

# 0-10V dimmer sensor

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

## Description

Single pole & 3-Way  
 10A @ 120V/AC  
 8A @ 277V/AC  
 0-10VDC **FLR** and **LED** ballasts



OS10D7

## Design features

- Full-range Preset dimming control provided with horizontal dim/bright bar
- Digital circuitry provides aesthetically pleasing soft ON/fade OFF
- Single green LED indicates motion
- Push pad design provides minimal travel and crisp actuation
- Provides 180 degree field of view and 1000 sq. ft. of major motion coverage
- Selectable time delay of 15 seconds (Test mode, changes to 2 minutes after 2 minutes of powering up), 5 minutes (factory default), 15 minutes and 20 minutes
- Adjustable high-end and low-end trim setting
- Occupancy Sensor provides a selectable ambient light override preventing lights from switching ON when there is acceptable natural light
- Occupancy Sensor version allows to toggle between Auto ON/ Auto OFF or Manual ON/Auto OFF mode with a simple press and hold of switch
- Vacancy Sensor meets California Title 20
- No leakage to load in OFF mode
- Uniform color matched PIR lens to device housing
- Compatible with dimmable 0-10V LED and FLR ballasts
- Neutral required for installation of device

**Table 1. 0-10V Dimmer Sensor**

Catalog No.	Description	Compatible Lamp Types	Rating		Color Suffix
			Watt	V/AC	
□ OS10D7__	Occupancy sensor & dimmer with LED Single pole/3-Way preset	0-10VDC LED/FLR	1200 2200	120 277	BK, GY, LA, V, W
□ VS10D7__	Vacancy sensor & dimmer with LED Single pole/3-Way preset	0-10VDC LED/FLR	1200 2200	120 277	BK, GY, LA, V, W

**Compliances, specifications and availability are subject to change without notice.**



Powering Business Worldwide

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## Applications

Eaton's 0-10V dimmer sensor is a 3 in 1 solution that combines functionality of a switch, a sensor and 0-10V dimmer to help customers save labor costs as well as meet the latest energy codes and standards. Eaton's 0-10V dimmer sensor solution offers a convenient and cost effective way for users to satisfy commercial energy codes like ASHRAE 90.1 and California Title 20 that require designs that enable energy savings for Commercial and Residential facilities. Some of the requirements that can be solved by a solution incorporating this device involve Area Control, Automatic Lighting Shutoff, Daylight Control, Manual ON or Partial ON (ASHRAE 90.1 only), Multi-level Lighting Control and Occupancy Sensor Control. This product can be used in a single-pole (one location) and 3-way (multi-location) applications and is compatible with Eaton's decorator style devices and wallplates. Other features of the product include 180° field of view, selectable Occupancy and Vacancy modes and daylight sensing.

**Table 2. Specifications**

<b>Catalog No.</b>	<b>OS10D7, VS10D7 Series</b>
<b>Device Type</b>	<b>0-10V dimmer sensor</b>
<b>Wiring Type</b>	6" pre-stripped wire leads, #16 AWG
<b>Testing &amp; Code Compliance</b>	<ul style="list-style-type: none"> <li>• cULus Listed to UL244A &amp; UL1472, file no. E325082</li> <li>• NOM Certified</li> <li>• California Title 20 Compliant</li> </ul>
<b>Environmental Specifications</b>	<b>Flammability:</b> Meets UL 94 requirements; V2 rated <b>Temperature Rating:</b> 0°C to 40°C (32°F to 104°F)
<b>Electrical Specifications</b>	<b>Rating:</b> 120V/AC 277V/AC at 60 Hz <b>Light Intensity Control:</b> Full-range, continuously variable dimming <b>Surge Protection:</b> Meets ANSI/IEEE Std. C62.41, tested to withstand voltage surges up to 6000V and current surges of up to 3000A <b>Radio Frequency Interference:</b> Designed to reduce interference with radio, audio and video equipment <b>Power-failure Memory:</b> Light returns to ON at 50% or lower
<b>Mechanical Specifications</b>	<b>Wiring Types:</b> Single pole & 3-Way <b>LED Indicators:</b> To indicate motion <b>Voltage Ratings:</b> Permanently marked on device

**Table 3. Materials**



<b>Catalog No.</b>	<b>OS10D7, VS10D7 Series</b>
<b>Top Housing</b>	Polycarbonate
<b>Bottom Housing</b>	Polycarbonate
<b>Strap</b>	Aluminum
<b>Form Factor</b>	Decorator
<b>Finish</b>	Gloss

**Table 4. Color Ordering Information**

For ordering devices, include Catalog no. followed by the Color suffix: BK (Black), GY (Gray), LA (Light Almond), V (Ivory), W (White)

<b>BK</b>	<b>GY</b>	<b>LA</b>	<b>V</b>	<b>W</b>
(Black)	(Gray)	(Light Almond)	(Ivory)	(White)

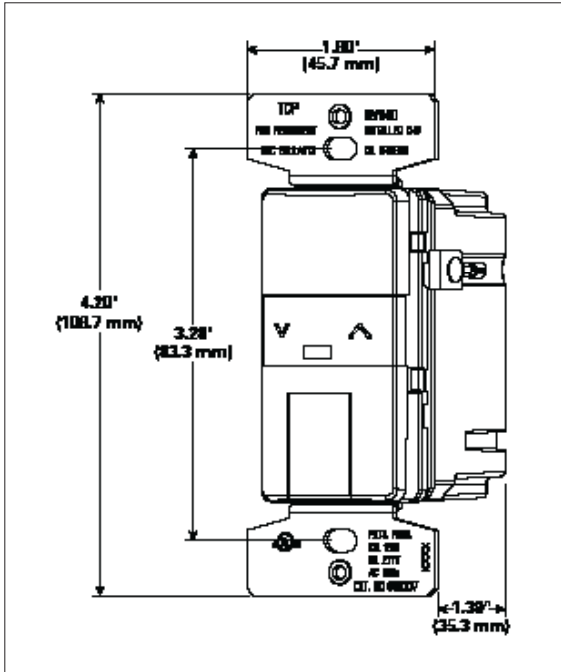
## Certifications & Compliances

<b>Catalog No.</b>		
OS10D7	•	•
VS10D7	•	•

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**Product Dimensions**



**Coverage Diagram**

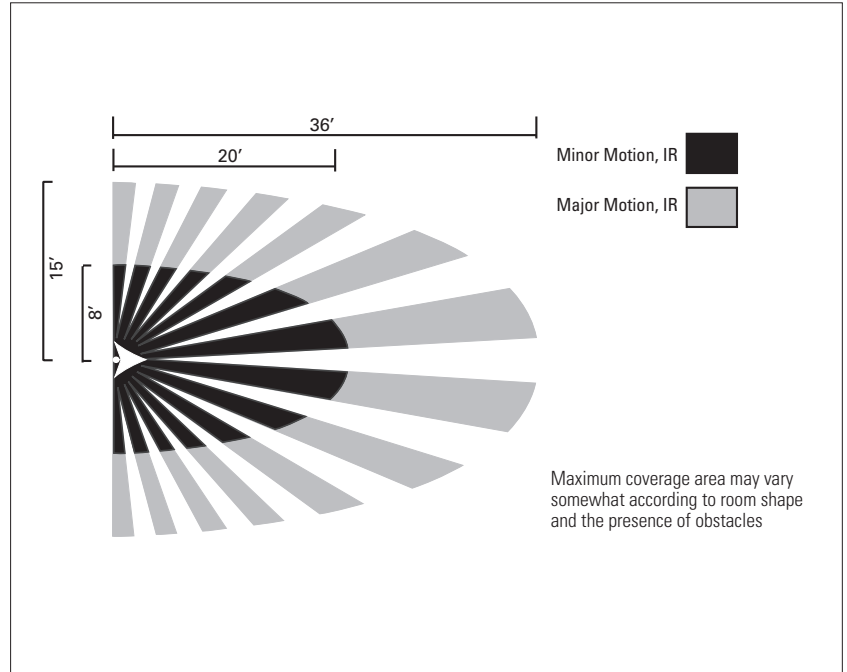
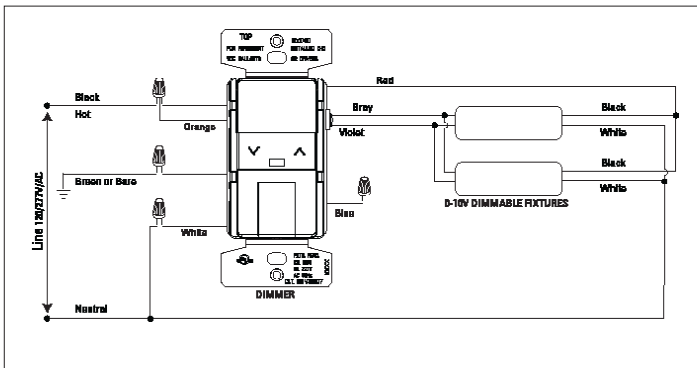


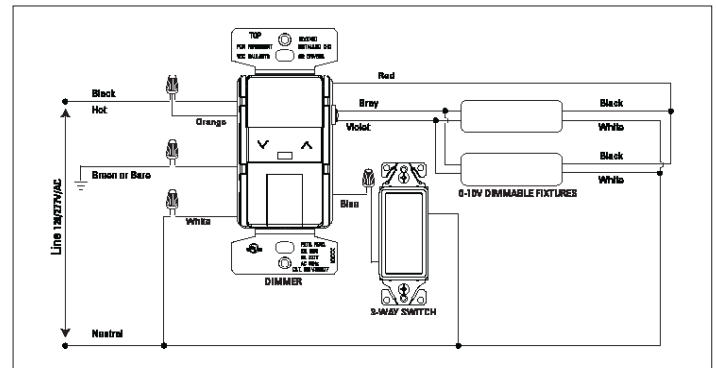
Figure 1. OS10D7/VS10D7 Line Art with Dimensions

**Wiring Diagrams**

**Single-Pole Wiring Diagram  
FLR, LED**



**3-Way Wiring Diagram  
FLR, LED**



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