### siteco







Imagine you could simply have it all: Perfect lighting. That already offers convenient, intelligent functionality today. And tomorrow? Even more – much, much more.

Sounds good, doesn't it? And the best part: It's already a reality. Streetlight SL 11 iQ unites lighting technology, efficiency and environmental protection. And with SITECO iQ Smart-Interface, you get convenience, future viability, intelligent control, smart diagnostics and flexible connections on top.

Streetlight SL 11 iQ. Making the future. Secure.



Rely on your proven control system without restrictions today. And step into the networked world tomorrow.

## Entirely flexible. Equipped for everything.

Streetlight SL 11 iQ Smart-Interface - thinking the future. One step ahead.

#### Making the future. Green.

Durable housing. Components you can exchange in a breeze. Recycled and recyclable materials. Insect-friendly light colors (e. g., 2,200 K). Illumination without any light pollution or light spill (ULOR 0). **Environmental protection reflected in every detail.** 

#### Making the future. Better.

Patented reflector technology. Non-yellowing covers. Precise illumination. Dark sky. Maximum LED output. Top efficiency. Outstanding visibility.

It's all a win-win-win for the next 100,000 hours and beyond.

Streetlight SL 11





Exchange ECGs in no time – without reprogramming.



#### **Desk-Remote**

Adjust luminaires in the workshop without opening any luminaires or shipping boxes.



#### **Street-Remote**

Configure luminaires from the sidewalk or from a vehicle "on the fly."



#### **Night-Set**

Automatically adjust nighttime reduction to multiple levels and switch between two profiles. (for example, weekends and weekdays)



#### **Light-Switch**

Boost visibility and safety for road users when the weather changes.



#### **Smart-Wire**

Dim inexpensively using existing control wiring and intelligently switch between dim profiles, light colors and light distributions.

## The future. In a luminaire.

Comprehensive control and diagnostic options?

Or rather interfaces for sensor technology and the like?

Both, of course!







**Smart-Interface** is your ticket to entering the world of sensor technology and wireless control.

Smart-Interface complies with the Zhaga D4i standard, which means the interface is standardized according to Zhaga Book 18 and tested by an independent laboratory. So you can be sure our wireless accessories and sensors are 100% compatible.

When exactly you enter this world is entirely up to you. The SL 11 awaits you – ready to go.





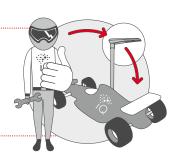
Our **iQ luminaire electronics** link all the parts of the luminaire into a single network – ECG, LED module and optics, transforming individual components into a complete system that you can even configure wirelessly.



#### **Unrivaled feature No. 1**

#### Smart-Interface + SITECO iQ Auto-Match

All luminaire data is stored twice, so you can deal with spare parts as fast as in Formula 1. New components are automatically configured – in two minutes, not two hours.



#### **Unrivaled feature No. 2**

#### Smart-Interface + SITECO iQ Street- / Desk-Remote

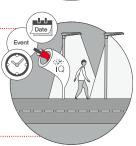
It doesn't get any easier than this: Parameterize luminaires with iQ without unpacking and using a power feed – e. g., conveniently over Bluetooth from the sidewalk.



#### **Unrivaled feature No. 3**

#### **Smart-Interface + SITECO iQ Smart-Wire**

Have you ever tried to use a reduction function without additional components in the luminaire? Well, Smart-Wire makes exactly that possible. With the existing control wiring.



Convenience and function. Already possible today with iQ. All control options. Available at any time with Smart-Interface.

SITECO iQ Smart-Interface, the combination that opens the gateway to a new world of possibilities.

Unrivaled in the history of light.

## Future-proof? You bet!

### Smart light?

Super simple!

## All the options?

SITECO iQ

Smart-Interface.

Types, data sheets, configurations – all at a glance:

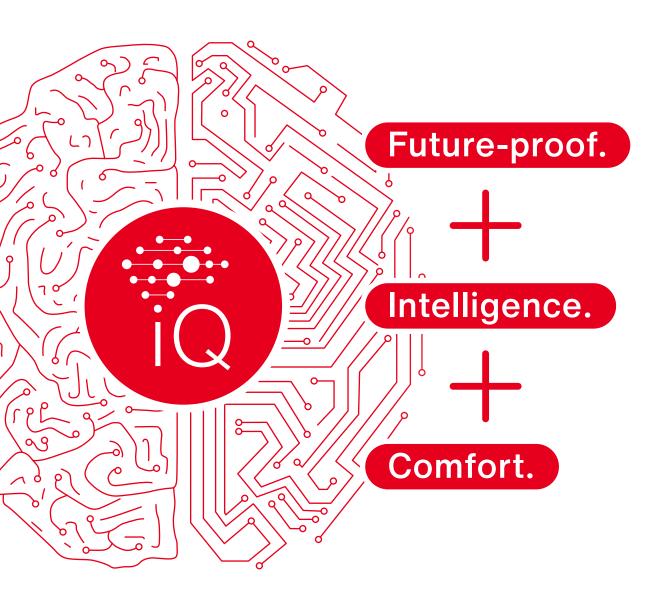
Streetlight SL 11 iQ

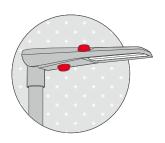


### SITECO iQ

Because we know what challenges you are facing every day.

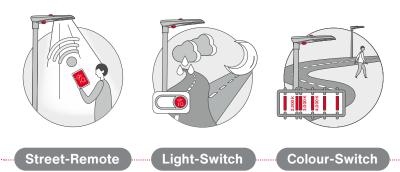




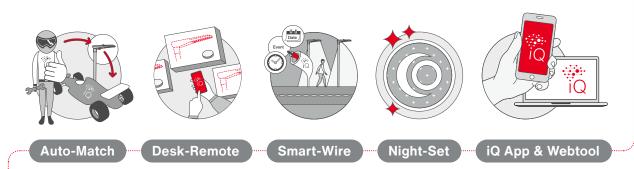


#### **Smart-Interface**

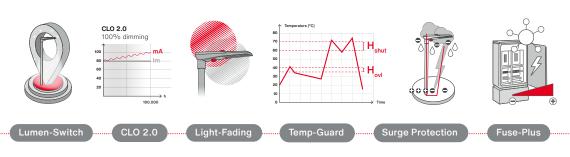
Intelligent light at its peak - for maximum future viability.



Intelligent additional features - for maximum flexibility.



Intelligent features - for maximum convenience in everyday use.



Intelligent foundation - for maximum efficiency.

# Get started straight away. With intelligent light.

Everyone's talking about sustainability and saving energy. But it's not about talking, it's about taking action. Just take the first step. **With SITECO iQ**Smart-Wire, for example.

This function turns control wiring into smart control wiring using your existing infrastructure. All you need to have is a control wire with 230 V in the power-supply network used by your lighting system.

#### SITECO iQ Smart-Wire propels your control wiring into the future.

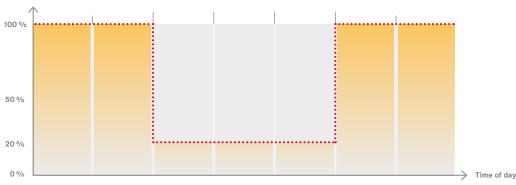
And coupled with efficient LED technology, it becomes an enormous lever for activating energy savings.



#### Control of SITECO luminaires - classic

Smart-Wire with two scenes

Previous reduction function: switch between two dimming levels

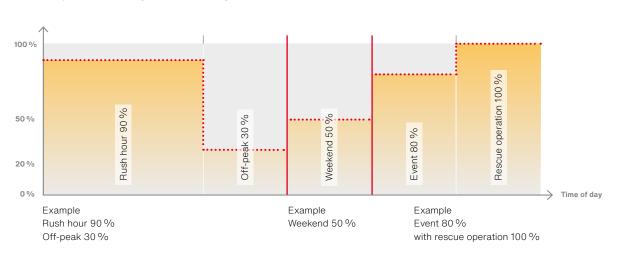


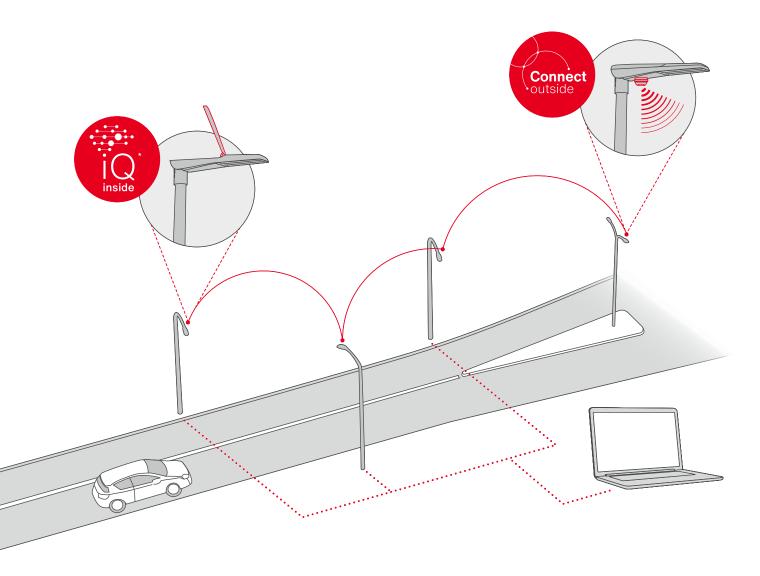
For example, rush hour 100 %, off-peak 20 %

#### Control of SITECO luminaires - with SITECO iQ

Smart-Wire with up to 10 scenes

Switch among up to 10 light scenes including selection of the respective dimming level and fading time



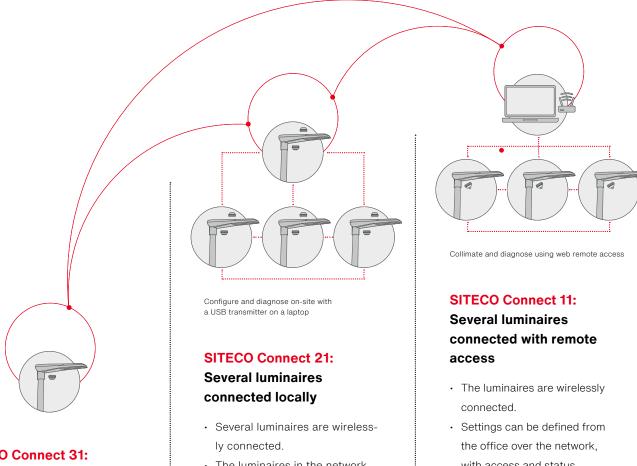


## Intelligent. Completely networked. **Fully flexible.**

SITECO iQ luminaire electronics already offer countless functions to make life easier and energy savings greater. The SL 11 also comes with Smart-Interface, a feature that lets you connect many wireless control systems and sensors through plug and play. If and when you take this step is up to you – a decision you can make completely flexibly.

And, of course you can remain in the SITECO world for sensor technology and networking: We offer our own compatible control system with SITECO Connect.

From a single luminaire to a fully networked system.



#### **SITECO Connect 31:**

#### Single luminaire

· Individual luminaires are switched or dimmed with a local motion sensor.

- · The luminaires in the network communicate and synchronize among themselves.
- · The luminaires are synchronously or successively switched or dimmed.
- with access and status messages sent automatically.
- · Existing inventory and workflow systems like luxData by sixData can be used as a master.

#### **Advantages with modern lighting control**



Increases traffic and personal safety, reduces vandalism.



Contributes to sustainability by protecting environmental resources and wildlife



Improves energy efficiency thanks to needs-based dimming



Optimizes operational management using current diagnostic data and documented systems

## How the future looks. Not brighter, but better.



## Precise light. The benchmark.

#### Premium optics provide maximum control.

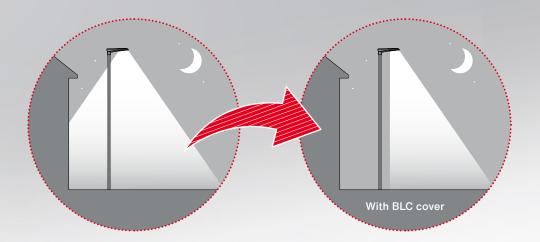
The silver sparkle to the Streetlight SL 11 is actually real silver. The reason? Compared with aluminum, silver offers significantly greater reflectivity.

That lets us use the same energy input to obtain up to 10 % more luminous flux from the luminaire.

#### No light pollution. No light spill on adjacent gardens.

We also control the light better. The ST1.0a light distribution system uniformly targets light to only where it's needed: on roads and paths – without creating glare.

And with our BLC cover, we go one step further: Our BLC cover is **the best rear glare control** on the market today.





**Good to know:** Lens-based luminaires lose about 40 % of their efficiency through glare control. For the SL 11, this figure is just 15 % thanks to faceted reflectors and BLC (back light control). This is how you save energy and cut costs.





SITECO offer

Future-proof and tool-free maintenance

Modules, drivers
and other components
can be replaced easily,
even without tools – the ideal way
to make repairs or add updates
in no time at all. And thanks to the
SL 11's clever modular concept,
you can constantly upgrade to the
latest state-of-the-art solution.

SITECO is light for generations and absolutely future-proof.

SITECO luminaires can be dimmed, activated and controlled as needed. The reduced level of light has a positive effect on the natural behavior of animals.

Targeted lighting control

Environmentally friendly production and

packaging

SITECO follows

environmental protection
guidelines for its production
operations in Germany.
That means: No long transport
routes that stretch halfway
around the globe and packaging
that uses as little plastic
as possible.

No light pollution

Zero percent light in the upper atmosphere: The

Zero percent light in the upper atmosphere: The Streetlight SL 11 achieves this thanks to its construction and lighting technology – for a dark night sky; certified by "Paten der Nacht" ("Godparents of the Night").

SITECO offers

Sustainable light

From the die-cast aluminum housings to the interchangeable LED modules equipped with lighting technology – we've designed everything at SITECO with long-lasting operation and significant CO<sub>2</sub> savings in mind.

#### Making the future. Green.

Is a product sustainable because it uses less energy? No. Its manufacturing and disposal count as well. That's why we manufacture the Streetlight SL 11 in Germany using an energy-saving, modular concept and exceptionally high recycling rates. And at the same time, we're doing all we can with lighting technology, control systems and smart interfaces to also reduce power consumption and light intensity. This is how we define the seal of quality "Made in Germany."

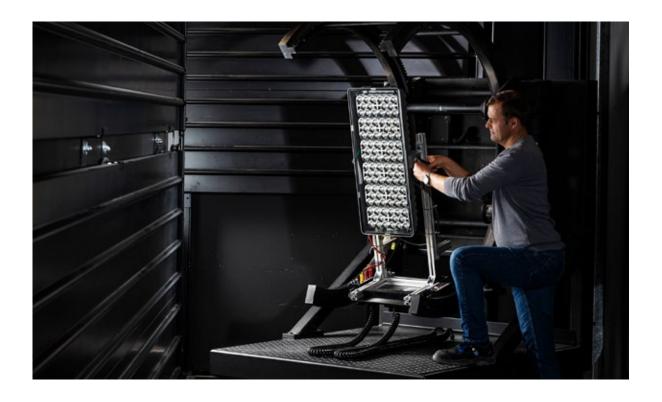




## Made in Germany. We're living it.

For us, "Made in Germany" is more than just a label. Because at SITECO, we take care of everything ourselves: From the very first idea to the finished product.

At our facility in Traunreut, Germany, we operate our own in-house paint shop as well as optical and LED PCB production. We're constantly expanding our on-site production to create exceptional added value in the region, optimum quality and delivery capacity. as well as to quickly and flexibly respond to all your requests and requirements.



#### Trend-setting light.

## Maximum convenience in operational management.

The future means not only intelligent luminaires and control systems, but smart operational management as well. Forget about stacks of paper and manual processes. How about managing everything centrally instead? Manage, control, maintain and service. Using a single interface.

Let's get started today. And work together to define the light and management of the future for your towns and cities.

#### luxData.easy can ...

... be filled as easily as Excel.

... record all data from the date of installation to energy consumption.

... control all objects in towns and cities.

... monitor lighting and record fault reports.

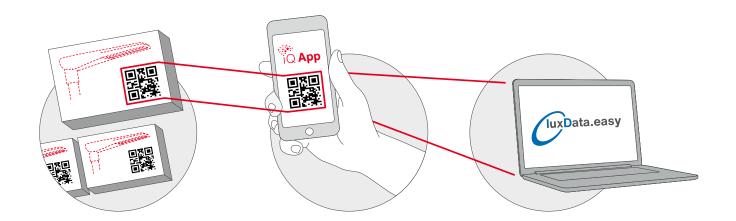
... measure energy consumption.

... provide custom dashboards for maximum transparency.



## SITECO and luxData. Maximum compatibility.

#### SITECO luminaires can be easily scanned and transmitted.



The QR code for inventorying your luminaire is enclosed in the luminaire packaging.

SITECO luminaires can be inventoried using a QR code and transmitted to luxData.easy. The luminaire data can thus be supplemented with important information such as location, time of installation and type of installation.

## Point objects

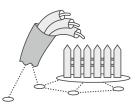
For example: street lighting, traffic lights and illumination of buildings

#### Surface objects



For example: WiFi coverage, parking lots and playgrounds

#### Line objects



For example: cables and wires



#### Streetlight SL 11 models

efficacy of up to 166 lm/W



#### **Technical data**

Luminous flux: from 1,500 to 3,800 lm

Output: up to 26.5 W

Luminous efficacy: up to 156 lm / W

Service life: above L97 after 100,000 h

Mounting heights: 3 to 6 m

#### **Recommended applications**

Collection roads, residential streets, cycle paths, town plazas

#### Possible light distributions









#### **Optical concept**

HD faceted reflectors

#### Light colors

1,800 K | 2,200 K | 2,700 K | 3,000 K | 4,000 K

Color rendering: CRI > 70 | 80

Luminous intensity classes: G3 | G4

#### Type of protection

IP66

Safety class: II

Impact resistance: IK09

#### Mounting

Mast top and mast side

Mast flange: Diameters of 76 / 60 / 48 / 42 mm with inclination options from -15° up to +15°

Reducer: 76 - 60 mm, 60 - 42 mm

#### **Control system**

SITECO iQ | SITECO iQ Street-Remote | SITECO iQ Light-Switch (on request) | SITECO Smart-Interface (Zhaga / D4i)





#### **Technical data**

Luminous flux: from 2,900 to 8,800 lm

Output: up to 59.3 W

Luminous efficacy: up to 166 lm / W

Service life: above L97 after 100,000 h

Mounting height: 4 to 8 m

#### **Recommended applications**

Collection roads, main roads, pedestrian crossings, town plazas

#### Possible light distributions

**1 2 3 4 5 6 7** (see diagram below)

#### **Technical data**

Luminous flux: from 9,200 to 18,900 lm

Output: up to 124.7 W

Luminous efficacy: up to 161 lm / W

Service life: above L96 after 100,000 h

Mounting height: 6 to 12 m

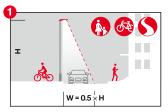
#### **Recommended applications**

Collection roads, main roads, pedestrian crossings, town plazas, conflict zones

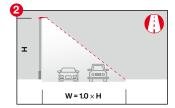
#### Possible light distributions

**1 2 3 4 5 6 7** (see diagram below)

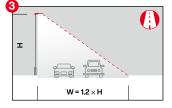
#### Light distributions for Streetlight SL 11 models:



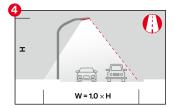
**ST0.5a** – For normal / narrow roads; lighting classes M + P; e. g., (cycle) paths, roads in residential areas



**ST1.0a** - For normal roads; lighting class M; e.g., main roads; optional with BLC



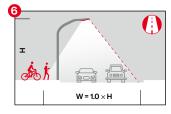
**ST1.2a** – For normal / wide roads; lighting class M



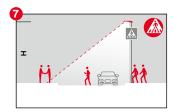
**ST0.5ST0.5** – For normal roads with whip-type masts; lighting class M



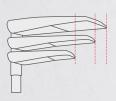
**P1.0a** – For narrow paths, streets and cycle paths; lighting class P



**ST1.2P1.0** – For normal / wide roads with adjacent path; lighting classes M + P



**PC-L/R** – For pedestrian crossings









#### Sizes:

- micro
- mini
- midi

#### **Light distributions:**

- ST0.5a
- ST1.2a
- ST0.5-ST0.5
- ST1.2-P1.0
- P1.0a
- PC-R
- PC-L
- ST1.0
- ST1.0 BLC cover

#### **Light colors:**

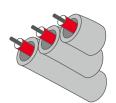
- 1,800 K
- 2,200 K
- 2,700 K
- 3,000 K, CRI 70
- 3,000 K, CRI 80
- 4,000 K

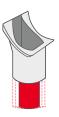
#### **Control:**

- iQ Comfort
- iQ Street-Remote
  - · Without ServiceBox
  - · ServiceBox ready (with DALI 2)
- iQ Smart-Interface
- · Smart-Interface TOP
- · Smart-Interface BOTTOM
- · Smart-interface TOP, BOTTOM
- · iQ Smart-Wire (two scenes)
- · iQ Smart-Wire (10 scenes)
- · iQ Night-Set
- · iQ Lumen-Switch











#### **Individual settings:**

 Set individual reduction times for the night

#### Types of cable:

- H07RN-F 3 × 1.5
- H07RN-F 5 × 1.5
- NYM-J 3 × 1.5
- NYM-J 5 × 1.5
- NYM-O 5 × 1.5
- SITECO Plus,5-wire

#### Cable length:

- 5.5 m
- 6.5 m
- 8.5 m
- 10.5 m
- 12.5 m

#### Mast flange:

- Diameter 42 mm
- Diameter 60 mm
- Diameter 76 / 60mm

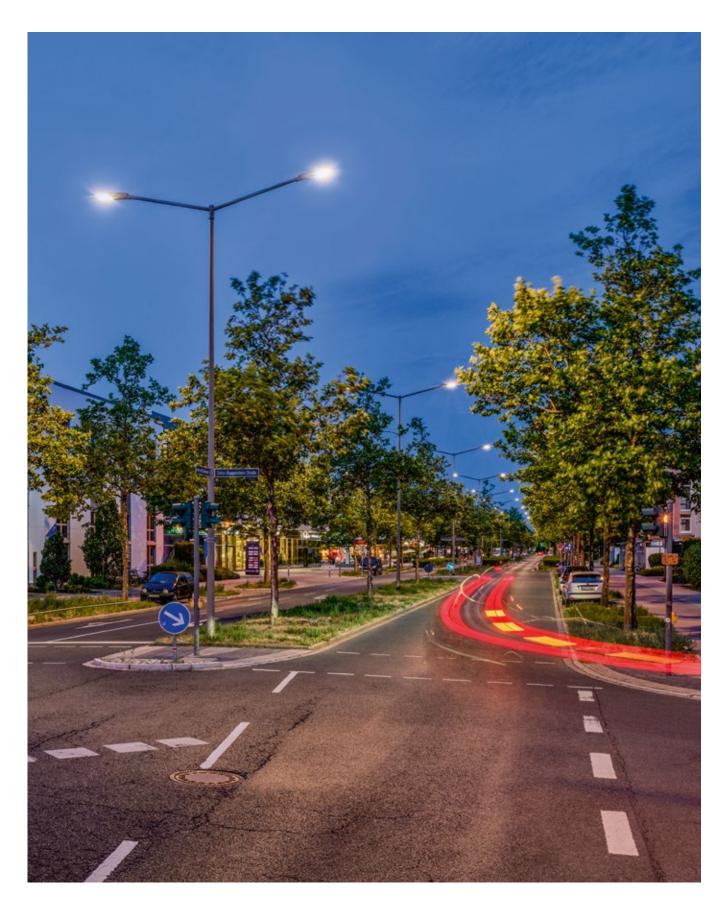
#### **Housing color:**

- DB702S
- DB703
- RAL 6009
- RAL 6012
- RAL 7021
- RAL 9005
- Additional colors on request

#### Make it your light.

#### There isn't just one Streetlight SL 11.

With its wide range of standard models and additional configuration options, the SL 11 is always the luminaire you want it to be. With various light colors, optics and mounting options. And always as flexible to control as you want – pre-set and ready for the future.

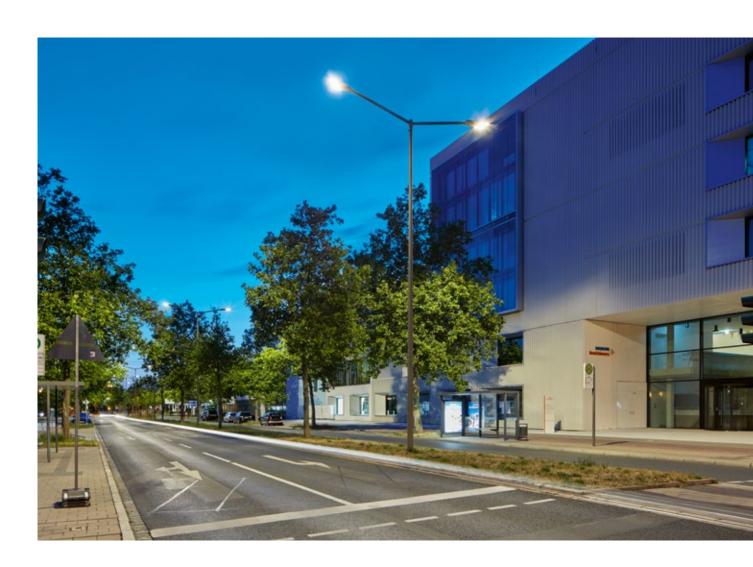


Project: City of Erlangen
Product: Streetlight SL 11 iQ

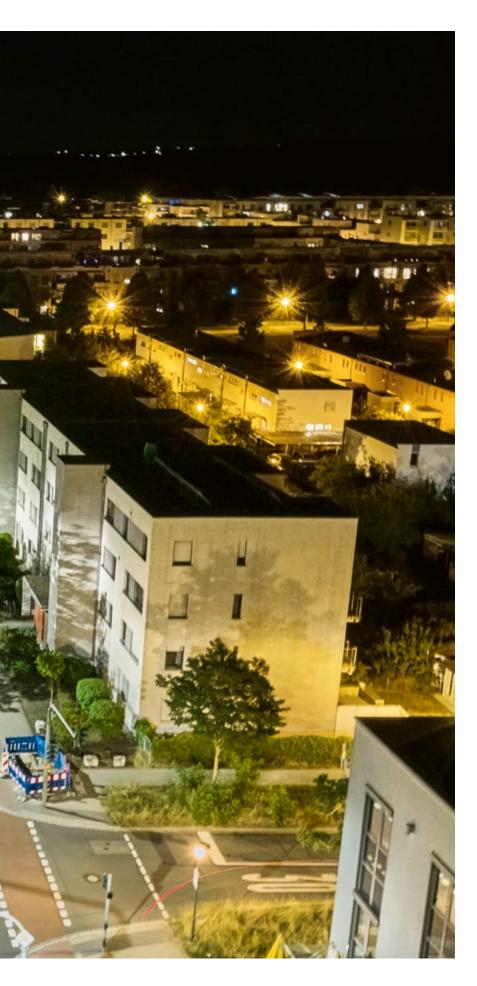


## Erlangen

Erlangen is preparing for the future – and is relying on Streetlight SL 11 iQ. A decision that not only reduces energy consumption, but also creates a flexible foundation for future requirements. That's the smart way to invest!







Project: City of Erlangen
Product: Streetlight SL 11 iQ

#### Saving energy calls for teamwork.

#### What tasks can we carry out for you?



Our experts examine your existing lighting installation and define your individual requirements for the new system on location and together with you. 

Recording inventory and inventory data 
Operating costs and CO<sub>2</sub> savings
Investment and payback

Planning

We develop a lighting concept or customized solution designed to precisely meet your needs – enabling you to benefit from outstanding and sustainable lighting and control technology. 

Lighting design 
Lighting and electrical concept that considers nature conservation laws

Planning suitable control systems

Project management

Everything from a single source: You work with one project manager, so you have exactly one contact person. Our employee clarifies the formalities and coordinates all steps – so everything happens at the right time and everyone is properly involved. 

Project coordination and control

Financing and funding

Our individual financing solutions help you realize savings right from day one. The terms are flexible and depend entirely on your needs. We also prepare efficiency certificates that verify at least 50 % CO<sub>2</sub> savings for funding applications.

German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) funding quotas and application for funding Financing

Technical service

You decide whether we handle the installation through our network of installation partners. If you'd like, we can also assume responsibility for operating your equipment. 

Installation and commissioning of luminaires and control systems

Digital control center

The SITECO control center monitors in real time: from digital management to maintenance and servicing to control and optimization. In this way, we have everything covered for you and coordinate all work.

Select from these six service modules and combine them to precisely meet your needs.

Always tailored to the level of service you require.

#### Contact.

#### Siteco GmbH

Georg-Simon-Ohm-Str. 50 83301 Traunreut, Germany Tel. +49 8669 330 info@siteco.com

#### Sebastian Glunz

Head of Application City Tel. +43 676 830 24 250 s.glunz@siteco.at