enlighted™

A Siemens Company

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 award-winning 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.

Ideal Indoor Lighting

Productive. Task-specific lighting and lighting scenes, paired with color temperature tuning, creates ideal workspaces.

Intelligent. Lighting intensity is automatically adjusted, guaranteeing occupant comfort.

Energy Efficient. Daylight harvesting and vacancy detection contributes additional energy savings to already-efficient LED lighting.

Lighting Control

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.

How the Enlighted IoT Platform Works

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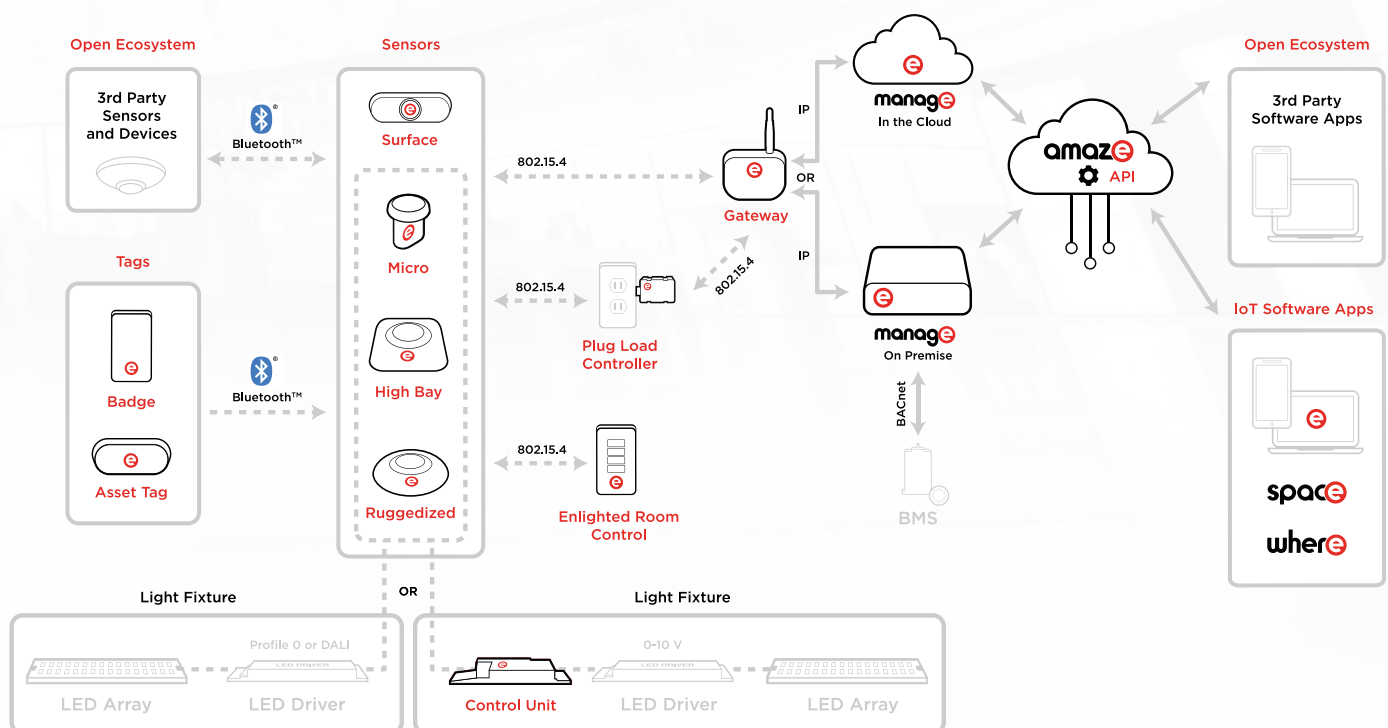
Dense Sensor Grid. Enlighted deploys a smart sensor into each light fixture in a building, creating a dense and regular grid of coverage, gathering data anywhere people go in the building.

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
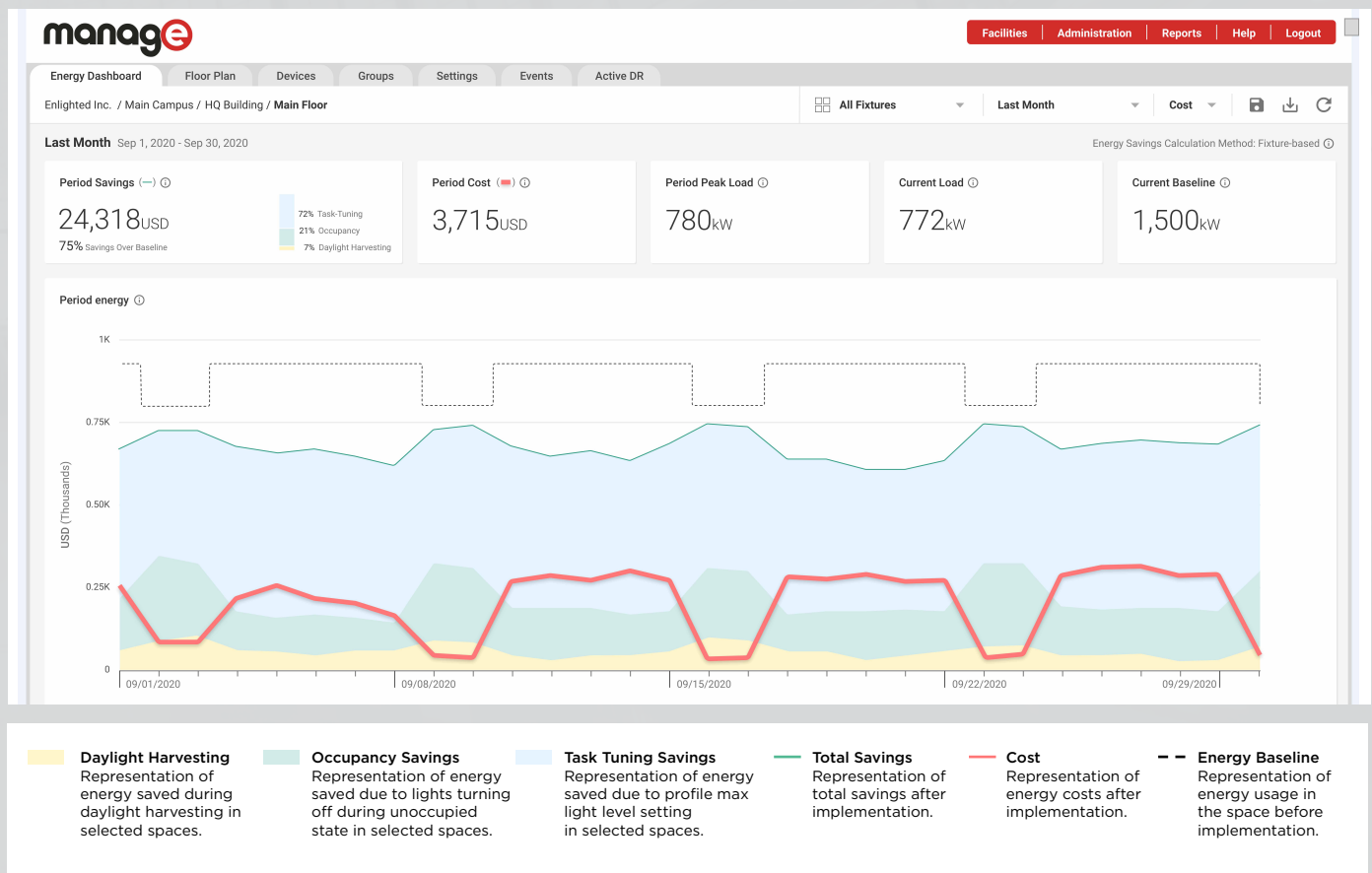
Enlighted Manage

Intuitive Management. The Enlighted Manage 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 Manage, 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.

Manage Reporting

manage

Facilities | Administration | Reports | Help | Logout

Energy Dashboard | Floor Plan | Devices | Groups | Settings | Events | Active DR

Enlighted Inc. / Main Campus / HQ Building / **Main Floor**

All Fixtures   Last Month   Cost

Last Month Sep 1, 2020 - Sep 30, 2020

Energy Savings Calculation Method: Fixture-based ⓘ

Period Savings (—) ⓘ
24,318USD
75% Savings Over Baseline

72% Task-Tuning
21% Occupancy
7% Daylight Harvesting

Period Cost (▬) ⓘ
3,715USD

Period Peak Load ⓘ
780kW

Current Load ⓘ
772kW

Current Baseline ⓘ
1,500kW

Period energy ⓘ

USD (Thousands)

1K
0.75K
0.50K
0.25K
0

09/01/2020   09/08/2020   09/15/2020   09/22/2020   09/29/2020

Daylight Harvesting
Representation of energy saved during daylight harvesting in selected spaces.

Occupancy Savings
Representation of energy saved due to lights turning off during unoccupied state in selected spaces.

Task Tuning Savings
Representation of energy saved due to profile max light level setting in selected spaces.

Total Savings
Representation of total savings after implementation.

Cost
Representation of energy costs after implementation.

Energy Baseline
Representation of energy usage in the space before implementation.

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

Out-of-the-box compliant

100% digital

100% adaptive

100% 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 Manage, 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™.

CAPABILITIES[1]	ENLIGHTED ONE	ENLIGHTED CONNECTED	ENLIGHTED IOT
Motion & Switch Groups	✓	✓	✓
Daylight Harvesting	✓	✓	✓
Schedule Lighting		✓	✓
Energy Reporting & Optimization		✓	✓
Overrides & Automated Demand Response		✓	✓
Environment Data & Lighting Controls API		✓	✓
Building Management System Integration		✓	✓
Where & Space Applications			✓
Location & Occupancy APIs & Beaconing			✓
Future App & API Ready			✓

[1]Capabilities may require purchase of additional products and services.

Three Configuration Options for Lighting Control and Building IoT

About Enlighted

Enlighted's Building IoT Platform is installed in over 410 million square feet of buildings worldwide. It is wireless lighting control that pays for itself through the building energy savings it generates - and so much more. Smart sensors capture information about what is happening in the building in ways never before possible, creating a data platform that drive analytics and intelligent software applications. Applications from Enlighted and our partners improve operating efficiencies and occupant experiences, enhance productivity, and optimize resource and asset use.

Enlighted's strong partnerships with over 70 lighting fixture OEMs, driver manufacturers and growing software application ecosystems, enable customers to have an open choice of lighting and solution vendors. Founded in Silicon Valley in 2009, Enlighted was acquired in 2018 by Siemens Smart Infrastructure.

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Get In Touch

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

Industry Awards

"Company of the Year"
—Frost & Sullivan

"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

"Cool Vendor"
—Gartner's Smart City Applications and Solutions

"BIG Innovation Award"
—Business Intelligence Group

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

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