LITON®

WIRELESS CONTROL INTEGRATIONS FOR LITON FIXTURES

CASAMBI®

LUTRON® Athena™

LUTRON® Vive™

synapse®

BubblyNet®

Unisense™

LITON CONTROL INTEGRATIONS

CASAMBI®

Wireless Lighting Control

Casambi enables wireless Bluetooth Mesh control of LITON luminaires without the need for additional wiring or gateways. Ideal for scalable commercial projects, it allows intuitive dimming, scene control, and remote configuration through a user-friendly mobile app. It's especially useful for retrofit applications where rewiring is cost-prohibitive.

LUTRON®

LUTRON ATHENA™

Lutron Athena is a high-performance lighting control platform that combines tunable white, precision dimming, and cloud-based scene management. LITON's fixtures easily integrate to support advanced lighting design in architectural environments. Athena is ideal for projects that require both wired and wireless control within the same building.

LUTRON VIVE™

Lutron Vive offers a flexible wireless control system for commercial spaces, using sensors and switches to enable easy retrofitting, scheduling, and dimming. LITON fixtures pair seamlessly with Vive to help maximize energy efficiency and lighting flexibility. The system can be installed zone-by-zone, allowing phased upgrades over time

synapse®

Wireless Lighting Control

Synapse provides a long-range RF-based wireless system ideal for large-scale outdoor applications. When paired with LITON luminaires, Synapse enables real-time energy monitoring, dimming, and scheduling for parking lots, campuses, and industrial sites. It supports central cloud management, making it easy to maintain and optimize multiple locations remotely.

BubblyNet®

Smart Building Program

BubblyNet offers secure Bluetooth Mesh control without the need for internet access or gateways. LITON fixtures integrated with BubblyNet deliver scalable, flicker-free wireless lighting ideal for commercial interiors that demand reliability and flexibility. It enables local, device-to-device communication, reducing network vulnerability and latency.

Unisense™

Wireless Lighting Control

LITON's exclusive low-cost UniSense™ technology integrates motion sensing and daylight harvesting directly into select luminaires. With stand alone programmable dimming and built-in automation, it's designed to improve safety, energy savings, and performance in outdoor environments. Settings can be tailored at the factory or adjusted on-site using a dedicated handheld programmer.

Product Family Integration Chart

LITON PRODUCT		CASAMBI	LUTRON ATHENA	LUTRON VIVE	SYNAPSE	BUBBLYNET	UNISENSE
	P-Series Recessed Downlights	•	•			•	•
	Cylo Cylinders	•	•			•	•
	CyloPro Adjustable Cylinders	•	•			•	
	Apollo LED Track Lighting	•	•			•	•
	LumenPad Surface Downlighting	•	•			•	•
	C-Series Recessed Downlights	•	•	•		•	•
	LumenBlast Recessed Downlights	•	•	•		•	
	LumenCannon Cylinders	•	•			•	•
	BL7 Bollards	•			•	•	•
	BL3 Bollards	•			•	•	
	LumenPole Bollards & Columns	•			•	•	•
	AG2 Adjustable Flood/Spot Lighting	•			•	•	•
	AG3 Flood/Spot Lighting				•		
	DL Ceiling Lighting	•			•	•	•
	WS Ceiling Surface				•	•	
	WD Wall Lighting	•			•	•	•

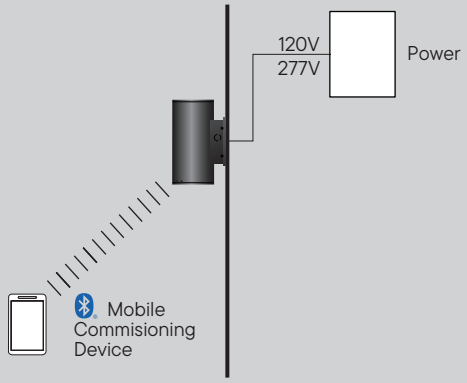
Quick Comparison: Why Choose One Over the Other?

CONTROL SYSTEM	BEST FOR	KEY BENEFIT
Casambi®	Small to mid-sized commercial & retail	Simple Bluetooth mesh, no gateway needed
Lutron® Athena™	High-end hospitality & commercial	Customizable lighting scenes, wired & wireless hybrid
Lutron® Vive™	Retrofits & large buildings	Wireless RF, fast installation, occupancy sensors
Synapse®	Outdoor smart lighting	Long-range mesh network, cloud-based control
BubblyNet®	Secure commercial applications	Decentralized Bluetooth Mesh, no internet dependency
UniSense™	Outdoor motion & daylight sensing	Low cost stand-alone control

Unisense™ UNIVERSAL SENSOR TECHNOLOGY

PROGRAMMABLE MOTION + DAYLIGHT SENSORS

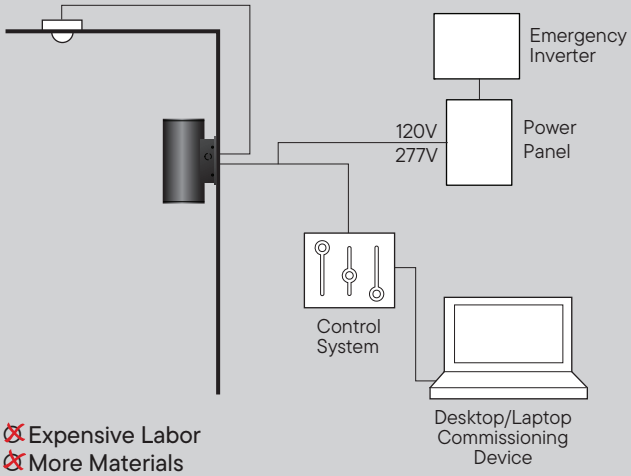
Stand-Alone



- Integral Emergency
- Integral Photo Sensor
- Motion Sensor

vs.

Full System Setup



- Expensive Labor
- More Materials
- Expensive Commissioning

PRODUCT OVERVIEW

UniSense™ integrates advanced microwave and PIR (Passive Infrared) sensors with daylight harvesting and dusk/dawn sensing. It adjusts lighting based on motion, presence, and ambient light, automatically dimming or brightening as needed. The system distinguishes between natural and artificial light for optimal energy efficiency and control.

Bluetooth and remote control capabilities make it suitable for indoor and outdoor applications, ensuring intelligent lighting management. Configurable settings include detection area, hold time, daylight threshold, standby dimming levels, and standby periods, with timing options from 5 seconds to 120 minutes. The system supports 0-10V dimming.

UniSense™ is fully programmable, allowing customization to meet specific project needs. Users can set complex schedules such as dimming lights to 30% one hour after a building closes and returning to full brightness one hour before opening or at dawn. It can also be programmed to dim to 50% after a designated period (e.g., 5 hours) and revert to full brightness upon motion detection until morning.

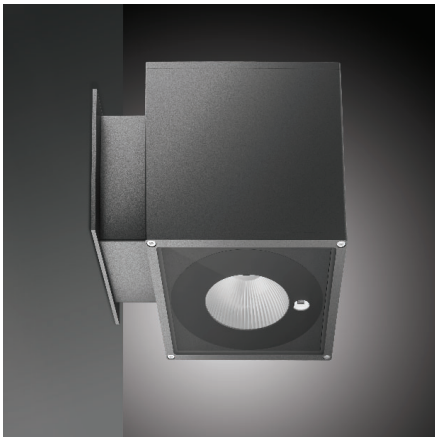
Hold Time:
From 5 seconds to 120 minutes adjustable via bluetooth app.

Dim Level on Standby:
Adjustable range: 10% – 50% of full brightness.

Daylight Threshold
Adjustable sensitivity:
2 lux (minimum) to 400 lux (maximum).

*Microwave sensor is standard. Contact factory for PIR (Passive Infrared) sensors.

MOUNTING TYPES



Integral Mounted

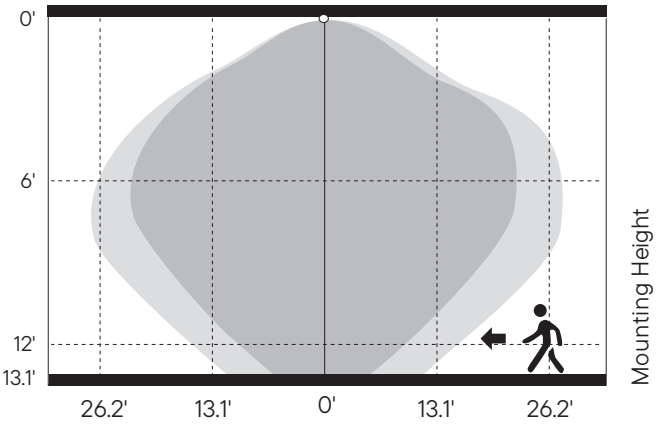
Surface Mounted

Side Mounted

DETECTION COVERAGE

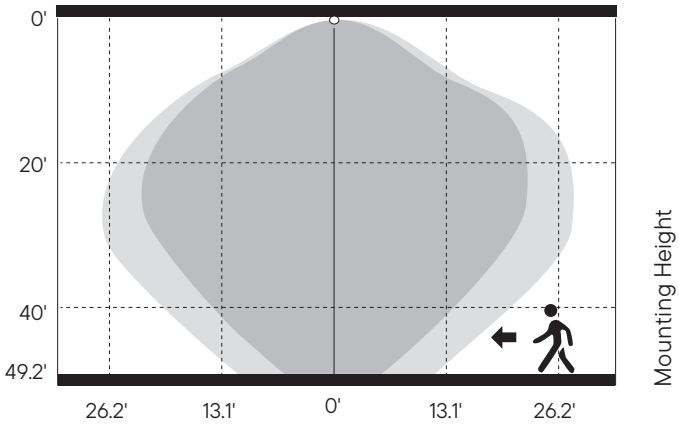
Ceiling Mounted (Low)

13.1 ft max. distance with 100% sensitivity



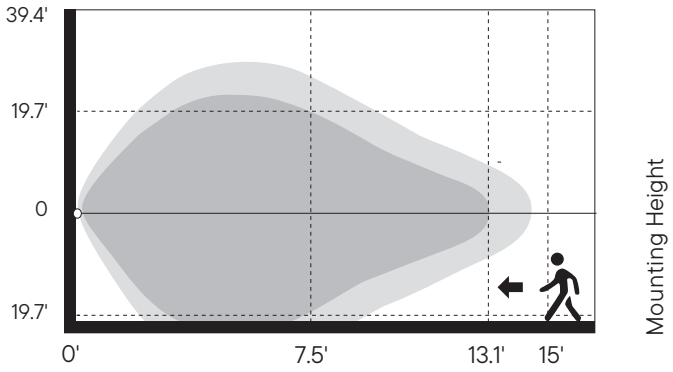
Ceiling Mounted (High)

49.2 ft max. distance with 100% sensitivity



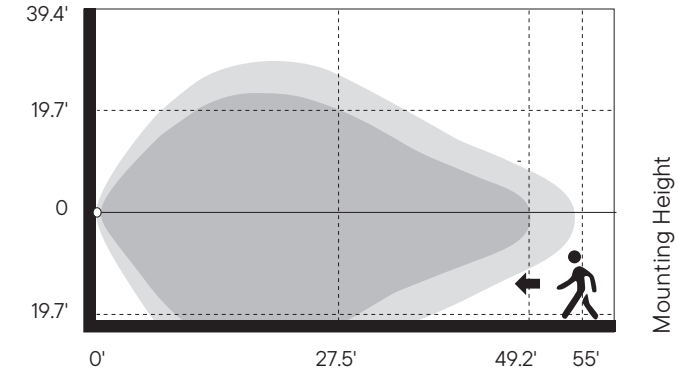
Wall Mounted (Low)

13.1 ft max. distance with 100% sensitivity



Wall Mounted (High)

49.2 ft max. distance with 100% sensitivity



Well Detected Area Possibly Detected Area 1.6-3.3 ft/s

DAYLIGHT HARVESTING MODES

The luminaire sensor conserves energy by adjusting lighting based on daylight, dimming or turning off lights when natural light is sufficient.

Dusk-to-Dawn Function

The sensor activates when brightness falls below a preset lux level, turning on and balancing indoor lighting as outdoor light changes. When ambient light is low, the sensor maintains a standby dimming level. Motion detection restores lighting to 100%.

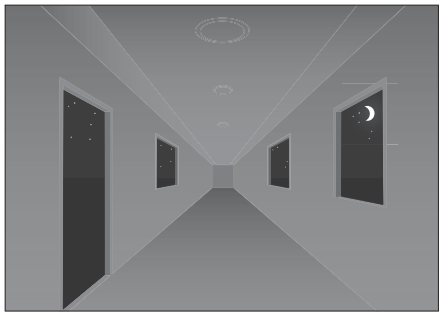
With sufficient ambient brightness, sensor will turn OFF light automatically.

Light level goes up from standby dimming to 100% when motion is detected.

Daylight Disabled Mode

In this mode, the sensor activates the light when motion is detected. If no motion is detected, the light dims to standby mode after the hold time and turns off after the standby period.

When motion is detected, sensor turns ON light.



Light is dimmed to standby after hold time and turns OFF after standby.

Daylight Threshold

The sensor turns off the light when sufficient daylight is present, even if motion is detected. If daylight is insufficient, the sensor turns the light on when motion is detected and switches it off after the standby period if no further motion is detected.

With sufficient daylight the sensor keeps the light OFF.

With insufficient daylight, the sensor turns light ON when motion is detected and OFF automatically after standby with no motion.

OCCUPANCY SENSING VS. VACANCY SENSING

The difference between Occupancy Sensing and Vacancy Sensing lies in how lights are turned on, and whether manual or automatic operation is involved.

Occupancy Sensing

Lights turn ON automatically when someone enters a space. Uses motion or presence detection to detect occupancy. Lights turn OFF automatically after a preset period of no movement. Provides hands-free convenience. Common in restrooms, corridors, and shared office spaces.

AUTO ON - Lights go on automatically when entering a room.

AUTO OFF - Lights go off automatically when leaving a room.

Vacancy Sensing

Lights must be turned ON manually by a person. Uses sensors to detect when the space becomes vacant and turns lights OFF automatically after a set time. Ensures lights are only turned on when needed, reducing unnecessary use and maximizing energy savings. Common in private offices, meeting rooms, or classrooms.

MANUAL ON - Lights have to be turned on manually when entering a room.

AUTO OFF - Lights go off automatically when leaving a room.

Common Guidelines for Occupancy Sensors

DO	DON'T
Position the sensor to trigger the lighting as soon as a person enters the space.	Install sensors within 4 feet of an HVAC supply register or fan.
Always maintain an unobstructed line of sight between the sensor and task areas. No equipment should be blocking the sensor.	Use vacancy sensors in space like corridors or stairwells where there are many entrances and not many light switches.
Locate sensors where they can't be tampered with.	Locate wall-mounted sensors behind doors.
Use sensors in large open areas like a lunchroom, media center, or larger classrooms.	Install sensors to point into hallways or other spaces that may send a false trigger.