Advanced Lighting Controls

Enlighted drives down lighting installation and building energy costs, improves occupant comfort, and brings the Internet of Things to buildings.
Enlighted Advanced Sensors

**Smart.** Enlighted transforms light fixtures into wireless IoT-enabled building intelligence solutions. Measuring temperature, light, energy consumption, and motion, along with Bluetooth capabilities, Enlighted sensors continuously capture robust real-time data in the building.

**Responsive.** Our sensors control lighting based on customized profiles, then capture and respond to data indicating changes in occupancy and ambient light levels. They maintain programmed behavior even if outages affect network health.

**Simple.** Enlighted sensors are compact, and easy to install. Our sensors aren’t just beautiful, they’re practical — delivering better occupant experiences, with lower installation and energy costs.

**Scalable.** Enlighted’s technology was designed from the ground up to be fully scalable, and has been proven in installations from small office buildings to multi-million-square-foot factories, and beyond.

**Future-Proof.** Our system is software upgradeable, enabling future intelligent applications to be created, and allowing it to adapt to changes in specifications and building codes.
The Enlighted IoT platform includes the most advanced wireless lighting control system in the world. Features like individual task and color temperature tuning let users enjoy ideal lighting conditions, while continuous occupancy monitoring and daylight harvesting dramatically reduce energy costs.

Capabilities

Daylight Harvesting. Enlighted smart sensors adjust ambient light levels to save energy by taking advantage of available daylight. Sensors may be grouped together, ensuring a uniform light level for a harmonious visual experience.

Task Tuning. Settings can be programmed to individual areas, based on each area's intended usage, to create appropriate lighting for any task and schedule.

Tunable White. Enlighted allows color temperature and intensity to be adjusted, increasing occupant comfort and well-being through perceptions of color temperature. Warm-hued white light promotes a feeling of calm, while cool white hues increase alertness.
The World’s Most Advanced Sensor. Enlighted sensors are installed in — and powered by — each lighting fixture in a building. Each sensor possesses temperature, light, motion-sensing, and bluetooth capabilities. Additional sensors are installed under desks for desk-level occupancy sensing.

Dense Sensor Grid. Enlighted deploys a smart sensor into each light fixture in a building, creating a dense and regular grid of coverage, gathering data anywhere people go in the building.

Robust and Scalable Wireless Network. The Enlighted IoT platform’s robust wireless network has proven to scale to even some of the largest buildings in the world.

Asset Tags and Badges. The Enlighted IoT platform uses physical asset tags to locate equipment, and visitor or staff badges to locate people in real-time. These tags communicate to the sensors using Bluetooth LE.

Cloud-Based Data and Apps. The Space app creates rich visualization and analytics about building usage and motion patterns. The Where app provides indoor real-time location services for asset tracking and process optimization, and more.

The Enlighted IoT Platform System Architecture
Enlighted Energy Manager

**Intuitive Management.** The Enlighted Energy Manager’s web-based graphical interface provides a one-stop console where operators can configure and control light fixture grouping and behaviors.

**Big Picture, Total Control.** Building managers can easily create and adjust groupings of individual lights, and track energy and usage patterns — in a room, across a floor, a building, a campus, or even portfolio-wide.

**Insightful Data.** Each fixture shares power metering data with the Energy Manager, allowing the system to display total energy savings, and a breakdown of energy saving by technique—from daylight harvesting, to task tuning, to vacancy detection.

**Sustainable Savings.** In a recent study, Enlighted demonstrated total lighting energy savings of 88% across a range of space types, sizes, and geographies, in over 328 U.S. Installations. 50% of the energy savings came from switching to LED lighting, and an additional 38% came from intelligent lighting control. Occupancy data can integrate with building management systems to adjust HVAC settings, providing additional energy savings of 35% or more.

**Energy Manager Reporting**

![Energy Manager Reporting Chart](image-url)
Compliance Made Simple

**Instant Compliance.** Quickly and easily installed into light fixtures, Enlighted sensors provide out-of-the-box compliance with energy use regulations. The sensors’ capacity for vacancy detection, daylight harvesting, demand response, and energy savings reporting, makes it easy to meet and exceed guidelines.

**Responsive.** The Enlighted IoT platform includes demand response capabilities to automatically adjust energy use during times of peak demand, making buildings policy-compliant, eligible for rebates, and protected from penalties.

**Adaptive.** Enlighted software is easily upgradeable to address changes in building codes, such as the California Energy Commission’s three-year updates to its Title 24 Building Energy Efficiency Standards. See our Title 24 Guidance at www.enlightedinc.com for more information.

**Meets Key Title 24 Requirements**

- **Section 130.1(b)** – Multi-Level Controls that support continuous dimming and shut off when spaces are unoccupied

- **Section 130.1(d)** – Automatic Daylighting Controls that adjust lighting according to ambient light levels

- **Section 130.1(e)** – Demand Response Controls to automatically reduce lighting energy use by at least 15 percent

- **Section 130.5(a)** – Service Metering to report on total electrical use

*CA TITLE 24 and ASHRAE 90.1-2016 COMPLIANT*
Bringing Buildings into the Internet of Things

A building’s construction requirements and occupant needs change over time. Enlighted offers sensors with three tiers of capabilities to provide an optimal solution for immediate construction or retrofit needs, with the ability for building owners and occupants to upgrade to additional capabilities as needs evolve - with no physical change to the light fixtures or sensor needed.

**Enlighted One.** Enlighted One’s easy-to-install, wireless room-based lighting control solution saves time and reduces installation costs. It can be upgraded to Connected or IoT offerings at any time.

**Enlighted Connected.** Enlighted Connected adds Energy Manager, with advanced networked capabilities for customizable lighting profiles and scenes, plus the ability to measure and report energy usage and savings, and connect to BMS systems through BACnet. Enlighted Connected is easily upgradeable to Enlighted IoT.

**Enlighted IoT.** Experience the full power of the Internet of Things with the world’s most advanced IoT platform. Enlighted IoT unlocks capabilities to support Bluetooth-based asset location services, IoT-powered space planning, and APIs to connect to third-party ecosystem solutions such as Comfy and Teem.

<table>
<thead>
<tr>
<th>Capabilities1</th>
<th>Enlighted One</th>
<th>Enlighted Connected</th>
<th>Enlighted IoT</th>
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1Capabilities may require purchase of additional products and services.

Three Configuration Options for Lighting Control and Building IoT
About Enlighted

Our flexible, extensible infrastructure enhances occupant experiences, improves productivity, and increases operating efficiencies. It pays for itself through lighting energy savings.

Enlighted is installed in more than 210 million square feet of real estate, at the world’s top companies, including AT&T, Google, NHS, Intel, JP Morgan Chase, Uber, and more.

Enlighted also has strong partnerships with all major driver and fixture OEMs.

Founded in Silicon Valley in 2008, Enlighted was acquired in 2018 by Siemens Smart Infrastructure.

Enlighted wirless lighting control and IoT solutions can be purchased through an Enlighted sales representative: www.enlightedinc.com/contact-us

Recent Awards

“Sapphire Award: Illumineer of the Year and Best SSL Smart Lighting Project”
—SSL Smart Lighting Project Awards

“North American New Product Innovation”
—Frost & Sullivan

“Product Innovation Award”
—Architectural Products Product Innovation Awards

“IoT Global Award”
—Smart IoT Awards

“North American Company of the Year”
—Cleantech Group’s Global Cleantech 100

“Top Project of the Year Award”
—Environmental Leader Product & Project Awards

“Winner of Supplier Sustainability Award”
—AT&T

“America’s Top 100”
—Red Herring

“Cool Vendor”
—Gartner’s Smart City Applications and Solutions

“Business Environment Award Winner”
—Acterra

If you’d like to partner with Enlighted, visit www.enlightedinc.com/partner