps)*
- *Remote programmable high-end trim*
- *External antenna connection for installation locations that impede wireless signal (-SMA models only, antenna not included)*
- *Reliable and encrypted communication*
- *Supports over-the-air (OTA) firmware updates*
- *Flexible event-based scheduling system*
- *Lighting fixture fault monitoring and reporting*

The ZUMMESH-OD-KOM is a wireless network-connected lighting controller with dimming, switching, energy metering, remote monitoring and management, and sensor input capabilities. The ZUMMESH-OD-KOM has sensor inputs for both occupancy and daylight sensors and can provide 12VDC power to the sensors. It has 4kV fault tolerance and control persistency. The status and health of the light fixtures are continuously monitored. The compact design with a waterproof feature enables mounting inside or outside a light fixture or pole for a quick and simple installation.

### Zūm® Outdoor Wireless Mesh Network

Zūm outdoor wireless mesh technology provides peer-to-peer RF communications without the need for physical control wiring, hubs, or gateways. Zūm mesh outdoor devices act as routing nodes to relay wireless commands between them without disruption. Adding Zūm mesh devices to a space 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.

### Self-Forming and Self-Restoring Wireless Mesh Network

Zūm outdoor wireless mesh technology auto-searches and establishes connections in a network. If a wireless connection in the network is broken, the Zūm mesh device will disable the path and reroute the data to ensure seamless communication. Once the device is restored, the Zūm device will automatically rejoin the network.

### Built-in Power Monitoring

Power monitoring tracks the real time energy usage of each node in the system to help control energy costs. By analyzing real data, organizations can make more educated decisions regarding the energy usage.

### Daylight and Motion Sensor Inputs

Daylight and Motion Sensor inputs enable the use of hard-wired occupancy and daylight sensors with a Zūm commercial lighting system. The sensor enables the use of ultrasonic and dual-technology type sensors for outdoors. One or more motion-detecting sensors can be connected and configured to operate in either occupancy or vacancy-only mode. A single photocell can also be connected to support daylight harvesting.

### Linear Continuous Dimming – High-Resolution Dimming (100+ steps)

Linear continuous dimming provides one channel of dimming for commercial lighting applications. Supports a continuous dimming range of 1% to 100%.

### Remote Programmable High-End Trim

Provides high-end trim for one or multiple zones, which helps with energy optimization.

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### External Antenna Connection (Optional)

Connect an external antenna (-SMA models only, antenna not included) to improve radio coverage in the Zūm outdoor system when the node is mounted inside an enclosure or the signal is blocked by an obstruction.

### Flexible Event-based Scheduling System

Event-based scheduling allows the creation of quick and flexible lighting schedules. The series of lights can be managed for better real estate planning.

### Lighting Fixture Fault Monitoring and Reporting

Fault monitoring and reporting applications are performed for control, monitoring, commissioning, and programming of individual or groups of lights in a network to help prevent issues.

### OTA Firmware Updates

Over-the-air (OTA) firmware updates reduce operational costs by providing an efficient update process that does not require direct access to the device. Updates can be performed remotely and deployed incrementally to ensure that the system remains functional.

## Specifications

### Power Requirements

<b>Voltage</b>	277VAC Models: 120-277VAC (+/- 10%) 480VAC Models: 347-480VAC (+/- 10%)
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### Load Control

<b>Dimming Output</b>	(1) 0-10V, 20mA
<b>Max Load Current</b>	277VAC Models: 10A 480VAC Models: 5A
<b>Surge Protection (Controller only)</b>	4kV (Lighting load protection provided by lighting load's circuit breaker)

### Wireless Communications

<b>RF Transceiver</b>	Zum Outdoor wireless, 2-way RF, 2.4 Ghz
<b>Topology</b>	Mesh topology
<b>Device Type</b>	Node; Routes data between nodes and gateway
<b>Coverage Range (typical)</b>	<b>Gateway to Node:</b> 2,000 ft (610 m); <b>Node to Node:</b> 2,000 ft (610 m) Maximum of 10 hops on the mesh network between the Gateway and the last node

### Connections

<b>Control</b>	(1) 8-wire cable for load control, flying lead, class 2; 22 AWG (0.34 mm <sup>2</sup> ); <b>White:</b> 12V output; <b>Red:</b> 3.3V output; <b>Brown:</b> Analog control 10V, channel 1; <b>Orange:</b> Analog control 10V, channel 2; <b>Black:</b> Analog control ground; <b>Yellow:</b> Light sensor input; <b>Blue:</b> Motion sensor input; <b>Green:</b> Sensor input ground
<b>Power</b>	(1) 3-wire cable for power, flying lead, class 1; 18 AWG (0.75 mm <sup>2</sup> ); <b>Black:</b> Hot, line power input; <b>White:</b> Neutral from line power, to LED neutral; <b>Red:</b> Switched power output, to LED power
<b>Antenna</b>	(1) Connection for antenna (-SMA models only, antenna not included)

### Environmental

<b>Temperature</b>	-40° to 122° F (-40° to 50° C)
<b>Humidity</b>	5% to 95% RH (noncondensing)

### Construction

<b>Material</b>	Plastic, IP67 rated
<b>Mounting</b>	Pole surface mounted 1/2 in. conduit knock-out mount

### Dimensions

<b>Height</b>	1.70 in. (43 mm)
<b>Width</b>	6.20 in. (158 mm)
<b>Depth</b>	3.6 in. (92 mm)

### Weight

1.016 lb (0.460 kg)
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### Compliance

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**Regulatory Model: M202217006**

FCC, DLC

To search for product certificates, refer to

[support.crestron.com/app/certificates](https://support.crestron.com/app/certificates).

### Models

#### **ZUMMESH-OD-KOM-277V**

0-10V Dimmer, 2 Channels, 1 Feed, Zūm® Outdoor Wireless Communications, Knock-Out Mount, 277VAC

#### **ZUMMESH-OD-KOM-277V-SMA**

0-10V Dimmer, 2 Channels, 1 Feed, Zūm® Outdoor Wireless Communications, Knock-Out Mount, 277VAC with External Antenna

#### **ZUMMESH-OD-KOM-480V**

0-10V Dimmer, 2 Channels, 1 Feed, Zūm® Outdoor Wireless Communications, Knock-Out Mount, 480VAC

#### **ZUMMESH-OD-KOM-480V-SMA**

0-10V Dimmer, 2 Channels, 1 Feed, Zūm® Outdoor Wireless Communications, Knock-Out Mount, 480VAC with External Antenna

This product may be purchased from select authorized Crestron dealers and distributors. 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/How-To-Buy/Find-a-Representative](https://www.crestron.com/How-To-Buy/Find-a-Representative) or contact us for additional information by visiting [www.crestron.com/contact/our-locations](https://www.crestron.com/contact/our-locations) for your local contact.

The original language version of this document is U.S. English.

All other languages are a translation of the original document.

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