



**SYNAPSE**

Control your industrial and commercial lighting and environmental systems, manage energy use, and optimize your operations, all through our powerful, wireless infrastructure.

**SYNAPSE**



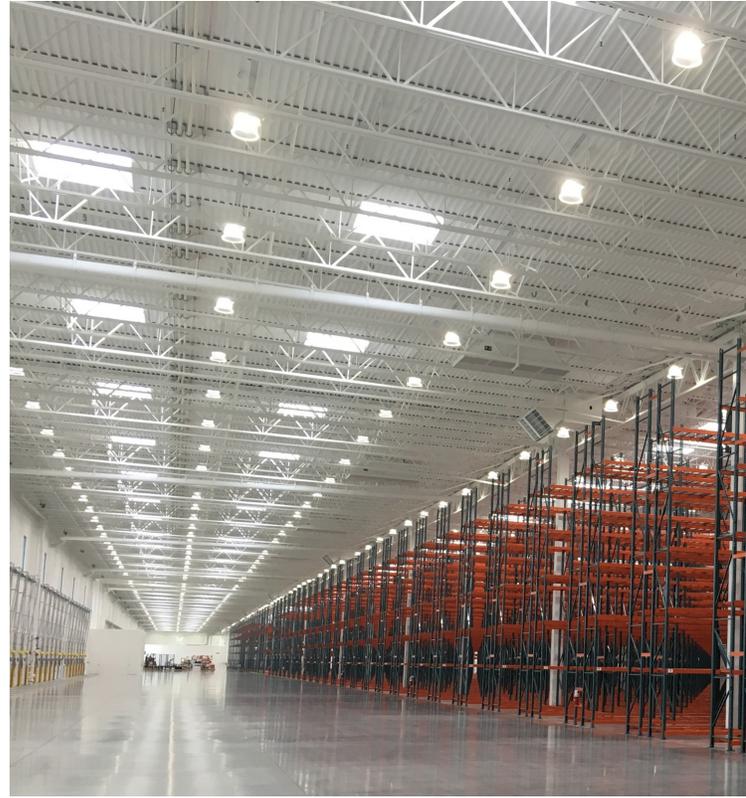
## SOLUTION OVERVIEW

**From industrial facilities to parking garages to sports arenas, SimplySnap provides a proven, reliable lighting solution that is simple to use both indoors and outdoors.**

Our intelligent lighting system scales easily to support small sites with a few hundred lights, installations with thousands of locations, and larger sites with up to 10,000 lights. SimplySnap also enables Energy Engineers to easily help their industrial clients reduce energy costs while gaining energy monitoring applications. These features deliver value beyond the light.

## KEY CAPABILITIES

- ✘ Works both indoors and outdoors – no need for separate control systems.
- ✘ Easy customization – quickly set up energy-saving behaviors and comply with energy conservation requirements, including demand response and daylight harvesting.
- ✘ Multiple methods of control – Flexible deployment models allow stand-alone local access or cloud-based remote control.
- ✘ Scalable solution – Integrate seamlessly into existing BMS systems and support large deployments with cloud-based architecture.
- ✘ Robust wireless mesh technology – it continually monitors the wireless network and generates alerts on any issues found.
- ✘ Automatic over-the-air upgrades – futureproof your investment, keeping it updated with the latest features.
- ✘ No special server required – forget expensive, complex hardware, or additional IT equipment.
- ✘ Streamline commissioning – with project management services and built-in tools within the software, have the customer's lighting network up and running quickly.





## APPLICATIONS

Synapse control solutions are designed to address the needs of commercial and industrial environments that require performance, reliability, range, scale, and flexible control options.

### OUTDOOR APPLICATIONS

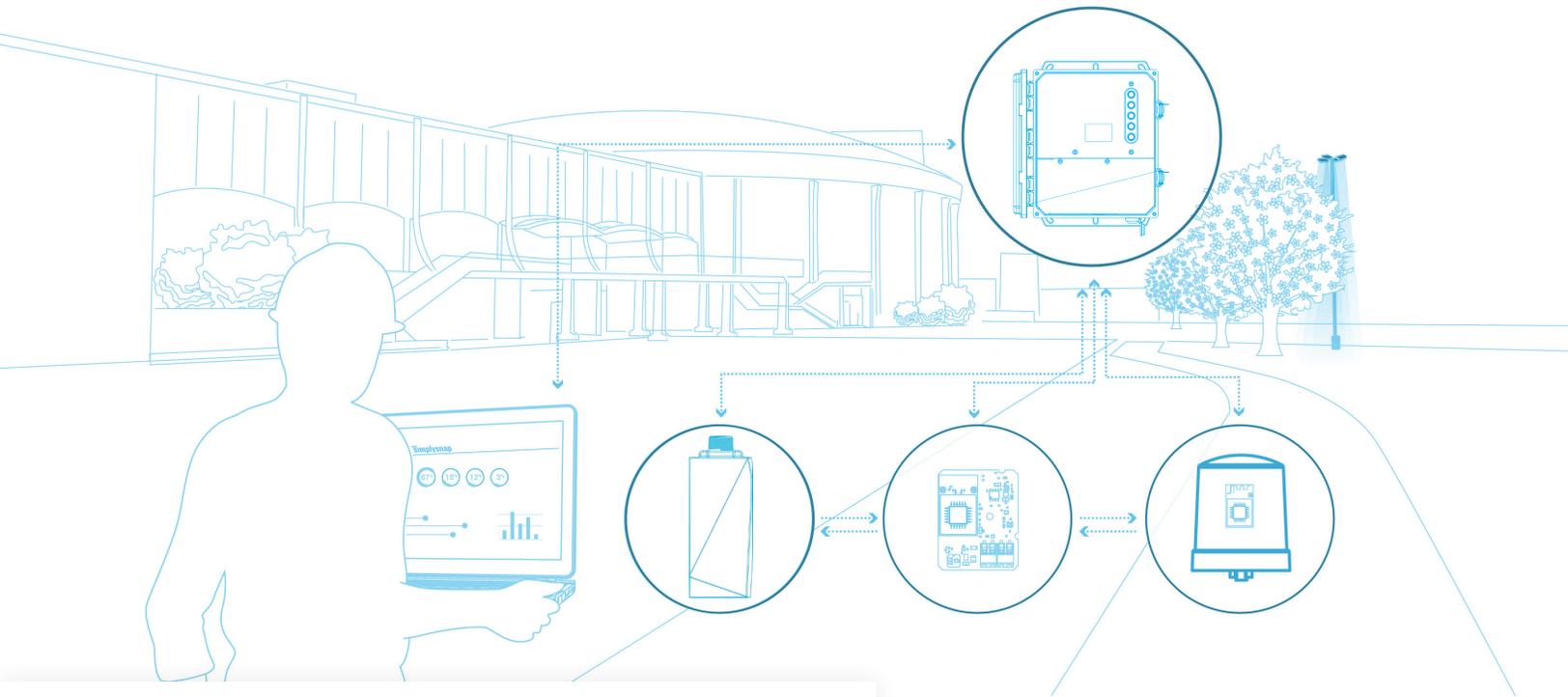


- + Parking Lots
- + Parking Garages
- + Pathway & Roadway
- + Sports Facilities & Stadiums
- + College & Enterprise Campus

### INDOOR APPLICATIONS



- + Industrial High Bay
- + Warehouses
- + Production Lines
- + Gymnasiums
- + Indoor Practice Fields



## HOW THE SYSTEM WORKS

The Synapse wireless light controllers connect to the LED drivers of the light fixtures and may be integrated/embedded inside the fixture or connected externally depending on the application and fixture design. Once they are powered, the wireless controllers automatically discover and connect with other nearby Synapse controllers and other Synapse-enabled devices to form a mesh network.

The SNAP wireless mesh network uses a proprietary protocol and operates on the standard IEEE 802.15.4 physical radio specification in the 2.4 GHz frequency band. A Site Controller manages the wireless lighting control system and stores system information. Larger systems with multiple Site Controllers can centrally manage the entire system through one user interface using the SimplySnap cloud based solution.

For customers with needs outside of lighting control, we offer additional capabilities through industrial sensors and other cloud applications. Together these solutions help companies better understand their Power, Air, HVAC, and other systems to reduce waste and optimize operations.

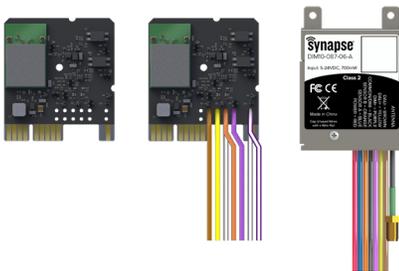


# KEY HARDWARE COMPONENTS



## CBSSW-450-002 Site Controller

The SS450 and the CBS (Central Base Station) site controllers are key components of every SimplySnap lighting control solution from Synapse. Site Controllers coordinate communication out to all the nodes that are part of the mesh network. They manage system configuration details, gather power and status information, apply zone behaviors, store scheduled events, generate notifications, and update controllers when new features or enhancements are added.



## DIM10-087-06, DIM10-087-06-A, DIM10-087-FW Embedded Light Controllers

Embedded wireless controllers open up exciting integration paths for LED fixtures. Its smaller size and lower cost point makes this DC powered wireless controller versatile enough to be embedded in nearly any medium to high wattage LED fixture.

- ☒ 2 Sensor Inputs: DC motion Sensors and 0-10V Photocells
- ☒ DALI-2 Compatible Bus- Power Monitoring and Dimming via Bus
- ☒ DIM to OFF Compatible with 0-10V Dimming (No Power Monitoring)



## TL7-B2, DIM10-220 Bolt-On and Twist-Lock Controllers

The Bolt-on and Twist-lock controllers make adding wireless controls possible for retrofit applications where embedded controllers will not work with the existing fixtures.

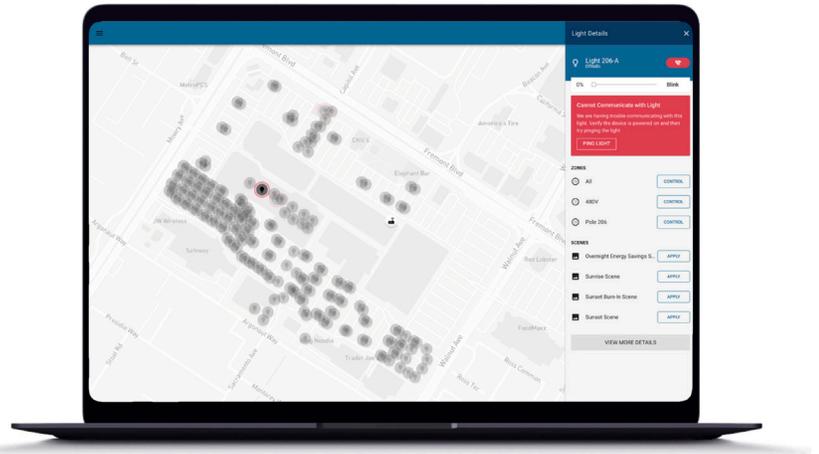
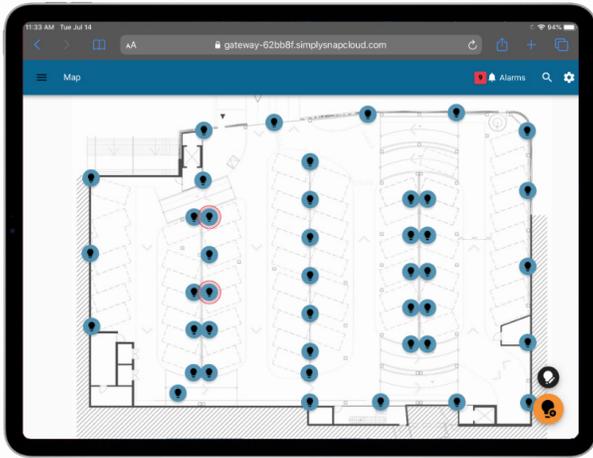
- ☒ Add wireless controls to a variety of lighting fixtures
- ☒ Power Monitoring and Off-the-Shelf Sensor Integration



## BMS-GW-002 BMS Gateway

BMS Gateways integrates SimplySnap into existing BMS systems so customers can control the wireless lighting control system from their existing BMS interface.

- ☒ Supports BACNET and MODBUS protocol
- ☒ BTL Certified



## KEY FEATURES

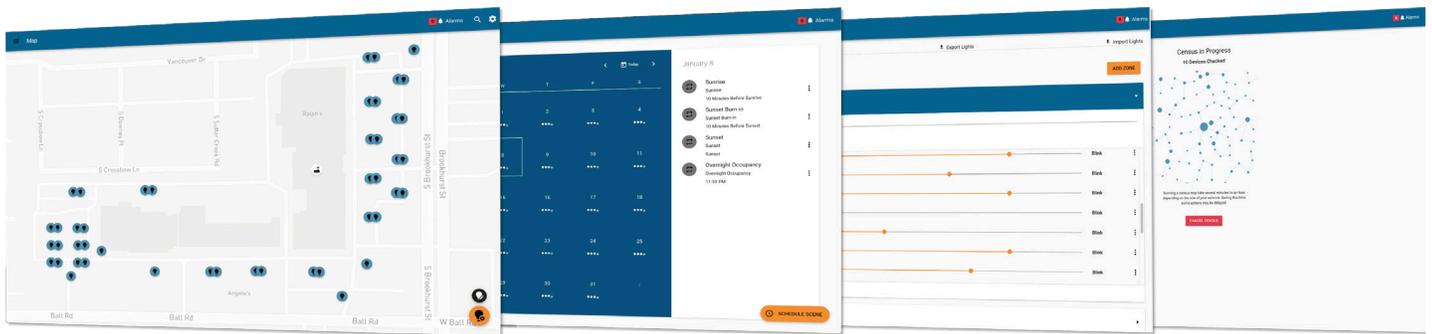
- ❑ Individual or Zone Control- On/Off/Continuous Dimming
- ❑ Sensor Support- Use Occupancy and Photocell sensors to manage behaviors across groups of lights
- ❑ Zones- Create groups of lights based on location, function, or type of fixture
- ❑ Scenes- Create custom systems behaviors for one Zone or multiple Zones
- ❑ Schedules- Automate scenes or specific changes using the built in 5 year calendar
- ❑ Daylight Harvesting- Open loop Daylight Harvesting for large interior spaces with natural light
- ❑ Demand Response- Participate in Utility rebate programs with multiple Demand Response options
- ❑ High-end Trim- Reduce energy use by adjusting the maximum light levels across the system
- ❑ Task Tuning- Granular control to adjust light levels in specific areas for specific task
- ❑ Diagnostic tools- System test performed during commissioning can find wiring and component problems before the electricians leave
- ❑ Alerts and alarms- notifications are sent immediately when issues are detected
- ❑ Energy Monitoring- Compare years of energy data across multiple zones
- ❑ External System Integration- Leverage the advanced wireless lighting controls with existing Building Management Systems (BMS)
- ❑ Secure Connections- Our mesh network uses industry standard AES-128 encryption

# DEPLOYMENT OPTIONS

## Single Site

The SimplySnap Lighting application is useful for a single site and can be used with or without an active internet connection. The site controller includes a built in browser interface for direct access using a local wired or wireless network connection.

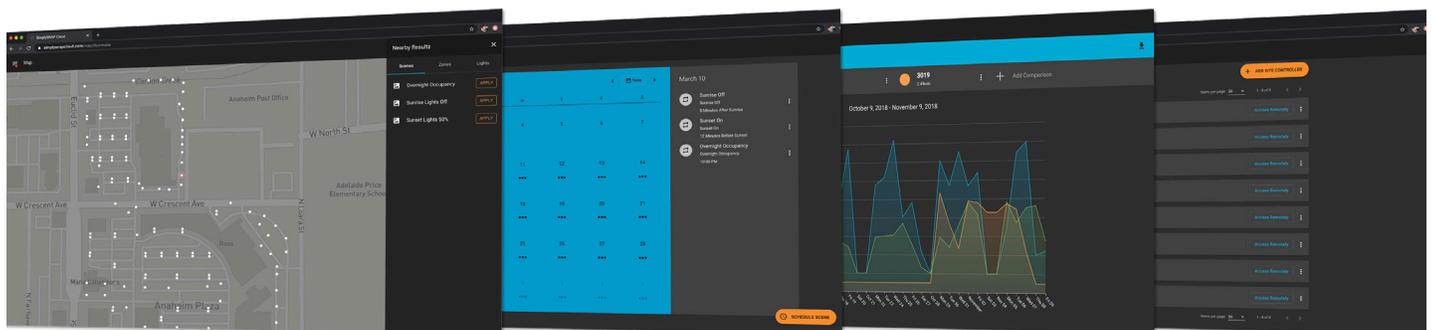
- + Access SimplySnap through local wired or wireless network connection
- + Functions with or without active internet connection
- + Built-in browser based interface included with the Site Controller
- + Configure system behaviors, Control groups or individual lights, set schedules and system settings



## Larger Single Sites Or Multiple Sites

The SimplySnap cloud-based option enables lighting control from anywhere across multiple facilities. The SimplySnap cloud interface can control sites with up to 10,000 lights across multiple site controllers and also integrates with our other SimplySnap cloud applications.

- + Centralized browser interface
- + Manage thousands of lights, sensors, and other IoT devices
- + Aggregate multiple site controllers into one management interface
- + Add additional features with cloud apps



# AVAILABLE PROFESSIONAL SERVICES

## Commissioning

- Remote and On-site commissioning service options are available to get your Synapse wireless lighting control system installed and configured for your site(s).
- Project Managers collaborate with your customers to complete critical documentation checklists, coordinate timelines, and communicate throughout the installation process.



## Training

- Partner Certification Training includes deep dive hands on learning labs that equip partners to commission and configure full systems for their customers. Learn best practices for system troubleshooting and wireless networking based on years of real-world lighting installations.
- End user Technical Training fast tracks new and experienced users to completely understand all the latest features and unlock the full value of their wireless lighting control system.
- Sales Enablement Training includes interactive training sessions to help sales teams fully understand the main features and benefits of the SimplySnap system. The comprehensive curriculum outlines key applications, and explains the system capabilities. This training is designed to speed up the learning process and to help sales teams become successful selling Synapse Wireless.



## Support

- Technical support is included for the duration of the hardware warranty. Systems not installed or commissioned by Synapse or one of our Certified Synapse Partners may be subject to additional services charges.





## WHY SYNAPSE?

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- + Synapse is a tech company making lighting controls— we are wireless controls experts.
- + We have over 2 million of our devices in the field— our technology is proven at scale.
- + We have a flexible solution for indoor/outdoor/small/ large systems with software options to allow easy future expansion and additional capabilities.
- + Our wireless infrastructure is doing more today than just managing lights.

To learn more, call or  
visit: [synapsewireless.com](https://synapsewireless.com)  
(877) 982-7888