

**IECC, ASHRAE 90.1 and Title 24  
Parking Lot Control**  
Comply with energy codes and utilize  
advanced energy-saving features

## NorthStar Outdoor Lighting Control System

### WIRELESS, CODE-COMPLIANT CONTROL FOR SITE LIGHTING APPLICATIONS

The Leviton NorthStar Outdoor Lighting Control System is specifically designed to meet the needs of outdoor and partially outdoor facilities, including the unique safety and code compliance concerns of parking lots (site lighting areas). Wireless system technology connected via a robust, self-healing mesh network makes installation and system management simple.

#### ASHRAE Standard 90.1:

- Exterior lighting must be controlled by a photocell to turn lighting OFF when sufficient lighting is available
- Controls must reduce advertising/sign lighting power by 30% after closing
- Building facade lighting must be controlled based on opening/closing time
- Any other lighting shall have controls configured to reduce connected lighting power by no less than 30% from midnight-6 am, OR 1 hour of business closing to 1 hour of business opening, OR any time space is unoccupied for more than 15 minutes

#### California Title 24:

- Exterior incandescent lighting over 100W must be controlled with a motion sensor
- All outdoor lighting must be controlled with a photocell or astronomical time clock
- Lighting that is >24 ft from the ground must be controlled to automatically reduce lighting by 40-80% when the area is vacant, and auto-ON when occupied
- Outdoor signage must be automatically or astronomical time clock controlled, and must dim to a minimum of 65% at night
- Lights must be turned OFF during daylight hours via a photocontrol and an astronomical time switch OR astronomical time switch control
- If luminaires mounted <24 ft above ground, motion sensors or other occupancy-based controls must be used; not required >24 ft above ground
- Maximum dimming permitted as part of a motion controlled lighting system increased to 90%
- Outdoor lighting no longer must be separately circuited from other lighting, but it must remain independently controlled via automatic scheduling

#### IECC:

- Exterior lighting designated for dusk to dawn operation shall be controlled by an astronomical time clock or photocell
- Lighting not designated for dusk to dawn operation shall be controlled by either a combination of a photocell and time switch, or an astronomical time clock

#### PROBLEM

**Parking lot area requires lighting control to meet local and national code mandates and improve area safety.**

- Parking lot is utilized during both day and nighttime hours by customers and employees
- Although people periodically come and go throughout the day and evening, the space is often unoccupied for long stretches of time
- Can be used to comply with IECC, ASHRAE 90.1 2016 and 2016 Title 24, Part 6 requirements for outdoor lighting control, occupancy sensing, 0-10V dimming, daylight harvesting, partial-ON, partial-OFF requirements

#### SOLUTION

**NorthStar Outdoor Lighting Controls manage parking garage lighting for energy savings and code compliance.**

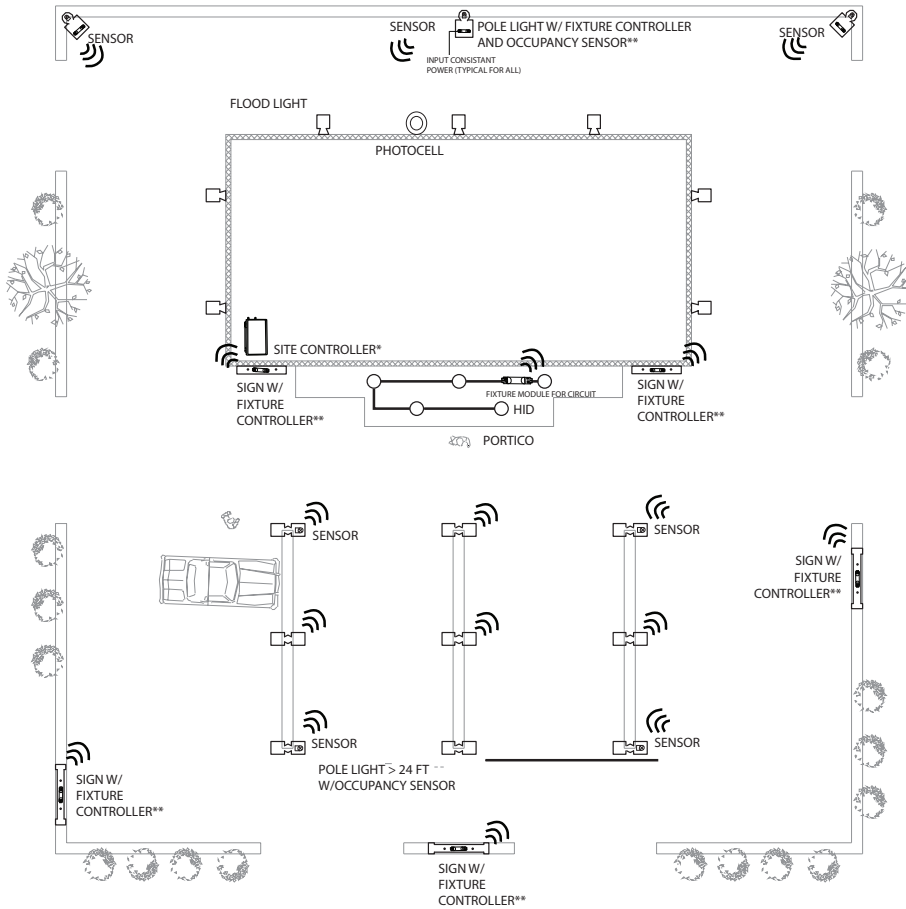
- Integrate photocells and time clock controls to measure ambient light in the space, and also ensure essential lighting remains on during nighttime hours—and off during daylight times
- Incorporate occupancy sensors for zone control, keeping empty areas off until occupants enter the space
- Can be used to comply with IECC, ASHRAE 90.1, 2016 Title 24, Part 6 requirements for outdoor lighting control, occupancy sensing, 0-10V dimming, daylight harvesting, partial-ON, partial-OFF requirements

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## NORTHSTAR PARKING LOT CONTROL



Disclaimer: This document is for informational purposes only. Each project will have its own specific requirements for satisfying IECC, ASHRAE 90.1 and Title 24 code compliance based on a variety of factors. Other exceptions or details may apply. Review the code for specific requirements and/or consult with a professional advisor. Leviton Mfg. Co., Inc. is not responsible for any loss resulting from the use of any information found in this document. Solutions are subject to change without notice. For additional assistance, contact your local Leviton representative.

### WHAT YOU WILL NEED

NORTHSTAR PARKING LOT CONTROL		QTY.
	<b>Wireless Fixture Controller, 1 Zone   OCF01-1RT</b> <ul style="list-style-type: none"> <li>Wirelessly controls lighting by responding to signals from the zone's occupancy sensors and photocells</li> </ul>	5
	<b>Site Controller   OC00G-00G OR OC00G-ENC</b> <ul style="list-style-type: none"> <li>Serves as the central hub for the NorthStar Outdoor Lighting Control System</li> <li>NOTE: A site controller must be installed within range of at least one of the nodes</li> </ul>	1
	<b>Outdoor Occupancy Sensor   OSF20-IUW</b> <ul style="list-style-type: none"> <li>Installs directly onto the parking garage lighting fixture to detect occupancy in a zone and dim lighting accordingly</li> </ul>	12
	<b>Outdoor Photocell   PCOUT-000</b> <ul style="list-style-type: none"> <li>Continually monitors the level of daylight in a space and dims lights accordingly</li> </ul>	1

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