## **CEN-ODT-C-POE**

## Dual-Technology Occupancy Sensor, PoE, 2,000 Sq. Ft.

The Crestron® CEN-ODT-C-POE is a low-profile, ceiling-mounted occupancy sensor that features passive infrared (PIR) and ultrasonic (US) motion detection technology.

The CEN-ODT-C-POE is designed for areas up to 2,000 square feet, making it great for use in large spaces such as auditoriums, warehouses, and building lobbies. It is an effective solution for reducing energy consumption and enhancing the functionality of lighting and environmental systems.

A single-wire Ethernet connection allows the CEN-ODT-C-POE to report to the Crestron XiO Cloud™ service when no control system is in place. Crestron XiO Cloud integration allows for device configuration, occupancy status reporting, and online/offline status.

### >> Check the Box

Item	Qty
CEN-ODT-C-POE	1
Assy, Plastic and Fresnel Lens (P/N 4515335)	1
PIR Shield, 180 Degree View (P/N 2031200)	1
PIR Shield, Perforated, 30 Degree Angles (P/N 2031201)	1
Cutout Template (P/N 4515604)	1

## >> Determine the Mounting Location

Use the "PIR Masking" and the "Motion Detection Range" sections to help determine the ideal mounting location.

**NOTE:** When determining the mounting location:

- Avoid areas where false tripping may occur due to outside motion such as through an open door.
- Identify and avoid areas of possible vibrations and air currents (e.g., projectors, fans, vents) and mount the sensor at least 5 ft (2 m) away from these items.

#### **PIR Masking**

The included masks change the detection area of the PIR sensor. Insert the half mask into the dome of the CEN-ODT-C-POE to block 180° of the detection area or remove any of the twelve 30° perforations from the full mask for a custom detection area.

### Motion Detection Range

#### **High Sensitivity**

The detection pattern for the high sensitivity setting is shown in the illustrations below. The first and second illustration show the side view of the detection range based upon the sensor orientation. The third illustration shows the detection range based on the top view of the sensor.



### **Motion Detection Range**

#### Medium Sensitivity

The detection pattern for the medium sensitivity setting is shown in the illustrations below. The first and second illustration show the side view of the detection range based upon the sensor orientation. The third illustration shows the detection range based on the top view of the sensor.







#### Low Sensitivity

The detection pattern for the low sensitivity setting is shown in the illustrations below. The first and second illustration show the side view of the detection range based upon the sensor orientation. The third illustration shows the detection range based on the top view of the sensor.



# >> Wiring

Use Ethernet cable to connect the control system to the 8-wire, RJ-45 10/100 Ethernet port on the CEN-ODT-C-POE. The CEN-ODT-C-POE is powered using PoE (IEEE 802.3af).

Connect the 6-32 ground chassis lug to an appropriate grounding point.

# >> Install the CEN-ODT-C-POE

Install the CEN-ODT-C-POE in a drop ceiling, drywall, or into an octagon electrical box.

The following items are required for installation:

- Slotted or #2 Phillips Screwdriver
- Pencil
- Cutting Tools

### NOTES:

- Ensure that the cover faces the correct direction when it is installed.
- The CEN-ODT-C-POE requires a 2-1/8 in. (54 mm) minimum mounting depth.

### Install into Drop Ceiling or Drywall

- In the location identified in "Determine the Mounting Location," mark the hole for the cutout using a pencil and the hole cutout template.
- 2. Cut a hole in the drop ceiling or drywall following the marks made in Step 1. Use tools appropriate for the surface type.
- 3. Wire the CEN-ODT-C-POE. Refer to the "Wiring" section for details.
- 4. Place the sensor base into the hole and secure it to the drywall or ceiling tile by tightening the preinstalled screws. Plastic wings are attached to the preinstalled screws that open when the screws are tightened to secure the sensor base to the drop ceiling or drywall.





5. Install the sensor cover. Align the arrows on the sensor cover with the arrows on the sensor base and then place the sensor cover on the sensor base. Twist clockwise until the cover clicks into place.

### Install Into an Octagon Electrical Box

- Remove the preinstalled screws and the plastic wings. Use a slotted or #2 Phillips screwdriver to turn the screw counterclockwise until the plastic wings are removed and the screws can be removed.
- 2. Wire the CEN-ODT-C-POE. Refer to the "Wiring" section for details.
- 3. Secure the CEN-ODT-C-POE to the octagon electrical box using two screws (not supplied). Ensure that the occupancy sensor faces the correct direction.



4. Install the sensor cover. Align the arrows on the sensor cover with the arrows on the sensor base and then place the sensor cover on the sensor base. Twist clockwise until the cover clicks into place.

## >> LED Functions

The CEN-ODT-C-POE has five LEDs.

- Passive Infrared (PIR): Lights red to indicate PIR motion detected.
- Ultrasonic (US): Lights green to indicate US motion detected.
- NET: Lights yellow to indicate no LAN connection to host.
- Power/Firmware: Lights green when the device is operating normally. Lights yellow if the firmware fails to load.
- Setup: Lights blue to indicate an identify command sent by the host.

### >> Restart the CEN-ODT-C-POE

Press and hold the **SETUP** button to restart the CEN-ODT-C-POE. The power/firmware LED lights yellow while the CEN-ODT-C-POE starts up and then lights green when the CEN-ODT-C-POE is ready for use.

## >> Configure the CEN-ODT-C-POE

The CEN-ODT-C-POE provides a web configuration interface that is used to view and configure the CEN-ODT-C-POE. The interface can be accessed using the IP address of the CEN-ODT-C-POE or the Crestron XiO Cloud™ service.

**NOTE:** Use the Device Discovery tool in Crestron Toolbox<sup>™</sup> software to obtain the IP address of the CEN-ODT-C-POE.

The Crestron XiO Cloud service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are configured to connect to the service. Use of the service requires a registered Crestron XiO Cloud account.

**NOTE:** The device may be disconnected from the service by navigating to the Cloud Services tab in Crestron Toolbox software (**Functions** > **Device Info** > **Cloud Services**). For details, refer to the Crestron Toolbox help file.

To access the web configuration interface using the Crestron XiO Cloud service:

- Record the MAC address and serial number that are labeled on the shipping box or rear panel of the device. The MAC address and serial number are required to add the device to the service.
- 2. Do either of the following:
  - For existing accounts, access the Crestron XiO Cloud service at <u>https://portal.crestron.io</u>.
- For new accounts, register for a Crestron XiO Cloud account at <u>www.crestron.com/xio-cloud-registration</u>.
- Claim the device to the service as described in the Crestron XiO Cloud User Guide (Doc. 8214) at <u>www.crestron.com/manuals</u>.
- 4. Select the device from the cloud interface to view its settings.

# >> Test the CEN-ODT-C-POE

Confirm that the sensor operates as intended after installation.

### Verify the Detection Range

The red and green LEDs on the CEN-ODT-C-POE should flash only when they detect motion caused by room occupants. To verify the motion detection:

- 1. Enter the room and close all of the doors.
- 2. Sit in the room and monitor the red and green LEDs on the CEN-ODT-C-POE. Remain still to prevent the CEN-ODT-C-POE from detecting your presence in the room.
- 3. If the red and green LEDs on the CEN-ODT-C-POE flash, the sensors are detecting unwanted motion. Identify and correct the sources of motion (projectors, fans, vents, etc.).

### Test the Occupancy Sensitivity

**NOTE:** If multiple occupancy sensors are located in the same room, adjust one at a time.

- Walk around the room to simulate typical room motion (e.g., sit at various places around the room and simulate typical motion for the room).
- 2. While walking around the room, monitor the LEDs on the CEN-ODT-C-POE to verify that the motion is detected. Red indicates PIR motion and green indicates US motion.
- 3. If motion in the room is not detected, increase the sensitivity of the PIR or US sensors.

### **Compliance and Legal**

**Original Instructions:** The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

### Regulatory Model: M2001903001

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This product is listed to applicable  $\mathsf{UL}^{\circledast}$  Standards and requirements tested by Intertek $^{\circledast}$  services.

Ce produit est homologué selon les normes et les exigences UL applicables par Intertek Prestations de service.





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

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

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

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**NOTE:** If motion is not detected in the corners of the room, increase the timeout to allow more time to detect motion.

4. Repeat these steps until all expected motion is detected.

## >> Troubleshoot Symptoms

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron Customer service representative.

Symptom	Issue	Action
The lights do not turn on.	The circuit breaker or fuse has tripped.	Reset the circuit breaker or replace the fuse.
	The control system is incorrectly programmed.	Verify the program in the control system.
	There is a miswire.	Verify that the wires are connected properly.
	There are incorrect settings on the device.	Increase the sensitivity setting on the PIR sensor, and then increase the US sensors.
	The mounting location is incorrect.	Move the sensor into an area that senses the occupant or point of motion.
The lights do not turn off.	There is constant motion in the room.	To test, reduce the sensitivity level and remove the motion source. If there is no change, then the mounting location must move.
	There is motion detected in a hallway or another room.	Put the sensor into Setup mode and walk by the area. If the red or green LED blinks, move the sensor, mask the PIR, or disable one side of the US sensors.
	There are incorrect settings on the device.	Reduce the sensitivity and timeout levels.
	The control system is incorrectly programmed.	Verify the program in the control system.
The lights remain on for too long.	The timeout setting is too high.	Reduce the timeout one step at a time.

## >> Additional Information

Scan or click the QR code for detailed product information.



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