ZUMMESH-OD-7P

0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount

The ZUMMESH-OD-7P is a wireless network-connected lighting controller with dimming, energy-metering, remote monitoring and management, and sensor input capabilities. A single ZUMMESH-OD-7P 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 7-pin (ANSI 136-41) dimming (NEMA) receptacles provide for a quick and simple installation.

Zum® 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%.

- *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 or light sensing*
- *Linear continuous dimming - high resolution dimming (100+ steps)*
- *Optional built-in photocell to report daylight levels (-DLS models only)*
- *Reliable and encrypted communication*
- *Supports over-the-air (OTA) firmware updates*
- *Flexible event-based scheduling system*
- *Lighting fixture fault monitoring and reporting*

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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

Voltage	277VAC Models: 120-277VAC (+/- 10%)
	480VAC Models: 347-480VAC (+/- 10%)

Load Control

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

Wireless Communications

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

Connections

7-Pin Connector	(1) 7-pin NEMA connector; Connects to ANSI 136-41 receptacle;
	Load: Load, Red wire; **L:** Line, Black wire; **N:** Neutral, White wire; **Pin 1:** Dimming -, Gray wire; **Pin 2:** Dimming +, Violet wire; **Pin 3:** Sensor input, Orange wire; **Pin 4:** Sensor Input, Brown wire

Environmental

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

Construction

Material	Plastic, IP67 rated
Mounting	NEMA-rated 7-pin

Dimensions

Height	2.5 in. (64 mm)
Width	ø4.6 in. (116 mm)
Depth	ø4.6 in. (116 mm)

Weight

0.835 lb (0.378 kg)

Compliance

Regulatory Model: M202217004
FCC, DLC

To search for product certificates, refer to support.crestron.com/app/certificates.

Models

ZUMMESH-OD-7P-277V
0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount, 277VAC

ZUMMESH-OD-7P-277V-DLS
0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount, 277VAC with Daylight Sensor

ZUMMESH-OD-7P-480V
0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount, 480VAC

ZUMMESH-OD-7P-480V-DLS
0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount, 480VAC with Daylight Sensor

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 or contact us for additional information by visiting 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.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed online at www.crestron.com/legal/patents.

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

Rev 03/30/23

0-10V Dimmer, 1 Feed, Zūm® Outdoor Wireless Communications, 7-Pin NEMA Mount

4.56 in.
(116 mm)

4.32 in.
(110 mm)

4.20 in.
(107 mm)

1.20 in.
(31 mm)

2.52 in.
(64 mm)

4.37 in.
(111 mm)

4.57 in.
(117 mm)