

ODC0P-D0W Low Voltage 0-10V Dimming Photocell

# **ODCOP-DOW Low Voltage 0-10V Dimming Photocell**





## DESCRIPTION

The Leviton ODCOP-DOW is an interior low voltage photocell capable of continually dimming between 0-10VDC based on the amount of natural light contribution. It is a low-power, highsensitivity mini-daylight harvesting system for precise monitoring of either task or ambient light levels. The ODCOP-DOW's digital onboard microprocessor adjusts light levels by mimicking the spectral response of the human eye for single zone dimming. The ODCOP-DOW uses patented Daylighting Design Level (DDL) technology for precise load dimming that maintains desired light level.

Ideal for existing retrofits and daylight harvesting applications, the ODCOP-DOW can be used with 0-10V sinking loads types and is a cost-effective solution when paired with dimming drivers/ ballasts.

#### **OPERATION**

The ODCOP-DOW must be hard wired to a compatible Leviton 24VDC power supply to provide the photocell with power. The ODCOP-DOW measures ambient light in a space and dims fixtures to a targeted lighting level in that specific area. Connection to optional power pack provides true ON/OFF switching.

#### OFF ON SETPOINT SETPOINT INTERIOR LIGHT LEVEL ENERGY SAVINGS 12 PM 6 PM 12 AM 6 AM 12 AM TIME OF DAY TARGET LIGHT LEVEL FLUORESCENT DAYLIGHT ENERGY SAVINGS

## **DAYLIGHT DESIGN LEVELS**



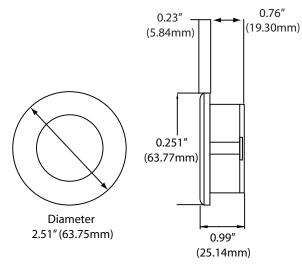
- Dimmed lighting at a desired daylight design level offers greater energy savings and comfort and improved energy efficiency
- Leviton-exclusive, patented Auto-Calibration™ eliminates the need for configuring labor costs during daylight harvesting configuration
- Industry-exclusive fail-safe circuitry: in the event of product failure, return-to-closed feature causes the relay to default to ON which eliminates life safety concerns
- Fade rate time setting 3-30 minutes
- Controls 0-10V sinking ballast
- No additional power supply required for 0-10V sinking operation
- Dim to OFF—over DDL for 30 seconds then lights OFF
- Test Mode—30 second fade rate for 15 minutes then auto exit
- Provides ultra-convenient, hands-free lighting control
- Measures light from any source in the visible spectrum within a 60° cone at 8-12' mounting height
- Provides continual measurements to control the lighting
- Mounts on ceiling—surface mount or lowprofile flush mount
- LED status indicators for ease of installation
- Meets energy code requirements for IECC, ASHRAE 90.1 and Title 24



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## **PRODUCT DATA**

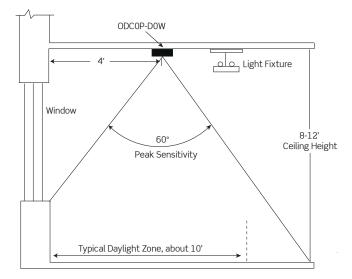
## DIMENSIONS



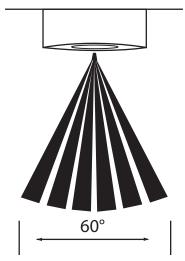
## **INSTALLATION - Low Voltage Class 2 Wiring**

- Connects directly to an OPP20 Series Power Pack (OPP20-RD3 or OPP20-RD4) and 0-10V dimming ballasts
- May be installed directly above workspace
- Use with standard Class 2 wiring

### LOW VOLTAGE PHOTOCELL PLACEMENT Closed Loop Application



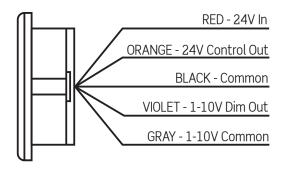
**FIELD OF VIEW** 



## **OPERATION**

- Measured light level < Target Level Action: Lights level increases
- Measured light level > Target Level Action: Lights level decreases
- Control output state (Orange wire):
  Photocell not calibrated, factory default state: lights ON, output is OV
  - Photocell calibrated, light needed state: lights ON, output is OV
  - Photocell calibrated, light NOT needed state: lights OFF, output is 12-24V

## WIRING DIAGRAM



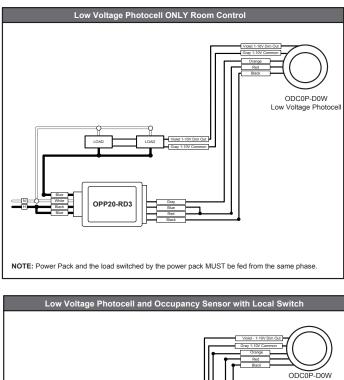


#### WIRING DIAGRAMS

N

E

OPP20-RD4

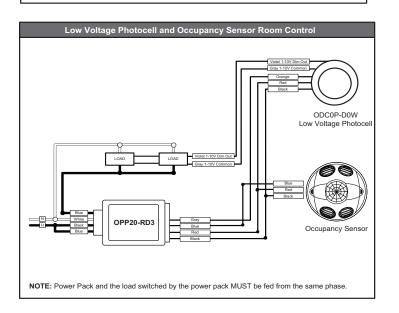


Switch

Low Voltage Photocel

Occupancy Sensor

NOTE: Power Pack and the load switched by the power pack MUST be fed from the same phase.



#### Leviton Manufacturing Co., Inc. Global Headquarters

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## **PRODUCT DATA**

## SPECIFICATIONS

ELECTRICAL	
Input Voltage	12-24VDC
Input Current	10mA
Output Current, Dimming Output	0.5-20mA
Operating Power Consumption	1W
Standby Power Consumption	<1/2W
Light Sensitivity	1-1,600 FC (10-16,000 LUX)
Output Voltage, Switching Output	Switched: 12 to 24VDC Dimming: 1-10V sinking
Testing/Code Compliance	Meets energy code requirements for IECC, ASHRAE 90.1, Title 24 and NYC LL48, UL 916 listed, FCC certified
PHYSICAL	
Diameter	2.51" (63.5mm)
Depth	0.99" (25.2mm)
Color	White
ENVIRONMENTAL	
Operating Temperature Range	32 to 131°F (0 to 55°C)
Storage Temperature Range	14 to 185°F (-10 to 85°C)
Relative Humidity	20-90% non-condensing
OTHER	
Warranty	Limited 5-year warranty

#### **ORDERING INFORMATION**

CAT. NO	DESCRIPTION
ODCOP-DOW	Low Voltage Photocell, 0-10VDC

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#### Visit our Website at: www.leviton.com/emca

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