

**PHILIPS**

*CityTouch*

Connect application



# Connected lighting for a dynamic city

Manage street lighting simply and flexibly  
with the CityTouch connect application

# The growth of the city

Cities everywhere are growing; in fact by 2030, it's estimated that 60% of people will live in cities\*. The question is, how can you manage costs and logistics while creating an environment that's as safe as it is energy efficient, and as attractive as it is environmentally friendly? Thankfully, modern lighting systems offer new answers to many of these questions. With evolving ways to manage and maintain street lighting, cities are finding smarter ways to be all the different things they need to be at once.

\*Source: Population Reference Bureau (PRB) 2014

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for so many people

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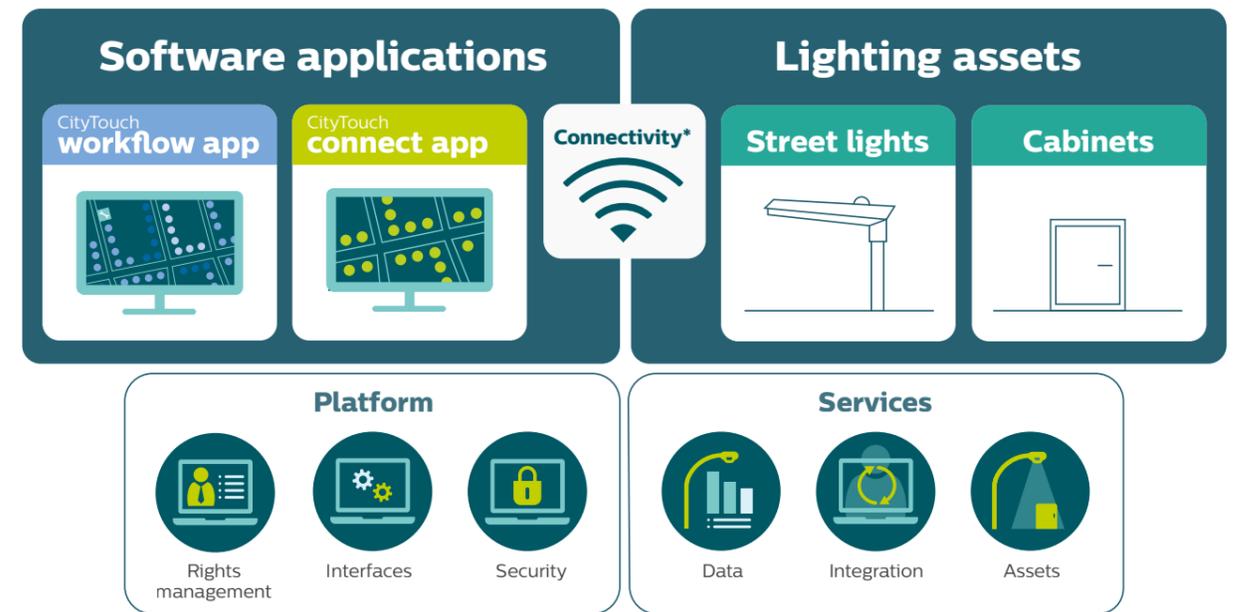
# What is CityTouch?

Quickly clear the

Softly illuminate the park

# CityTouch portfolio

CityTouch is an end-to-end street lighting management system that integrates connected devices, intuitive software-as-a-service applications, and specialized services to transform your city's lighting operations.



### Software applications

These are the core of our solutions, offering you close to real time control and detailed data about your street lighting.

### Lighting assets

Our extensive range of CityTouch products help you connect your street lighting assets in a way that best fits your needs.

### Platform

Intuitive, personalized and secure, your tailored CityTouch platform gives you complete visibility and control, with customizable access for third parties.

### Services

From data input to asset management, we can help you manage the entire lifecycle of your city's lighting portfolio.

This brochure focuses on the CityTouch connect application, for flexible control of your city's lighting.

# So many benefits for so many people

Implementing CityTouch helps meet the needs of different bodies concerned with the city, from the stakeholders to the citizens.

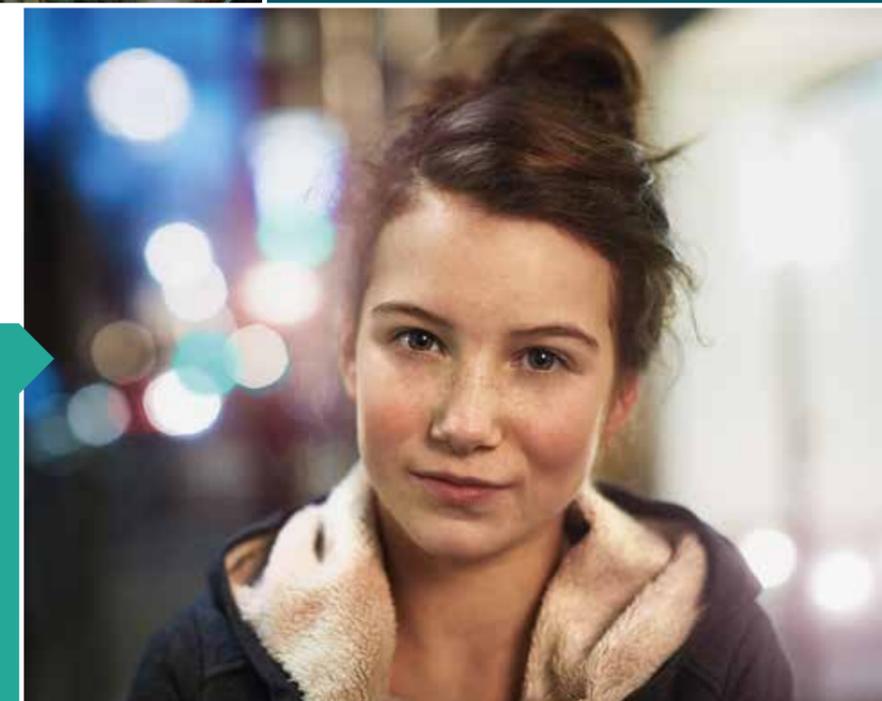


#### For city administrators

CityTouch can save your city a lot of money while helping you improve its safety and attractiveness. The transparency the system offers means you can see the energy you're using, and where and when you're using it. CityTouch allows you to monitor and control your entire lighting infrastructure, so you can deliver a better service to citizens, at lower cost.

#### For citizens

The level of control CityTouch offers means that cities can make noticeable improvements to everyone's quality of life. Smart, adaptive lighting can make your city feel more exciting, safer and more dynamic. The beauty of historic areas can be brought to life and the edginess of dark urban streets brightened and made accessible.



#### For lighting operators

CityTouch is a system that's easy to operate, with user-friendly interfaces and intuitive controls. Feedback is automatic and immediate so that you can stay on top of faults, in close-to-real time. The software is automatically updated, so it can keep pace with the latest advances.



# Lighting

that changes with your city

Flexible and future-proof

The CityTouch connect application lets you manage all connected street lights securely and remotely through a real-time, map-based view using any standard web browser.



### Manage

The intuitive user interface allows you to control and program lighting levels for every individual street light, a street, or an entire district. Depending on the specific need, you can boost light levels to improve safety and visibility, or dim them to save energy and prevent light pollution.



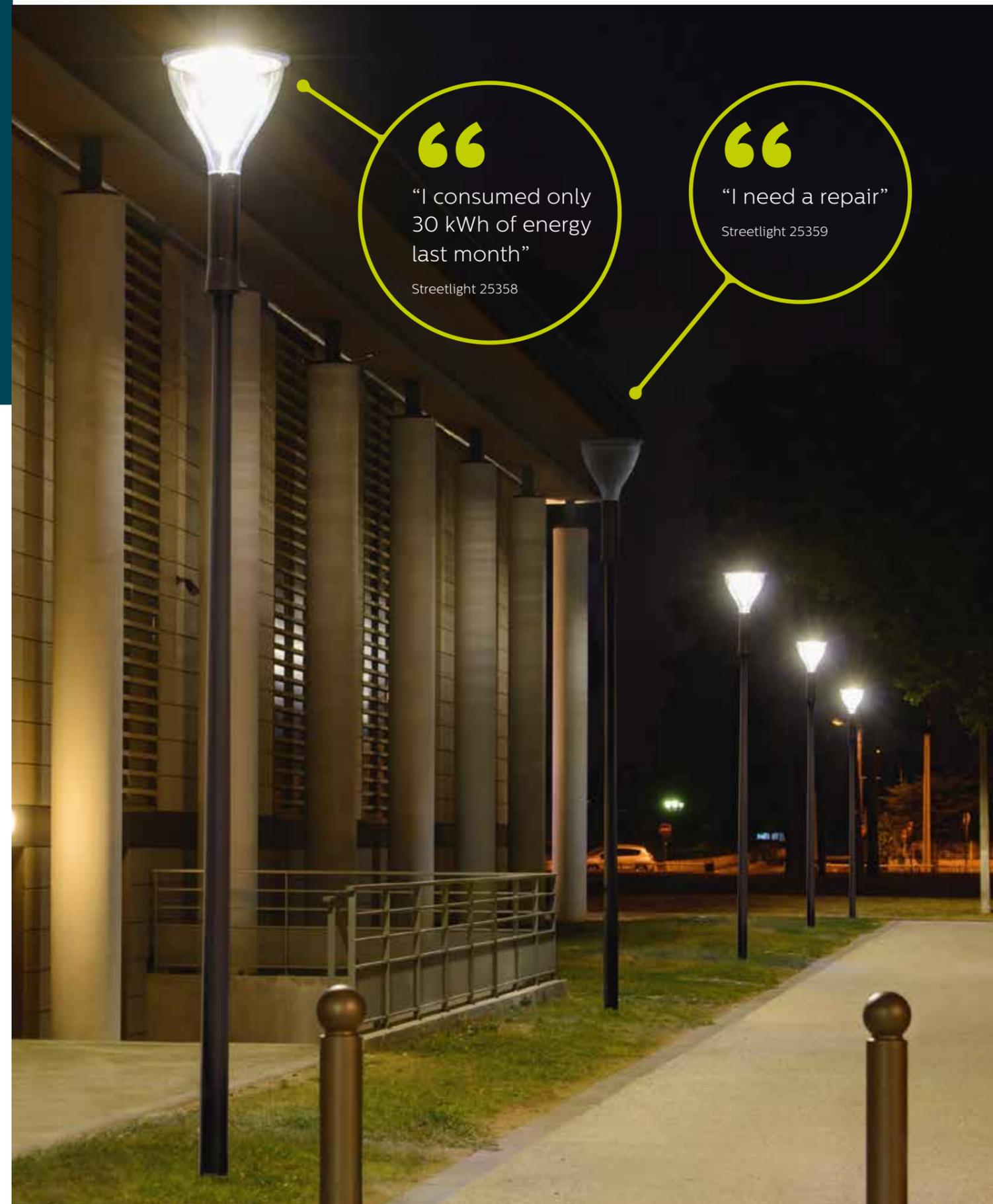
### Monitor

You'll be automatically informed if an outage occurs, enabling you to immediately initiate the work process. The system offers configurable fault types with different levels of severity, so you will know exactly why the luminaire has failed, with comprehensive information about the history of that luminaire too.



### Measure

Accurate metering of each individual luminaire means you know how much energy you are using and where. This helps you to evaluate running initiatives and plan for the future. Accurate energy metering also means that you can verify your energy bills.



“I consumed only 30 kWh of energy last month”  
Streetlight 25358

“I need a repair”  
Streetlight 25359



Lights are bright enough for clear navigation with soft ambience

Lights off after midnight in private waterfront area

# Lights

## that stay in touch



Manage your city's lighting flexibly and easily

Cities are constantly changing and evolving to meet the shifting needs of their citizens, businesses and visitors. In addition, cities need to comply with new laws and regulations. The CityTouch connect application gives your city's lighting the flexibility it needs, while meeting energy saving requirements, now and for the future.



### Dimming profiles

You can specify an exact dimming profile for a single luminaire or a group, with an intuitive, user-friendly interface. For example, you can ensure main roads have more light during rush hours than residential areas, and you can dim lighting in the business district when the working day is over.



### Responsiveness

You can adjust individual light levels across different areas of your city as and when it is needed, helping citizens feel comfortable and safe. For example, if an incident happens in the city, then light can be brightened in that area to facilitate a more effective response and improve camera images.



### Calendars

CityTouch connect app has a set of predefined dimming calendars, and an integrated astroclock means the system factors in sunrise and sunset times. You can set up your own dimming calendars too, to accommodate for events and patterns relevant to your city.

# Simple



and straightforward

Monitor the status of your city's lighting with the CityTouch intuitive user interface

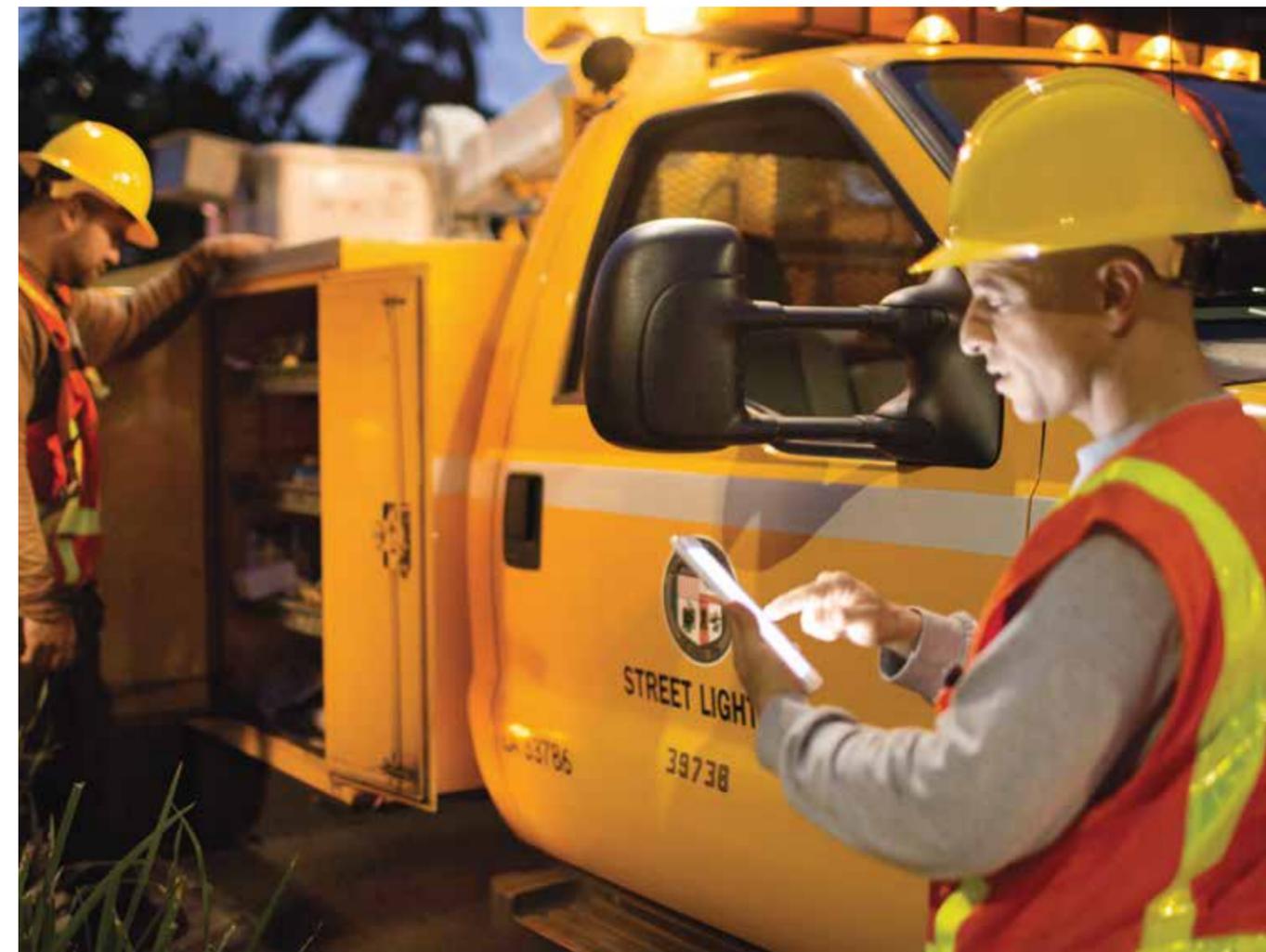
Monitoring your city's lighting with the CityTouch connect application is simple. You will receive automatic notifications if a light needs repair, so there is no more need for night scouting. And the application's intuitive user interface means you will spend time improving your city's operations, not learning how the software works.



Control your city's lighting simply with the intuitive user interface.



Manage repairs faster and improve the maintenance process with detailed knowledge of luminaire faults.



#### Status information

The CityTouch connect app gives you exact status information of every individual luminaire, in close to real time. Faults and outages are automatically recognized and a message is sent immediately from the luminaire to the system. Even "day burners", which aren't usually identified during night scouting can be eliminated.



#### Efficiency

A city never sleeps and you can request an email to be sent every morning from your CityTouch system detailing all new faults and issues, so this work can be scheduled efficiently.



#### Workflow management

To improve your city's lighting management further, you can opt to add the CityTouch workflow application. Seamlessly integrated into the same interface, it provides detailed insights about your lighting infrastructure. This will help you manage repairs better and improve the efficiency of all lighting-related workflows.

# Only pay for what you use

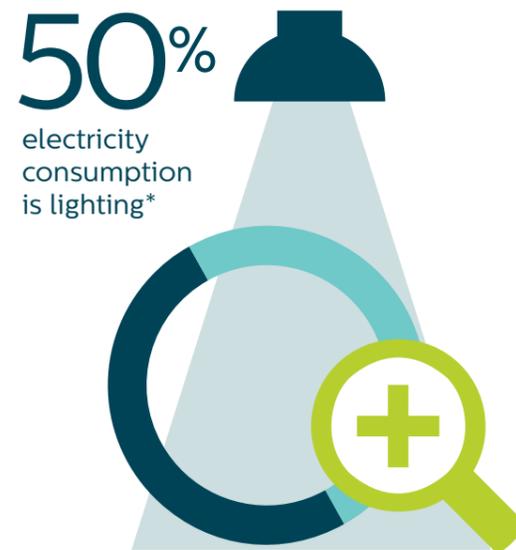


Measure your city's energy usage, accurately

Why pay for more energy than you really consume? With CityTouch you get accurate energy metering. All too often, energy invoicing is based on estimates, not real figures. When you consider that lighting accounts for about 50% of the electricity consumption in cities\*, accurate metering can make a big difference, highlighting where significant savings can be made. Regulations in many countries now also request the exact recording of your city's energy usage so CityTouch helps you comply.



Measure and compare different time periods and different locations to make sure your city's lighting is as economical as possible.



#### Accuracy

CityTouch connect app gives you accurate energy metering down to the level of each luminaire so you can verify your energy bills. You can measure the energy consumption for single streets, specific districts, predefined groups of luminaires or the whole city.



#### Reporting

CityTouch allows you to track your city's lighting energy consumption over different locations and also periods of time so you can see exactly where and when energy is being consumed. This knowledge can also quantify the immediate economic benefits to your city of investing in LED technology and improved operational practices.



#### Future readiness

CityTouch software is delivered over the Internet and is always up to date so you'll never be caught out with technology phase-outs or switch-overs. And as an experienced and trusted partner, we'll gladly offer you help and advice for your CityTouch system should you need it.

# Connect your city, your way

Add connected lighting to future-proof your city

CityTouch offers a wide range of connectivity options. Just pick one (or combine several) options that suit your needs, and manage all your luminaires through a single dashboard.



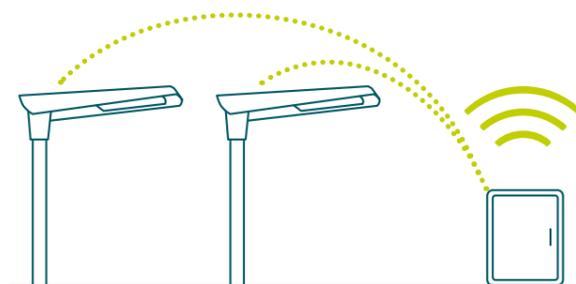
#### CityTouch Ready luminaires

This is the simplest option. Just install CityTouch Ready luminaires and the luminaire will connect to the internet and start sending data.



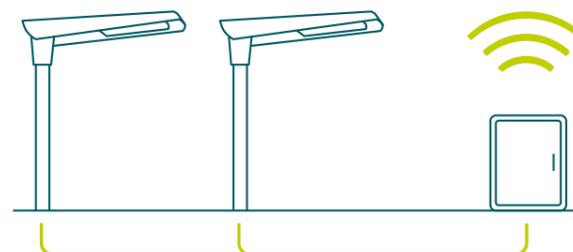
#### CityTouch connector kit

Existing luminaires can be easily connected to the CityTouch system via the connector kit, a compact unit which is mounted to the luminaire pole. It works with most luminaires, independent of vendor or luminaire type.



#### Local network connectivity

Your installed street lights connect via wireless radio frequency to a segment controller, which connects to the CityTouch software via the Internet.



#### Cabinet-based group connectivity

A group of your installed street lights connect via a power line to a segment controller, which connects to the CityTouch software via the internet.

# CityTouch Ready luminaires



## READY

All CityTouch Ready luminaires are true plug-and-play solutions which can be handled exactly like traditional luminaires during installation.

Once installed, the luminaires connect automatically to the CityTouch system, upload their location and technical data, and start transmitting operational information.

Integration is seamless. No additional hardware or special commissioning is needed and the user-friendly interface of the CityTouch software means you can control your city's lighting simply and intuitively from a desktop computer via the CityTouch connect application.

Philips offers a wide range of luminaire shapes and styles to suit your city. And CityTouch Ready luminaire technology is also open to other street light manufacturers.

#### Examples of CityTouch Ready luminaires\*



Luma



Metronomis LED



Iridium gen3 LED



GreenVision Xceed

### Key advantages:



#### Automatic commissioning

Luminaires automatically connect to CityTouch system once installed



#### Automatic location

Luminaires are auto-located on the map with all asset data in place



#### Automatic data upload

All luminaire data automatically updates to your system

# Big change in Buenos Aires

Buenos Aires is a megacity. Lighting it efficiently required some mega changes.

As the largest city in Argentina, the problem for Buenos Aires' ambitious authorities was that its constantly growing population was resulting in a corresponding growth in energy consumption, costs, CO<sub>2</sub> emissions and light pollution. However, in line with the city's enlightened ambition to be a leader in terms of creating a sustainable, environment-friendly, safe and liveable place, Philips was challenged to design a new lighting solution that would be more sustainable, more innovative, and more welcoming. In other words, a lighting system that would meet the future demands of city life and make it a better place to live.

To realize the full potential of sustainable public lighting, Buenos Aires mayor Mauricio Macri entered into a public-private partnership with Philips Lighting. As a result, Philips installed an intelligent, future-proof public lighting solution, combining energy efficient LED luminaires with sophisticated lighting management from CityTouch.



## In focus: Integration with other systems

CityTouch has partnered with SAP to help cities plan better and manage costs. Already in Buenos Aires the combined SAP and Philips solution links close-to-real time information from Philips connected luminaires with data from other sensors in a single integrated city dashboard to help cities gather valuable information.

As a result, Buenos Aires has been able to increase operational efficiency, realize energy savings of over 50% and greatly improve safety and quality of life for its 13 million residents. Philips believe that other cities around the world will be able to achieve similar benefits thanks to this innovative and exciting new partnership.



“

We have heard many anecdotes about changes in people's habits. They enjoy the parks and squares of the city much more. **People are able to enjoy the city more because they feel safer now.**”

Gladys Gatti  
Outdoor Segment Leader, Philips LatAm

### Giving the controllers more control

CityTouch has provided Buenos Aires with complete control of its lighting system. Lighting operators can now activate, control and monitor each individual light point, aligning the city's lighting output with day-to-day requirements. Energy consumption is therefore optimized, along with maintenance management, via constant monitoring and diagnosis across the network. This level of flexibility and control also facilitates better management of energy consumption peaks, while always ensuring safe conditions for both vehicles and pedestrians.

### Easy to phase in

The installation was done in three phases. In 2013, 11,000 LED luminaires were installed on main avenues and streets. Then an additional 40,000 were installed in both 2014 and 2015 on secondary streets, making a total of 91,000 new light points. As a result, by 2015 Philips had upgraded 75% of the lighting in Buenos Aires.

But what about the city's ambition to be more environmentally friendly? The good news is that CityTouch is providing the city with significant electricity cost savings and massively reduced CO<sub>2</sub> emissions. Meanwhile, Buenos Aires has been able to save 50% in operational costs, which is a big change.

# Flexible, open and secure

Philips CityTouch is an end-to-end, future-proof solution, able to support your city's changing requirements over time.

## Flexible

CityTouch is extremely flexible, allowing you to configure the system to your specifications.

CityTouch can monitor and manage an unlimited number of lighting assets, so you can add street lights and other assets over time without taking the system offline.

Because each luminaire communicates with CityTouch independently, there are no centralized points of failure: if one street light goes out, the others around it are unaffected. You can control single light points or all light points together, or you can group and control light points however you wish.

CityTouch updates are activated wirelessly and automatically via the mobile network. This ensures that you always have the latest features and functions, with no physical intervention required.

## Open

CityTouch can work with any luminaire from any manufacturer, whether Philips or non-Philips, whether LED or non-LED.

CityTouch uses standard web services to connect to city IT infrastructures via the mobile network, so no proprietary networks are required.

With published APIs, you can integrate CityTouch into other city management systems already in use. This allows you to bring your CityTouch system together with other connected systems to create a new digital ecology that can deliver new levels of responsiveness and resiliency.

Philips also offers integration services and technical support, so your city is always ready for the future.

## Secure

Your data deserves to be protected, so CityTouch always applies the latest state-of-the-art security measures along with end-to-end encryption and two-factor authentication.

Philips uses the same level of security as online banking and brokerage houses, ensuring that your sensitive data is transmitted privately and stored safely.

## Philips CityTouch: an open system



CityTouch works with almost any type of street light from any manufacturer



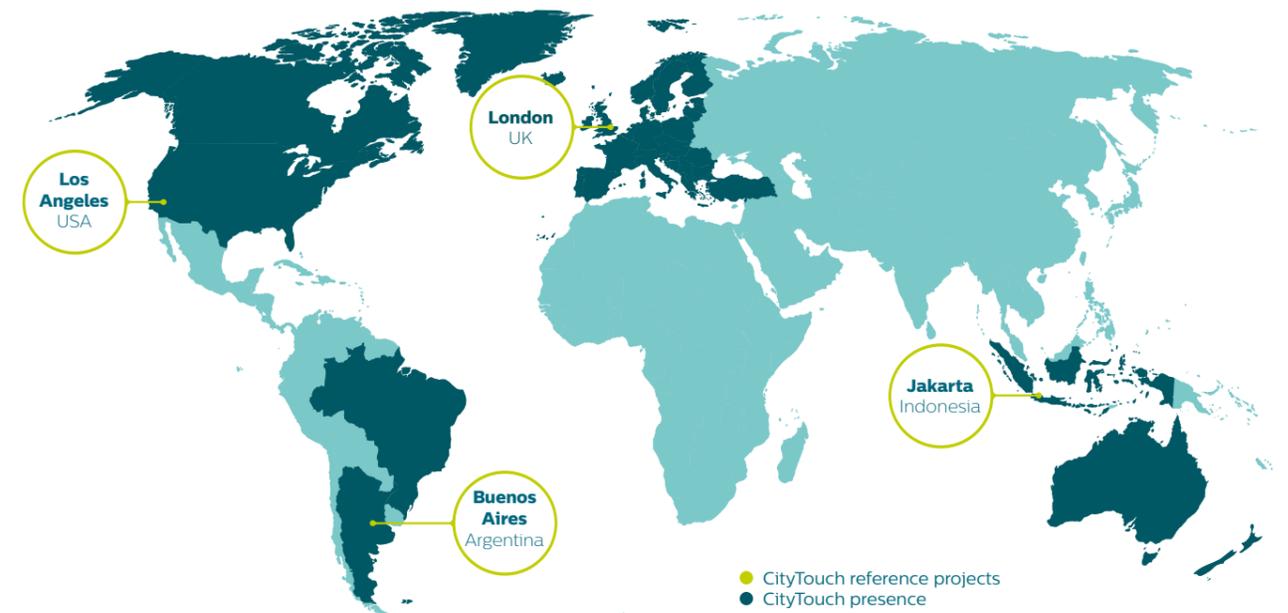
CityTouch communicates via the mobile network: no proprietary networks



With APIs, customers can integrate CityTouch into their existing systems

# Helping to meet objectives globally

Philips is the world leader in lighting, with over 120 years of experience.



### The choice of world cities

CityTouch is already in use in cities worldwide, including Los Angeles, London and Buenos Aires. In fact you'll find us in over 30 countries and on five continents.

### Scalable and adaptable

CityTouch is a flexible, easily scalable solution. Our local teams take the time to understand each city's specific needs, ambitions and challenges. After all, what's right for one city might not be right for another.

