Put brighter ideas to work.

When you can help reduce maintenance costs and energy consumption with Verizon Intelligent Lighting, you're ready.

Street lights can use a lot of power and maintaining them can be time consuming. That's why many municipalities and businesses are upgrading their aging street-lighting infrastructures with energy-efficient LEDs. By adding smart controls, you can create greater operational flexibility and more opportunities for energy and maintenance savings.

Gain more control, new capabilities and valuable insights.

With Verizon Intelligent Lighting, you can remotely operate lights in near real time. Or program them, either individually or by groups, to turn on and off or dim according to preferred schedules. In addition to these smart controls, the solution transmits data back to a central management system (CMS) where you can monitor lighting, receive alerts and view reports. You'll have access to actionable data to manage your energy consumption and reduce maintenance costs through improved asset management—all while enhancing public safety.

Experience the combined power of three smart-lighting components.

The Intelligent Lighting solution includes three interacting components—lighting control nodes, a communication network and CMS—bundled together as a managed offering.

Intelligent Lighting control nodes

Typically installed in a National Electrical Manufacturers Association (NEMA) socket on a street light, our lighting control nodes contain hardware and embedded software that function together to control and remotely monitor luminaires. We offer two different types of control nodes—Light Sense node and City Hub.

Get a full-featured lighting control node with Light Sense node.

Light Sense node provides the most essential lighting control capabilities at a competitive price point. Enjoy a gateway-free installation with embedded LTE CAT-M1 cellular connectivity and auto commissioning. Installation is easy with plug-and-twist mounting to the luminaire via the existing NEMA socket. The device enables full-on, off and dim scheduling capabilities, and includes a 10-year warranty.

Be future-ready with City Hub.

For a forward-thinking start to your intelligent street-lighting project, you can begin with our City Hub. It's a smart, LTE/Wi-Fi–enabled device that simplifies power and connectivity for intelligent street lights and other Internet of Things (IoT) devices.

With City Hub, you can easily perform advanced lighting control, as well as add monitoring devices, such as cameras, audio nodes and environmental sensors. City Hub is equipped with Power over Ethernet (PoE), an audio port, auxiliary line power and a communications port that can support a variety of future smart solutions for parking, traffic, environmental sensing and public safety.

Intelligent Lighting communication network

Each Intelligent Lighting control node comes embedded with Verizon 4G LTE connectivity. The Verizon cellular network enables secure communications between control nodes and the CMS without requiring any gateways or additional networking equipment. You also get the added benefits of:

Easy and efficient setup

With our network already in place, setting up new lighting controls is simplified, as the nodes easily connect to existing cellular infrastructure.

verizon✓

No hidden system costs

Connectivity is included in the service fee for Intelligent Lighting, so there are no separate charges or hidden fees for data transport and backhaul.

Long-term cost effectiveness

Lighting control nodes simply connect to the existing cellular network, which means you don't need to build out or incur costs for an additional network. Adding more lighting controls or IoT devices to the cellular network is easy, so you don't have to worry about expanding or updating a dedicated network. And eliminating the monitoring, management and maintenance required by a dedicated network for a connected lighting system is one of the many reasons cellular has a lower cost of ownership than mesh networks.[1]

Easier pairing of multiple smart-city applications

Choosing a lighting solution rooted in a cellular and IoT network allows you to connect and expand with other smart-city solutions in the future.

A clear growth plan for cellular advancements

Verizon maintains a strong leadership position in IoT technology and solutions with a history of providing customers with many options to meet their needs, including nationwide deployment of 4G LTE, LTE CAT-1 and LTE CAT-M1 networks, as well as the Verizon Narrowband (NB) IoT network. In addition, our 5G Ultra Wideband network will help usher in the rise of a smarter and more connected world due to higher speeds and lower latency. We're preparing for tomorrow's even faster and more powerful networks.

Intelligent Lighting CMS

Our Smart Communities solution features the NetSense® Lighting Application, a cloud-based portal that allows you to monitor your smart-lighting infrastructure. NetSense is a fully managed, highly available and scalable application that you can access through a standard web browser. The application helps you reduce energy and maintenance costs, and quicker lighting repairs help to create a safer environment for residents.

There's also little to no impact on your IT resources. We deliver software feature updates and firmware upgrades seamlessly through the cloud, providing you enhanced functionality and strong security. And it's easy to integrate with third-party applications and ingest data into back-office systems because the CMS has a robust application programming interface (API).

Key features of the NetSense Lighting Application include:

Asset management

Store and view, either in list form or map view, key asset information for poles, luminaires and lighting control devices.

Scheduling and dimming

Create and apply lighting schedules, including on/off functions and dimming levels with up to six different set points.

Energy reports

Access energy consumption data for luminaires measured in kilowatt hours (kWh) that can be filtered by fixture, group and time frame.

Alerts and notifications

Be notified via SMS or email if luminaires and nodes are disconnected or operating outside of expected parameters.

Status and diagnostic reports

View the current status of lighting control devices and review and manage alerts.

Improve operational efficiency, asset management and maintenance.

The NetSense Lighting Application provides monitoring, diagnostics and alerting, as well as utility-grade energy consumption reporting. You won't have to drive around searching for malfunctioning lights or auditing inventory, which saves time and money. Verizon Intelligent Lighting is easy to install and commission. Plus, there's no gateway to troubleshoot, freeing up your IT staff to focus on other city priorities.

Reduce energy consumption with remote on/off and dimming control.

It's easy to remotely regulate light levels to match the varying needs of your communities. Simply program lights using smart features like scheduling and photo-control, and apply individually and by group. You can quickly make lighting schedule adjustments for individual lights or groups, including on/off timing and dimming levels. And schedules can be based on photocell, sunset and sunrise, time of day, and special events.

verizon✓

Address street safety and engagement.

Get alerts via email or SMS from the NetSense Lighting Application so you know when power or connectivity issues occur or when lights are operating outside of expected parameters. This helps you have safer streets by helping to ensure that issues are resolved quickly and lights are on when and where they're needed. Also, reduce citizen calls by proactively fixing light-related issues and, in some cases, doing so remotely without a truck roll.

Managed services help deliver added cost controls, efficiency and agility.

Intelligent Lighting is provided as managed services with flexible term lengths and transparent, predictable payment options. Our services include:

Device connectivity with no separate data charges or hidden fees

Cloud hosting of the NetSense Lighting Application so there are no servers or dedicated IT infrastructure to maintain

Software enhancements and over-the-air firmware updates applied automatically

Ongoing technical and customer support

Access to an open API for integration with no separate fees or volume-based charges

Our skilled professional services teams make system startup painless with project management, training for install crews and staff who use the CMS, and service activation. If desired, we can also install control nodes on top of street lights for you.

Why Verizon

We offer the nation's largest and most reliable 4G LTE network, as well as a tightly integrated ecosystem of IoT and wireless network technologies. And we're hard at work on the nation's 5G network.

We help public- and private-sector planners increase economic development, drive citizen engagement and promote sustainability with our suite of Smart Communities solutions. Plus, we can deploy at any level. From end-to-end, citywide solutions to individual business projects, we'll match our Intelligent Lighting solution to your needs—and your budget.

Learn more:

To find out more about how Verizon Intelligent Lighting can help you conserve energy and reduce maintenance costs, contact your Verizon Wireless business specialist.

enterprise.verizon.com/intelligentlighting

verizon√