



Stay in touch
with your street lights.

CityTouch LightWave
Remote Lighting Management.

PHILIPS

CityTouch

LightWave



- 04 Flexibility
- 06 Knowledge
- 08 Accuracy
- 10 Connectivity
- 11 CityTouch End-to-End Solution

Welcome to the new dynamics of public lighting.

Today, street lights are passive, static devices which are centrally positioned throughout cities. It's strange that such a vital city organ as the city outdoor lighting grid is so passive while everything around it is in flux such as people, seasons, traffic, city events or the general feeling of public safety. Wouldn't it be better if you

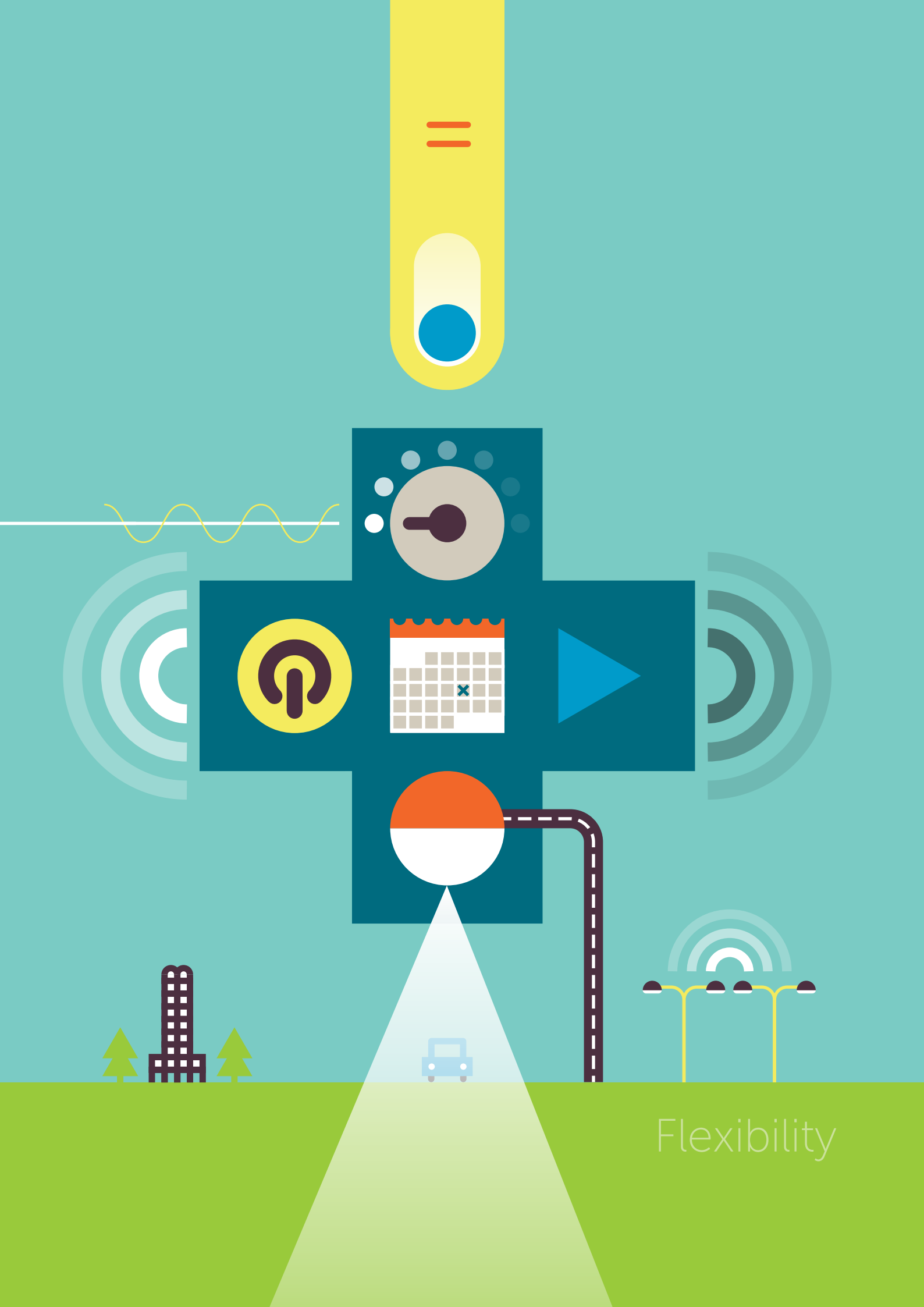
could adjust your cities' outdoor lighting grid to all these ever-changing influences – thereby saving time, costs and energy?

That's why we invented CityTouch LightWave – an intelligent, interactive remote management solution for your street lighting. It brings your city lighting to life and provides you with flexibility, knowledge and accuracy.

Flexibility means that you will be easily able to act or react according to expected and unexpected situations by dimming or brightening all areas within your city to ensure safety and well-being. Knowledge implies that you are always informed about the current status of every single luminaire – for better maintenance and faster repairs. Accuracy stands for precise energy metering which gives you a perfect overview on real non-estimated energy consumption.

All in all, CityTouch LightWave transforms your static lighting system into a vital organ of your city. By connecting and conducting your assets like in a modern orchestra, you will turn them into a smart lighting grid that you are able to control with just a few clicks.

CityTouch brings state-of-the-art software to the lighting world. It already has an impressive track record of excellent international references thanks to the combined expertise and global field experience of Philips. For you personally, this means you benefit from the security and dependability offered by a global partner with proven international project expertise combined with local know-how.



Flexibility

City lighting is static and inflexible. Unless you bring it to life.

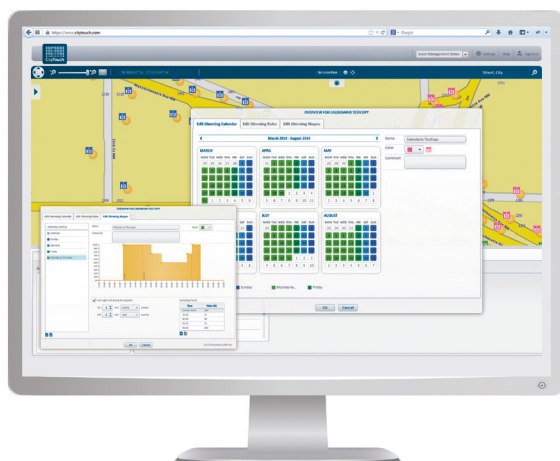
Due to long life cycles in outdoor lighting cities may need to adjust their lighting system to changing needs, new demands, new laws and regulations.

CityTouch LightWave gives you the power to add dynamics, intelligence and flexibility to your lighting. With this remote management solution you get perfect **control of each individual light point**. You'll be easily able to pro-actively and reactively dim or brighten corners, streets or whole neighborhoods according to the prevailing city needs.

With CityTouch LightWave you can create an atmosphere of safety and well-being with an optimized energy consumption – simply by individually adjusting the light levels to the different demands, for example on special days with public events. They can also be **adjusted to the varying needs** of different areas in a city. Main roads may need more light during rush hours than residential areas while a business district needs less light during the evening hours than the city center.

Calendars are an essential part within CityTouch LightWave, offering you efficiency and planning security. You can **assign a special dimming profile** to every single luminaire. Within a 24 h-programming the lighting levels can be set up according to the specific timely needs, such as the season, day of the week, time of the day etc.

As a CityTouch customer you get a set of **predefined, tested and proven dimming calendars** including the special characteristics of each single day of the week. For example: On Friday evenings during commuter traffic the streets require higher light levels while on Sunday mornings less light is needed. Thanks to the integrated Astroclock functionality, also sunrise and sundown will automatically be considered – everywhere in the world.



You get the flexibility to adapt every single luminaire to changing situations or demands of the city at any time. To adjust calendars to the individual needs you are free to change the "switching points" of every dimming profile simply via drag & drop.



Knowledge

Your luminaires can easily improve your maintenance. **Just listen to what they say.**

What would you say if you could perfectly monitor the condition of your entire public lighting infrastructure – avoiding any costly and time consuming night scouting or complaints from citizens? With CityTouch LightWave you constantly get the **exact status information of every luminaire** within your lighting infrastructure. You always have easy access to information on the technical parameters, including optionally added attachments like on-site-pictures or repair instructions.

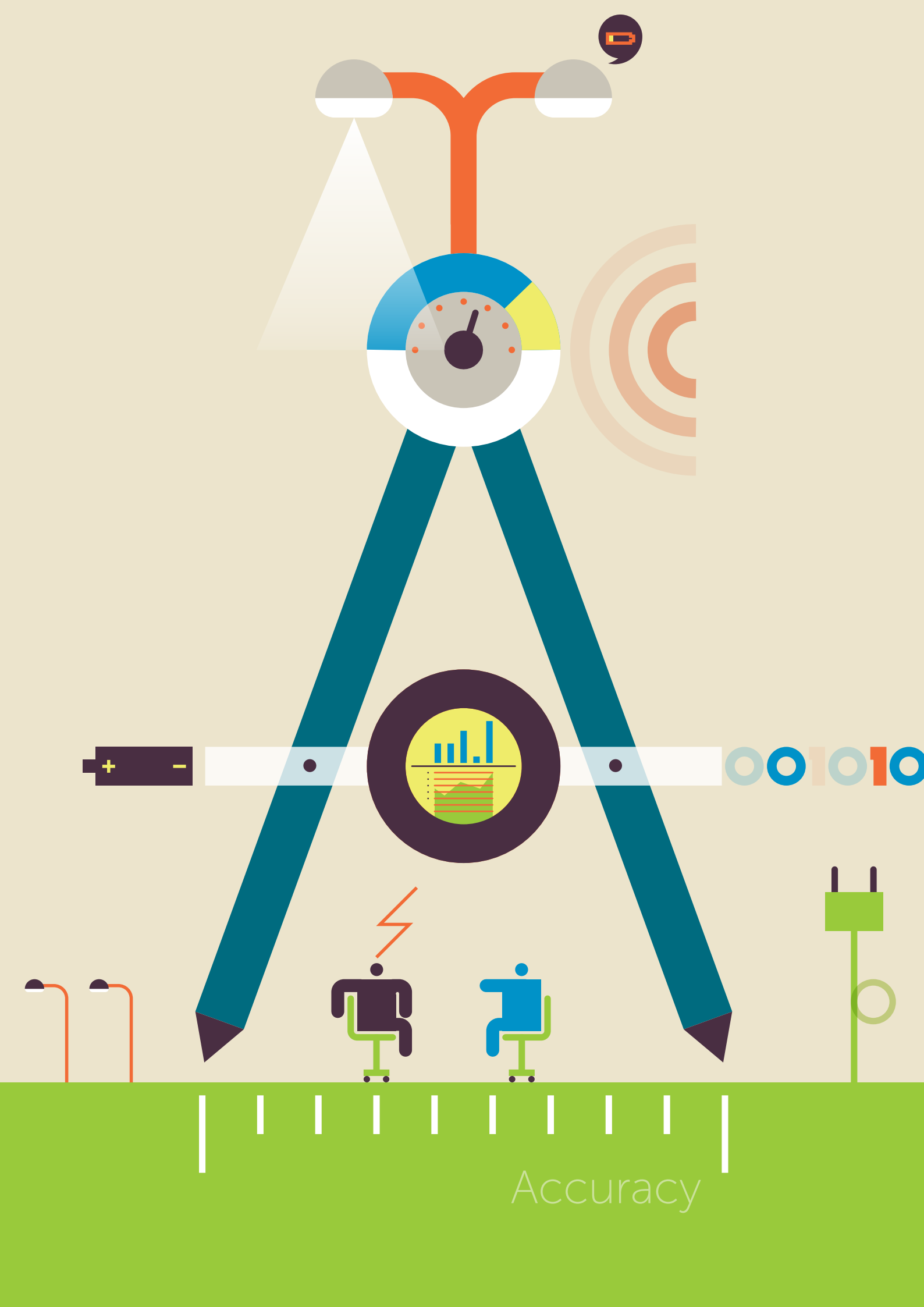
Most importantly: With CityTouch LightWave **faults and outages will automatically be recognized** by the luminaire itself and a **fault message will be sent immediately** to the system. Through this, even “day burners,” which are hardly identified during night scouting, can be eliminated. To make it even more comfortable, CityTouch can send out an email to you every morning listing all new incidents of the last night. That way you know exactly within a minute which parts of your city lighting need any service work. Very easy. Very efficient.

The advantages are clear: A quicker and better knowledge of faults and the current status of the lighting infrastructure enables you to manage faster repairs and **improve the maintenance service**. Eventually, this leads to considerable cost savings, a higher quality of your public lighting and a greater citizens' satisfaction. So, when your lighting system talks to you, you better listen.

Note: To improve your fault management we recommend CityTouch Light-Point, our lighting asset management solution for an efficient handling of maintenance workflows.



A quicker and better knowledge of faults and the current status of the lighting infrastructure enables you to manage faster repairs and improve the maintenance service.



Accuracy

Accurate energy metering has a clear goal. Don't pay for more than you really consume.

There's a simple reason why accurate energy measurement is so important: your municipal budget. While lighting accounts for about 50% of the electricity consumption in cities*, the invoicing practice is often based on pure estimation – and not on real figures. As a consequence, cities must pay for broken luminaires although they don't consume any electricity. So, when you are looking for **potential cost savings**, you will easily find it here. And there's another profound reason for adding precision to your energy consumption: New regulations in more and more countries consider the exact recording as mandatory.

With CityTouch LightWave you get the opportunity of an **accurate energy metering** down to the level of **each individual light point**. You are able to measure the energy consumption for different areas, such as single streets, specific districts, the whole city or individually predefined groups of luminaires. It also allows you to track the consumption over a longer period or to compare different periods.

Thanks to the accurate measurement of real usage, you can **verify your energy bills**. It gets easy to check the effect of any saving initiatives (e.g. infrastructure modernization with LED technology) and to quantify the achieved benefits of the investment for your lighting system.

CityTouch LightWave makes your lighting infrastructure of today **ready for the smart grid** of tomorrow – and supports you in saving an immense amount of money.

*Source: Lighting the Cities, European Commission, June 2013



With accurate energy metering down to the level of each single luminaire it's possible to verify your energy bills and identify new potential savings.

Stop wasting time and money with complex networks. **Start implementing smart lighting.**

How much time do you expect for the complete implementation of a remote management system? Sometimes it takes years to install a new city-wide radio frequency network to build a connection between all street lights and the backend. This can cause very long, complicated, time and money consuming project roll-outs, often resulting in a complex system.

With our new solution you benefit from a higher reliability and security due to less pieces of hardware and thereby less points of failures. **All intelligence is integrated into the luminaire** without any additional hardware needed. The communication runs directly via the public mobile network. As a positive side effect, **no own maintenance effort** is required. In addition, the whole connectivity management is part of our service which keeps any hassle away.

The CityTouch-ready luminaires play a central role as enabler for **quick, flexible and cost-efficient roll-outs**. Instead of spending months and years with the planning and installation of a local network, here you get a simple and powerful **plug-and-play solution**. Each luminaire masters fully automated commissioning, installation, locating and data import.

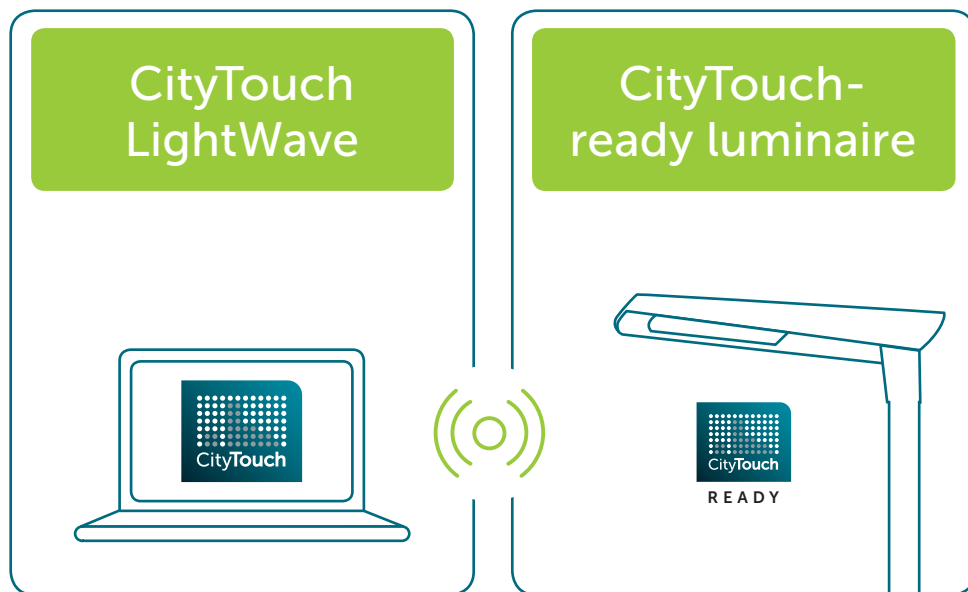
Once connected to the power supply a light point **automatically appears on the CityTouch map at the right location** – with all technical parameters imported into the system. Only a few clicks later you can already start to remotely manage the luminaire.

Should you prefer an alternative way to connect your street lights, CityTouch also supports connectivity via local Radio Frequency or Powerline networks.

Limited solutions always come to an end. That's why we prefer thinking end-to-end.

Philips is the only company who can offer you a full smart lighting solution – from the CityTouch lighting management software to the first real intelligent luminaires. The entire system is designed for a **seamless and reliable end-to-end experience** based on a highly secure end-to-end architecture.

CityTouch End-to-End Solution



CityTouch LightWave

- Remote Control
- Remote Monitoring
- Energy Metering

CityTouch-ready luminaire

- Auto-commissioning
- Auto-locating
- Auto-fault-notification



© 2014 Koninklijke Philips N.V.
All rights reserved.

Philips Technologie GmbH CityTouch
Philipsstr. 8
52068 Aachen
Germany
info@citytouch.com
www.citytouch.com