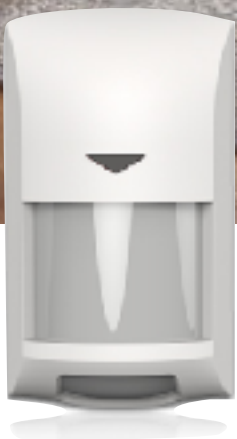


Choosing the right sensor type

Design and Application Guide



be-SENSE®



BeSense has developed three kind of sensors to cover all the security and automation needs that all today's living requests.

Sensors, which can automatically turn lights on when you enter a room and off when you leave, are a smart and easy way to save energy also they will let you know if someone is walking around where they shouldn't.

This is a quick guide that will help you to understand the difference between each type of sensor and which is the best option for your project.

An important recommendation for any sensor you choose:

Avoid mounting sensors close to air vents, as the vibration and air flow can reduce the effectiveness of the sensor (PIR sensors should not be within 4 ft of an air vent)



IX30 BeSense Z-Wave, Wall PIR Motion Detector

Pet immune motion detectors **disregard** the **motion caused by animals** weighing less than 55 pounds. IX30 uses passive infrared (PIR) motion detector technology to

monitor heat changes in a designated area.

With a traditional motion detector, when your pet enters the coverage area, a sensor is tripped and causes a false alarm. Pet immune motion detectors ignore the motion caused by animals and thus reduce the likelihood of a false alarm.

The IX30 Wall sensor works better in a small and enclosed spaces with high levels of occupancy movement because it has been developed to be more sensitive to the movement. PIR technology easily detects people walking in and out of a space.

Ideal Uses:

- Small rooms
- Low ceilings (less than 7 feet)
- Presence of animals like dogs or cats.
- High sensitive for people movements.

IX32 BeSense ZWave Ceiling Motion Detector



The 360° Ceiling-Mount Motion Sensor with Passive Infrared (PIR) technology that does just that in all directions.

This type of sensor is ideal for spaces that have tall furniture along a wall.

Ideal Uses:

- Open Offices
- Recommended for 7–12ft (2–3.7m) ceilings

- Hallways with more than three entrances
- Conference rooms

IM20 BeSense Door/Window Sensor



Of all the security devices out there, contact sensors might seem the least interesting. They're small, simple and unobtrusive, with a single function: to detect the opening and closing of **doors, windows, cabinets and drawers**.

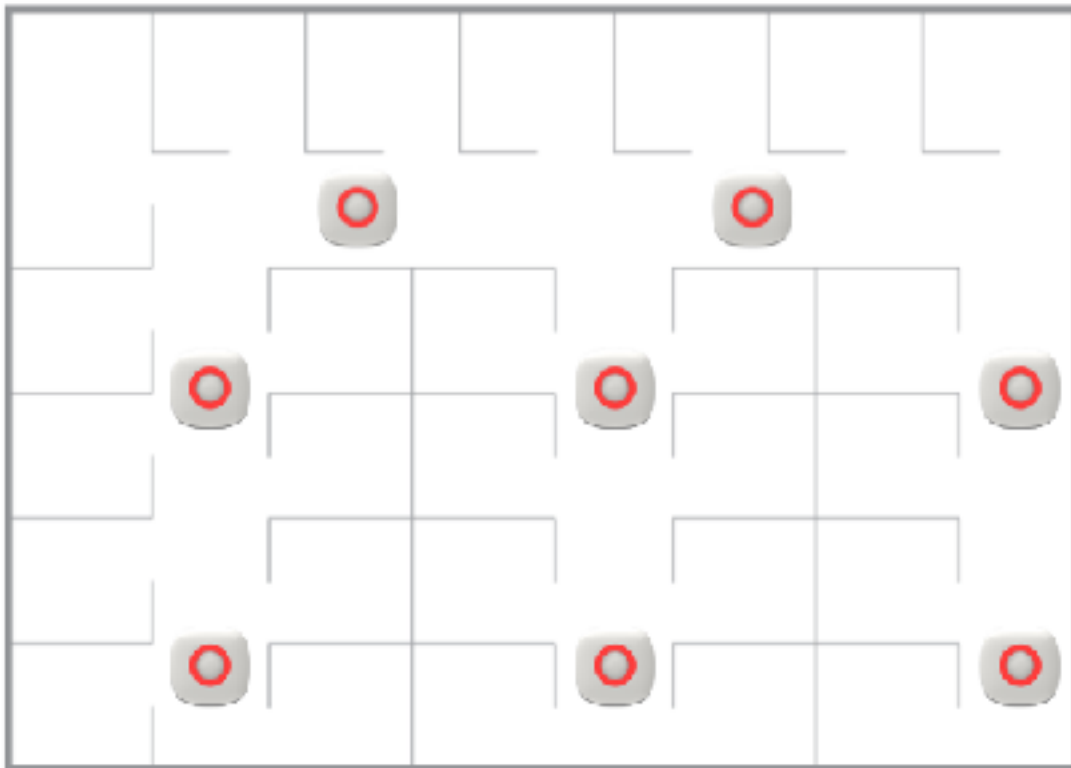
From screen doors to cigar humidors, contact sensors can be applied virtually anywhere where you need to know about activity.

Ideal Uses:

- Front and Back door
- Garage door
- Downstairs windows
- Children's windows
- **Closest and cabinets**

Sensor placement examples

Open Office



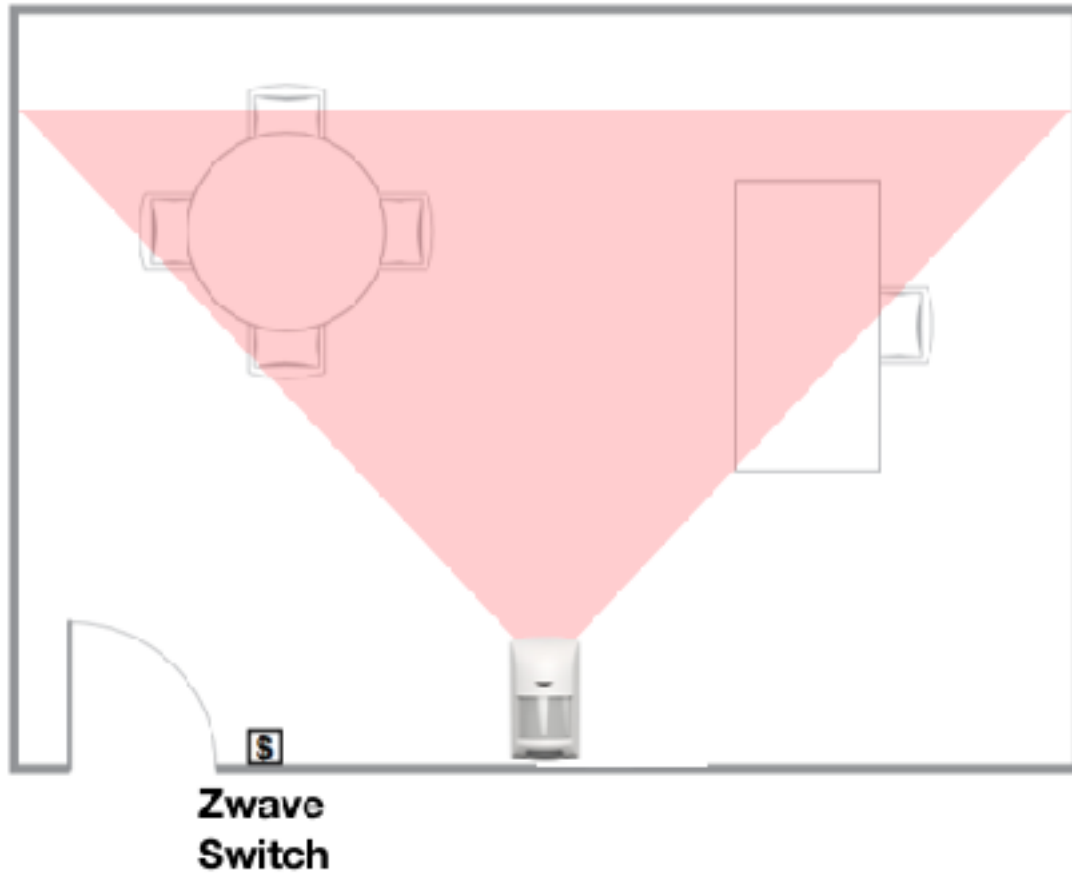
Example 1

In this example, we placed ceiling-mounted sensors along the walkway so the coverage pattern overlaps to avoid dead spots. We also placed the sensors away from air vents in order to avoid reliability issues.

Example 2

In this example, a wall-mounted sensor makes the most sense. The desk is close enough to the wall to be within the minor motion coverage area, and using a wall-mounted sensor along the same wall as the door prevents the sensor from looking out into the space. Because the door opens into the space, the sensor can see someone entering regardless of the door's position. In terms of the sensor's lateral position along

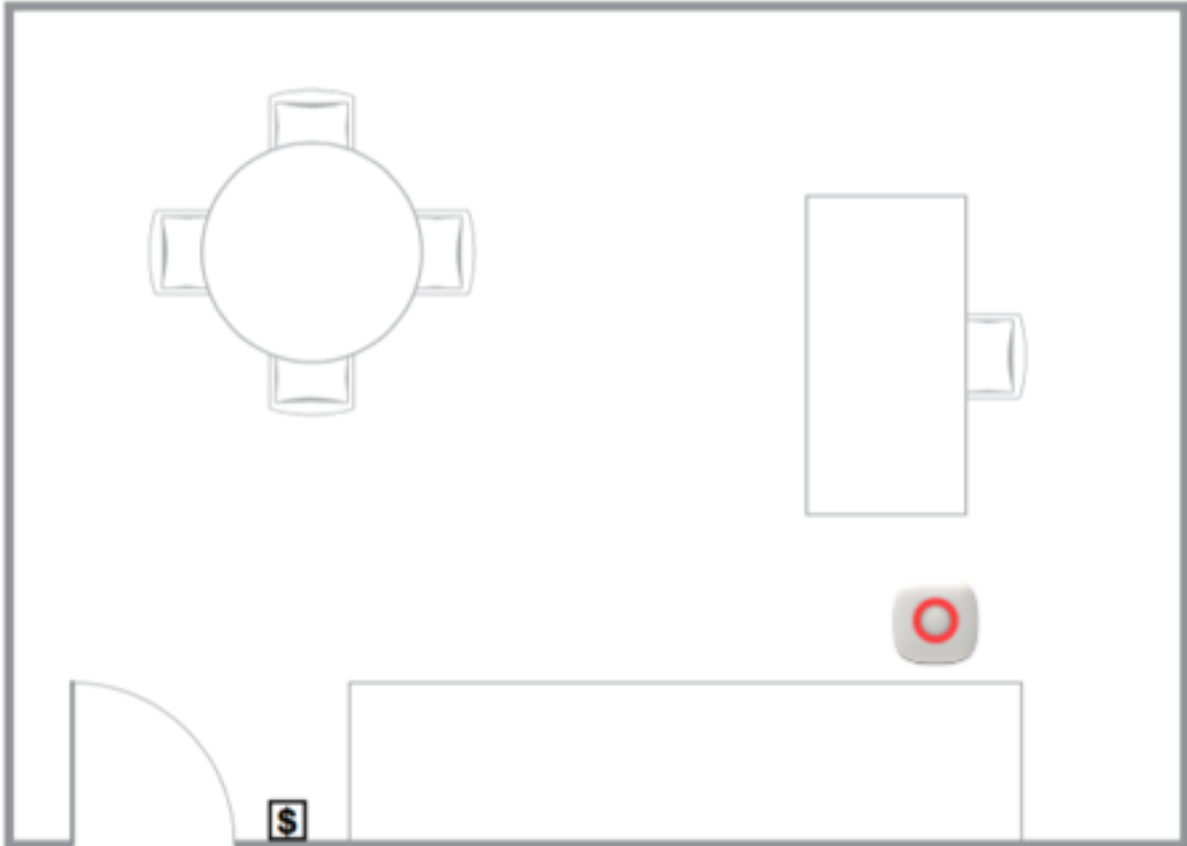
the wall, we want to keep it close to the desk, but away from any air vents that might be in the ceiling.



Example 3

In this example we're using a ceiling-mounted occupancy sensor. This type of sensor is ideal for spaces that have tall furniture along a wall.

When placing the sensor on the ceiling, we want to try to have the desk inside of the minor motion coverage area, but we also want to keep the sensor as close to the wall with the door as possible in order to minimize the sensor's view out the door. Any air vents in the space will also affect sensor placement.



**Zwave
Switch**

House

Living in a house or apartment, the front and back doors are two important spots to control at all times.

We have also installed a Wall Sensor that controls the storage room door, so we can keep control of tools and dangerous cleaning chemicals

In the kitchen and living area we chose ceiling sensors to turn on the lights when someone comes in from the outside or from the bedrooms

The kitchen sensor should be placed over 8ft high.

