LUNERA®

Lunera Smart Lighting Platform

An IoT Infrastructure Hidden in Plain Sight

We already live in an age where digital technologies surround us. But the systems and devices we depend on often do not work seamlessly with each other and they lack a common infrastructure that knits everything together. The Lunera® Smart Lighting Platform is that infrastructure—and it was hidden in plain sight all along.

It's simplicity -- a connected smart lamp, a cloud and an open architecture enabling countless applications -- is the solution for existing buildings to introduce a building management system and networked lighting controls and to deploy a connected IoT infrastructure without the burden and limitations of discrete stand alone solutions.

The Cloud

Universal IoT Gateway

In the cloud, the Lunera Cloud IoT Software takes an open architecture, micro-services approach by design, eliminating proprietary platforms that restrict how the infrastructure can be used. On premise, the

Smart Lamps or lighting devices with Smart Modules, are Wi-Fi agnostic, using internal Wi-Fi to eliminate the need for an external gateway or controller. The on-board BLE radio is receptive to any Bluetooth IoT device.

Indoor Location Infrastructure

The Smart Lamps and Smart Modules integrate a Bluetooth (BLE) radio to form a BLE local network and connect to any Bluetooth device in range, and a Wi-Fi radio for high-bandwidth backhaul to the cloud.

As a result, each smart device can track up to 50 IoT devices with superb performance, making it an ideal infrastructure for asset and people tracking, proximity messaging, facility use mapping, and indoor wayfinding.

Energy Management Solution

The Smart Lighting Platform is an energy management solution. The Smart Lamps are energy-efficient LEDs with integrated networked lighting controls (NLC), the first NLC solution integrated into a lamp, and can deliver occupancy-based HVAC control and plug-load management.

The cloud-connected, open architecture platform opens a world of building management possibilities through a light bulb. Keep track of visitors, augment security, map the facility usage - all through the Smart Lighting Platform.

The Platform

Lunera Smart Lighting Platform is the networked, open platform that makes 20th century buildings smart. One simple installation retrofits lighting with LED lamps, delivers Networked Lighting Controls and energy management; deploys a future-proofed, robust infrastructure for IoT connectivity and communications used for indoor location, asset tracking and proximity messaging; and is a Wi-Fi-connected universal IoT gateway.

It supports a limitless ecosystem of applications that can run in and in-between the cloud, at the edge and on devices themselves. Lunera Smart Lighting Platform enables context-aware and fully-automated user experiences that will transform how we all think about every smart device that exists today. Soon, devices we can't even imagine, will enhance what we experience indoors.

The Hardware

Lunera Smart Lamps, and Smart Modules for OEMs, embeds sophisticated IoT technology directly into the lamp, retrofit kit, or luminaire. The platform, which is ArubaEdge certified, is Wi-Fi agnostic, connecting directly to the cloud through built-in Wi-Fi. Once installed it also automatically creates a local, self-organizing, Bluetooth network connecting to any type of Bluetooth IoT device. This means that everywhere you have a lighting fixture, you have a powerful sensing and networking platform with the ability to enable things like context-based indoor GPS, asset tracking, proximity messaging, space utilization, environmental controls and more.

The Software

The Lunera Smart Lighting Platform features a cloud-connected Lunera Cloud IoT Software that includes a command and control center to setup and manage a facility online, installation and commissioning apps, and reporting apps. The software is an open, microservice architecture, making the potential use of the Smart Lighting Platform unlimited.

The Cloud

The platform Lunera Cloud IoT Software Command and Control Center, Lunera Applications Marketplace and data storage are in the cloud, accessible anywhere, anytime. The integrated microprocessor, memory, Bluetooth network and Wi-Fi enables connected devices to benefit from less latency, more speed, improved security and privacy and reduced costs.

The Marketplace

The Lunera Marketplace is the cloud-based home to Lunera and third party software that uses the Smart Lighting Platform. The open standards-based microservice architecture enables rapid development, deployment and integration of third-party ecosystem applications.

The Ecosystem

There is already an active and growing ecosystem of software and hardware partners using Lunera Cloud IoT Software APIs, as well as SDKs that seamlessly integrate devices with the platform.

Smart from Lunera
Unleashing Smart Building Potential

The Lunera Smart Module and Smart Lighting Platform firmware makes any LED lamp, retrofit kit or luminaire ready to connect to the Lunera Cloud IoT Software, and the unlimited possibilities it enables.

We've proven it in our Smart T8 lamp, and its available, license free, to lighting manufacturers that want a simple, affordable way to offer smart products that connect to the Lunera Cloud IoT Software and all the added value it brings.

This one module, integrating Wi-Fi, Bluetooth, microprocessor, memory and an ambient light sensor, is the solution to a simple, affordable universal IoT gateway.

Integrate the Smart Lighting Platform in your products.

To reach a Lunera OEM Relations specialist:

call Lunera at 877-354-3870

or send an email inquiry to
oemsmartlighting@lunera.com