# Smart IP66 PIR Integrated Fixture Mount Sensors
## with Bluetooth™ Connectivity and UV Stable Plastic

Lens Collar Nut & Gasket

ZLDUZ

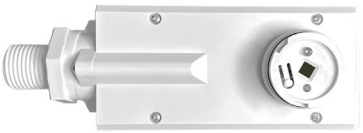
ZLD1Z

Low Bay Lens

Aisleway Masks

High Bay Lens

OFDxZ with Offset


OFDxZ

### Description
The Leviton Smart IP66 Passive Infrared (PIR) Integrated Fixture Mount Sensors are designed for use with switching or 0-10V LED dimming drivers, and fluorescent ballasts. The sensors use PIR detection technology and advanced optics to provide an exceptional Field-of-View (FOV) for mounting heights from 8-40 ft.

The sensors detect motion and turn lights ON when an occupant passes in or out of a sensor zone. The lights remain ON as long as the occupant moves through the sensor zones and after throughout the timeout period. The sensor uses a minor motion feature to detects small body movements which allows the lights to stay ON when individuals in the space are nearly stationary. The major motion feature exhibits a lesser degree of sensitivity requiring larger movements.

Configuration is made using the Leviton Smart Sensor App from a smartphone or other Bluetooth®-enabled Android or iOS device.

### Applications
- Warehouses
- Loading bays
- Outdoor lighting
- Parking garages
- Gymnasiums
- Libraries
- High-bay applications

### Features
- Can be used to comply with IECC, ASHRAE 90.1, and 2022 Title 24, Part 6 occupancy/vacancy sensing and dimming requirements
- IP66 rated (when installed in an appropriate IP66 rated enclosure/fixture)
- 120-277V Models
  - 120-277VAC 1-pole
- Universal voltage models
  - 120-347VAC 1-pole
  - 208-480VAC 2-pole
- ioXt Certified Models:
  - OFD1Z-ISW
  - OFDUZ-ISW
  - ZLD1Z-IOW
  - ZLDUZ-IOW

### Features, cont'd
- Mesh grouping
  - 16 devices per group
    - Max distance of 50' sensor to sensor
    - Max distance of 150' from first sensor to last sensor (must have line-of-sight and no interference)
  - Occupancy
  - Daylighting
- Scheduling - Universal voltage models only
  - Weekly scheduling
  - Time clock or astronomical clock
  - Change level, operating mode, daylight mode
  - Models without the integral scheduling feature can be part of a group with scheduling
  - Controls LED lighting loads up to 6.7A
- Single-level switching
- Occupancy mode:
  - Disabled (Photocell only)
  - Auto-ON/Auto-OFF
- 360° field-of-view provides up to 8,250 square feet of coverage
  - 8-20 ft. and 20-40 ft. lenses plus aisle way masks included
- Daylight control modes:
  - Disabled
  - Ambient light hold OFF (switching)
  - Daylight harvesting (0-10V continuous dimming)
  - Daylight Transition Lighting (reverse daylight harvesting)
- Out-of-the-box configuration default mode:
  - Auto-ON/Auto-OFF with 20-minute timeout
  - Sensitivity set to high
    - Daylight harvesting enabled with auto calibration enabled
- Advanced configuration is made using the Leviton Smart Sensor App on any Bluetooth-enabled Android or iOS device:
  - Adjust the sensitivity of the sensor to increase or decrease coverage area
  - Adjust timeouts
  - Set and configure daylight mode
    - Auto and manual calibration
    - Set a security code to lock configuration settings
    - Configure dimming options such as high and low trim, partial-OFF, and partial-OFF timeouts

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201 North Service Road, Melville, NY 11747-3138 **tel** 800-323-8920 **tech line** (8:00AM-10:00PM ET Mon-Fri, 9:00AM-7:00PM ET Sat, 9:00AM-5:00PM ET Sun) 800-824-3005
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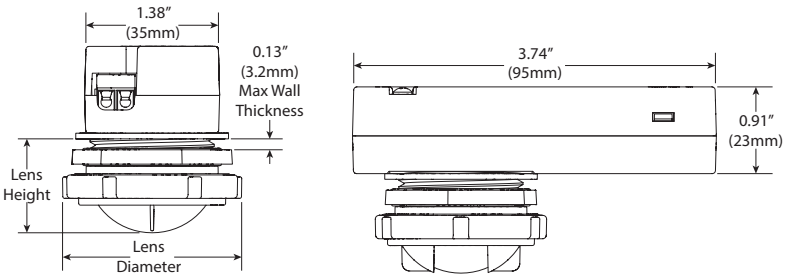
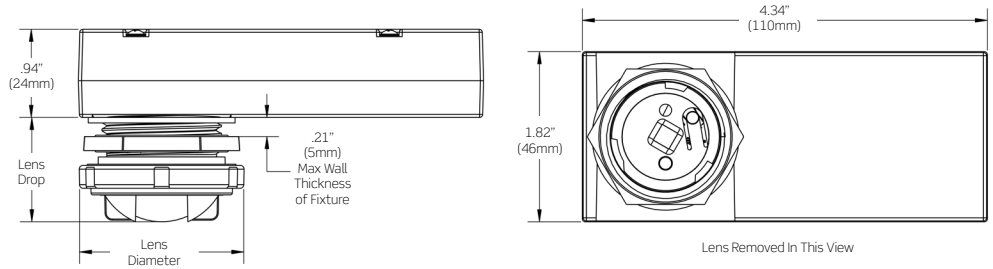
## Dimensions Diagram ZLD1Z



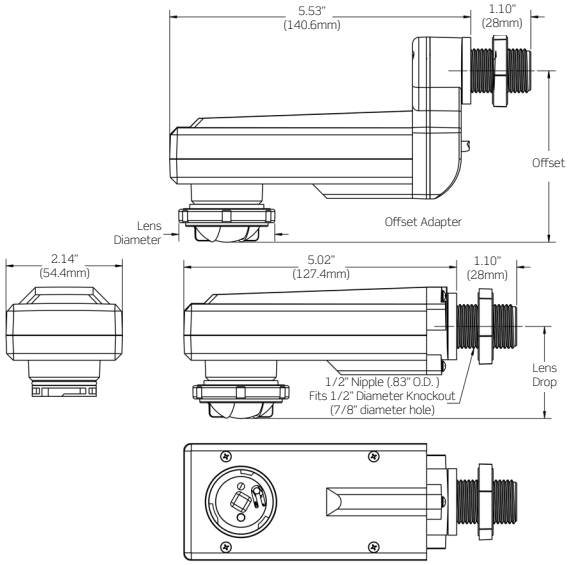

| Lens Dimensions | | |
|---|---|---|
| | Low Bay Lens | High Bay Lens |
| Lens Diameter | 1.84” (46.7mm) | 2.86” (72.6mm) |
| Lens Height | 1.08” (27mm) | 1.45” (36.8mm) |

## Dimensions Diagram ZLDUZ




| Lens Dimensions | | |
|---|---|---|
| | Low Bay Lens | High Bay Lens |
| Lens Diameter | 1.84” (46.7mm) | 2.86” (72.6mm) |
| Lens Height | 1.17” (39.1mm) | 1.54” (39.1mm) |

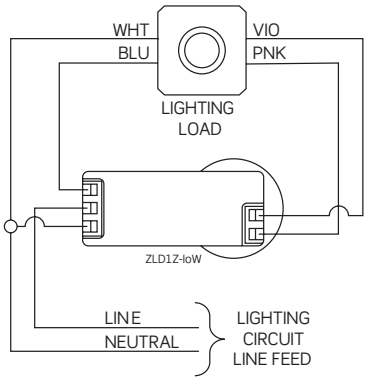
## Dimensions Diagram OFD1Z and OFDUZ



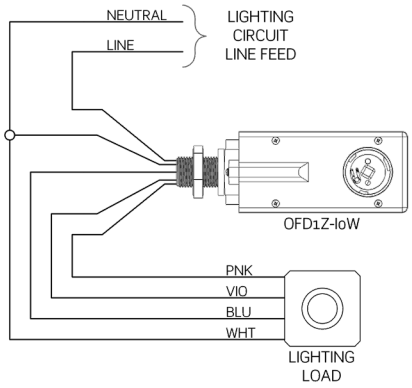

| Lens Dimensions | | |
|---|---|---|
| | Low Bay Lens | High Bay Lens |
| Lens Diameter | 1.84” (46.7mm) | 2.86” (72.6mm) |
| Lens Drop Straight Adapter | 1.69” (42.9mm) | 2.06” (52.3mm) |
| Lens Drop Offset Adapter | 3.14” (79.9mm) | 3.51” (89.3mm) |

# Product Data
## ZLDxZ-xxx/OFDxZ-xxx

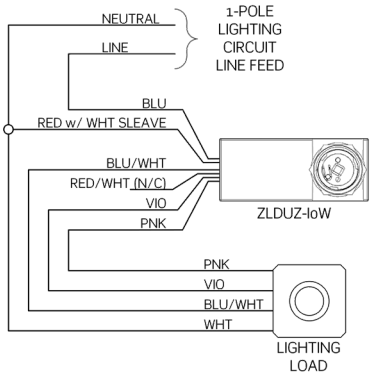
## Wiring Diagrams ZLD1Z

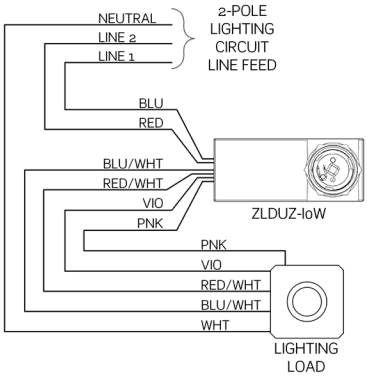


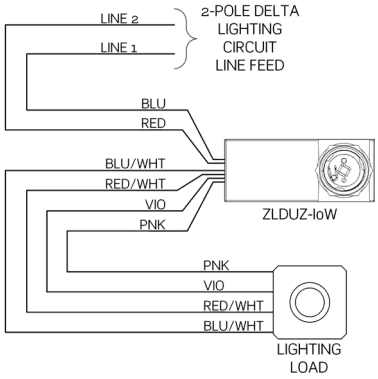

## Wiring Diagram OFD1Z



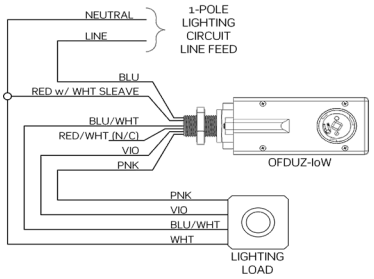

## Wiring Diagrams ZLDUZ

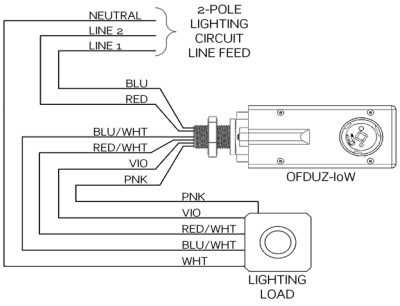


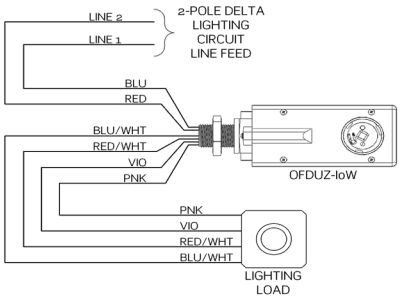




## Wiring Diagram OFDUZ

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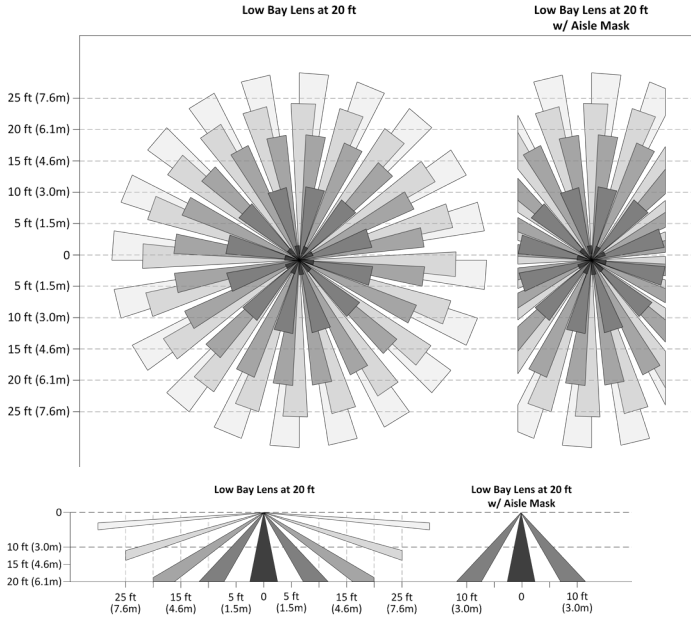
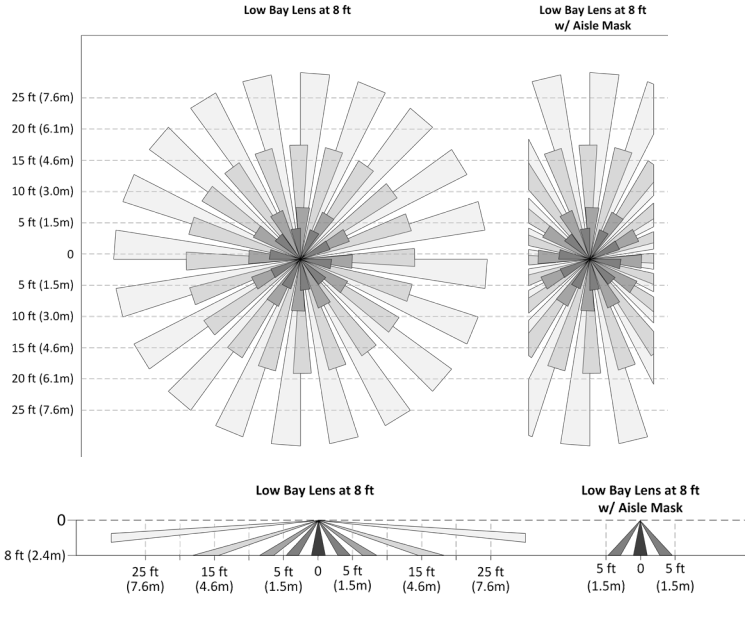
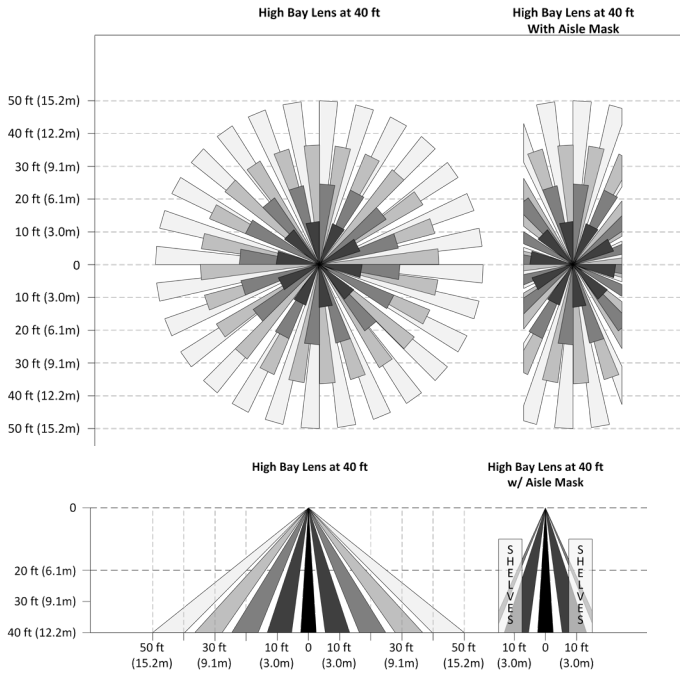
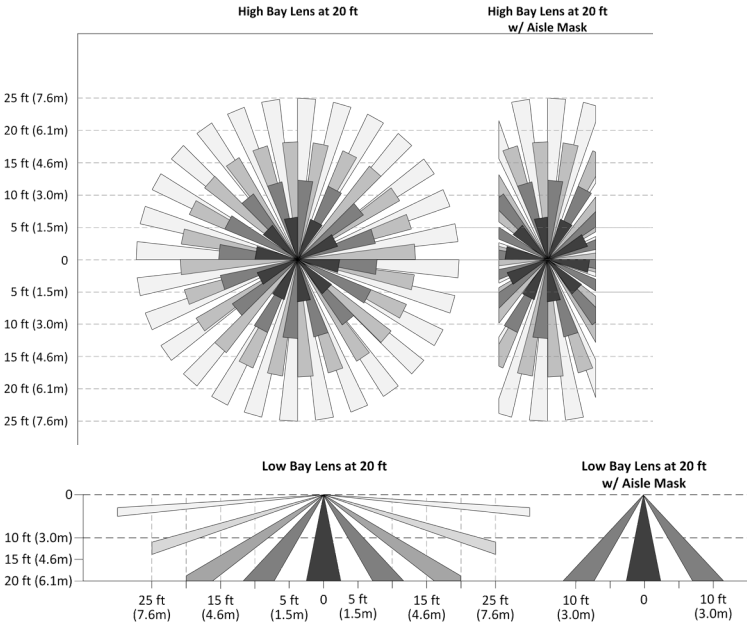
## Field of View Diagrams—Low Bay Lens




## Field of View Diagrams—High Bay Lens




| Mounting Height (Ft.) | Field of View Lens | Major (Sq.Ft.) | Minor (Sq.Ft.) |
|---|---|---|---|
| 8 | Low Bay | 2050 | 900 |
| 15 | | 1750 | 750 |
| 20 | | 1850 | 350 |
| 20 | High Bay | 2300 | 1050 |
| 30 | | 5300 | 800 |
| 40 | | 8250 | 550 |

## Specifications

| Electrical | ZLD1Z | OFD1Z | OFDUZ | ZLDUZ |
|---|---|---|---|---|
| Input Voltage Frequency | 120-277 VAC, 50/60 Hz | | 120-480VAC | |
| Input Current | | | | |
| Max | 15mA | | | |
| Standby | 5mA | | | |
| Load Ratings - All Load Types | | | | |
| 120 VAC (1-Pole) | 6.7A (800W) | | | |
| 208 VAC (2-Pole) | — | | 5.0A (1150W) | |
| 230 VAC (1-Pole) | 5.0A (1150W) | | | |
| 240 VAC (2-Pole) | — | | 5.0A (1200W) | |
| 277 VAC (1-Pole) | 5.0A (1400W) | | | |
| 347 VAC (1-Pole) | — | | 5.0A (1700W) | |
| 480 VAC (2-Pole) | — | | 5.0A (2400W) | |
| Motor 120-480 VAC | 1/3 HP | | | |
| 0-10V Dimming Control | 50 mA (Sinking) | | | |
| Wire Lead Length | Terminals | 30 Inches (762mm) | | |
| **Environmental** | | | | |
| Operating Temperature | -40° to 167° F (-40° to 75° C) | | | |
| Storage Temperature | -40° to 185° F (-40° to 85° C) | | | |
| Relative Humidity | 0% to 90% RH, non-condensing | | | |
| Rating | IP66 (Type 3R) | | | |
| Pollution Degree | 2 | | | |
| **Other** | | | | |
| Certifications | ioXT | | | |
| Energy Codes | Can be used to comply with IECC, ASHRAE 90.1, and 2022 Title 24, Part 6 occupancy/vacancy sensing and dimming requirements | | | |
| Dimensions | Width: 1.39" (35.3 mm) Length: 3.75" (95.3 mm) Depth: 0.91" (23 mm) | Width: 2.14" (54.4 mm) Length: 6.12-6.63" (155.4-168.6 mm) Depth: 1.61" (41.0 mm) | Width: 2.14" (54.4 mm) Length: 6.12-6.63" (155.4-168.6 mm) Depth: 1.61" (41.0 mm) | Width: 1.80" (46.0 mm) Length: 3.80" (96.5 mm) Depth: 0.94" (24.0 mm) |

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## Ordering Information

| Smart IP66 PIR Integrated Fixture Mount Sensor | |
|---|---|
| **Cat. No.** | **Description** |
| ZLD1Z-I0W | Dimming Daylight Harvesting PIR Occupancy Sensor; Internal Fixture Mount; 120-277VAC 50/60 Hz; IP66 Rating for High and Low-Temp, Water Tight, Indoor/Outdoor; Single Zone 0-10V Dimming, 120-277VAC single-pole 5A relay; 8-20' Lens and 20-40' lens included, bulk pack, 25/case |
| ZLDUZ-I0W | Dimming Daylight Harvesting PIR Occupancy Sensor; Internal Fixture Mount; Universal Voltage 120-480VAC 50/60 Hz; IP66 Rating for High and Low-Temp, Water Tight, Indoor/Outdoor; Single Zone 0-10V Dimming, 120-347VAC 2-pole 5A relay; 8-20' Lens and 20-40' lens included, bulk pack, 25/case |
| OFD1Z-I0W | Dimming Daylight Harvesting PIR Occupancy Sensor; End/Fixture Mount; 120-277VAC 50/60 Hz; IP66 Rating for High and Low-Temp, Water Tight, Indoor/Outdoor; Single Zone 0-10V Dimming, 120-277VAC single-pole 5A relay; 8-20' Lens and 20-40' lens included, bulk pack, 25/case |
| OFD1Z-ISW | Dimming Daylight Harvesting PIR Occupancy Sensor; End/Fixture Mount; 120-277VAC 50/60 Hz; IP66 Rating for High and Low-Temp, Water Tight, Indoor/Outdoor; Single Zone 0-10V Dimming, 120-277VAC single-pole 5A relay; 8-20' Lens and 20-40' lens included, individually boxed |
| OFDUZ-I0W | Dimming Daylight Harvesting PIR Occupancy Sensor; End/Fixture Mount; Universal Voltage 120-480VAC 50/60 Hz; IP66 Rating for High and Low-Temp, Water Tight, Indoor/Outdoor; Single Zone 0-10V Dimming, 120-347VAC 2-pole 5A relay; 8-20' Lens and 20-40' lens included, bulk pack, 25/case |
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**Leviton Manufacturing Co., Inc. Lighting & Controls**
10385 SW Avery Street, Tualatin, OR 97062 **tel** 800-736-6682 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

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