# Streetlight 20
Complexity made simple

The practical luminaire range for street lighting,
from residential neighborhoods to freeways.

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A strong concept for top performance

Efficient operation, highly durable, low maintenance, reliable SITECO quality and high quality of light for safety and well-being. Streetlight 20 is the practical mast luminaire with lens technology, suitable for cycle paths, business facilities, residential streets, collecting roads and multi-lane carriageways. The range features light distribution characteristics and lumen levels precisely matched to the application. Simply a smart concept.

Variable use.
With three mast adapters (42 mm, 60 mm, 76 mm), all sizes can be used as side entry or post-top luminaire.

A uniform design throughout.
Streetlight 20 features a concise, consistent appearance across all construction sizes.

Streetlight 20 mini

- Mounting heights: 4 to 8 m
- Light color: 3000 K, 4000 K
- Variants from 3890 lm to 8270 lm

Streetlight 20 micro

- Mounting heights: 3 to 6 m
- Light color: 3000 K, 4000 K
- Variants from 1850 lm to 4240 lm

iF **DESIGN AWARD 2016**

Streetlight 20 maxi

- Mounting heights: 8 to 14 m
- Light color: 3000 K, 4000 K
- Variants from 11,900 lm to 35,140 lm

Streetlight 20 midi

- Mounting heights: 6 to 12 m
- Light color: 3000 K, 4000 K
- Variants from 6000 lm to 17,500 lm

At a glance

- four construction sizes for applications in all lighting classes
- mounting heights from 3 to 14 meters
- two light colors for differing design concepts
- extremely long lifespan and highly efficient continuous operation
- simple, sustainable module concept for rapid mounting and safe module replacements on the mast (ESD protection)
- three control packages for more flexibility, convenience and efficiency
- high tightness and robust workmanship

Completely practical:
The new Streetlight 20

One luminaire family, one concept and
one solution—for the entire city

Complexity made simple: Reduced visually to the essential,
Streetlight 20 impresses with its inner values, qualities and
adaptability.

Every bit as simple as it sounds: The Streetlight 20 luminaire
family serves all technical street lighting applications with
one concept and one luminaire design across the entire family.
High-quality materials and intelligent thermal management
come together with clever construction with just two
components and tool-free mounting. The result: A sustainable
luminaire range.

Efficient

The Streetlight 20 range of luminaires is based on maximum efficiency—in terms of installation, service life and maintenance. And of course in operation. The new generation now functions up to 20 percent more efficiently.

High light output

In the latest generation, Streetlight 20 gets even better: 28 percent higher luminous flux, less light degradation, greater energy savings—with continued precise, glare-free lighting. The new generation now functions up to 20 percent more efficiently.

Safe

Inconspicuous during the day, reliable and powerful at night: Streetlight 20 features light distributions precisely matching their applications, from residential neighborhoods to freeways—a complete solution, and always conforming to standards.

Smart

Pioneering control concept also for the subsequent integration of telemanagement systems due to optional SITECO Smart Interface compliant to Zhaga standard.

Sustainable

Durability owing to high-quality materials such as die-cast aluminum housing. Sustainability thanks to simplified spare part management and environmentally-friendly disposal concept.

Form follows function

Intelligently designed, from drip edge to future safety

The modern and unobtrusive luminaire design of Streetlight 20 blends harmoniously into highly diverse surroundings. The design, materials and workmanship of Streetlight 20 combine to create a maximally resistant combination: A die-cast aluminum housing, a toughened safety glass cover and a defined drip edge for complete, fast drying. Streetlight 20 not only represents high quality light but also reliable operation with minimum maintenance.

The precisely aligned lenses of high quality PMMA create very high levels of uniformity, thereby achieving good vision. The planar distribution of light points avoids the danger of glare from typical observer positions. Edge printing on the toughened safety glass further optimises the soft brightness transitions.

Family design
An elegant, flat luminaire head without disturbing cooling ribs—all sizes speak the same design vocabulary

Functional form
A defined drip edge, smooth surfaces and high quality materials ensure complete water drainage and fast drying

Robustness
The optional double coating additionally increases corrosion protection (available in SITECO metallic gray DB 702s)

Especially durable
The diecast aluminum housing features high quality and high resistance. The toughened safety glass remains clean for a long time and is easy to clean if necessary. The Sealed-for-Life Light Engine ensures a dust- and insect-free lightning compartment for the whole lifetime of the product.

Future-proof design
The upper part of the luminaire can be simply replaced as a complete module whilst the carrier housing remains connected to the mast— for example after expiry of the service life

Flexible mounting
Whether as side-entry or post-top variant or for 42, 60 or 76 mm—Streetlight 20 has a suitable mast flange for all situations and can be inclined in 5° steps from 0° to 15° or from 0° to -15° (with side-entry mounting)

Complex can also be easy

Only two components for maximum handling comfort

Streetlight 20 has a consistently modular design to bring together simple handling with high levels of efficiency and sustainability.

The construction principle, identical across all sizes, is based on the following components:

- The carrier housing consists of connection compartment, mast adapter and connection box
- The upper luminaire section is designed as a complete module with LED module, ECG and control

All components have been designed for very long lifespans—the efficient standard version of Streetlight 20 for example achieves around 100,000 operating hours (L90/B10). This corresponds to problem-free use over 20 to 25 years with typical usage. After this period has expired, the complete module including electrical components can be replaced with ease while the carrier housing remains on the mast.

Durable diecast housing without cooling ribs
for optimum thermal management

Up to 20 percent more efficient LED unit
in the new generation including integrated sensor for temperature monitoring and in 3 light colors (3000 K, 4000 K, amber)

ESD-protected LED module
complete module can be replaced on the mast

Electronic control unit
with dimming options and surge protection (10 kV)

Smart City ready thanks to integrated interface for light sensor or RF antenna (with mini, midi, maxi)

Opening protection
for simple mounting and maintenance

Simple handling
The housing can be opened without tools.
The upper part of the luminaire is simply flipped open.
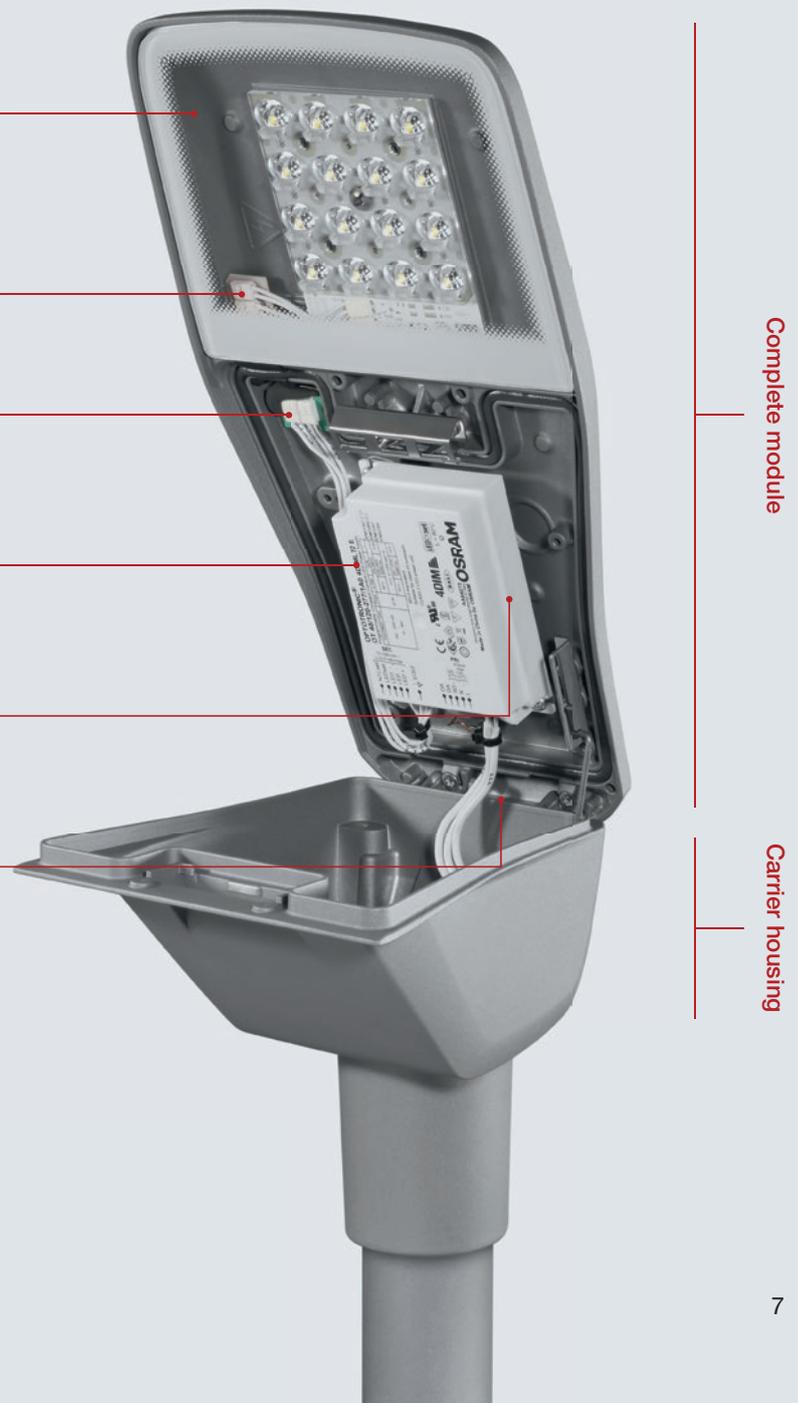
Complete module

Carrier housing

Streetlight 20 at a glance

Streetlight 20 range product matrix

|			
Streetlight 20 micro **Applications:** ■ Collection roads ■ Cycle paths ■ Plazas		**Lumen packages** 1750 to 4240 lm **Mounting heights** 3 to 6 m **Service life** > LB90/B10 after 100,000 h	**Light distribution** (diagram below) ① ② ③ ④ ⑤ ⑥
Streetlight 20 mini **Applications:** ■ Collection roads ■ Cycle paths ■ Plazas		**Lumen packages** 3510 to 8270 lm **Mounting heights** 4 to 8 m **Service life** > LB90/B10 after 100,000 h	**Light distribution** (diagram below) ① ② ③ ④ ⑤ ⑥
Streetlight 20 midi **Applications:** ■ Main roads ■ Collection roads ■ Plazas		**Lumen packages** 6300 to 17,520 lm **Mounting heights** 6 to 12 m **Service life** > LB90/B10 after 100,000 h	**Light distribution** (diagram below) ① ② ③ ④ ⑤ ⑥ ⑦
Streetlight 20 maxi **Applications:** ■ Main roads ■ Collection roads ■ Plazas		**Lumen packages** 10,360 to 35,140 lm **Mounting heights** 6 to 14 m **Service life** > LB90/B10 after 100,000 h	**Light distribution** (diagram below) ① ② ③ ④ ⑤ ⑥

Light distribution
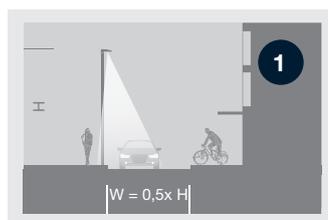
| ① $W = 0.5 \times H$	② $W = 0.8 \times H$	③ $W = 1 \times H$	④ $W = 1.2 \times H$
ST0.5a – For narrow roads, (cycle) paths, e.g. in residential areas	**ST0.8a** – For normal width roads (luminous intensity class 4), e.g. for trunk roads and frontage roads	**ST1.0a** – For normal roads, e.g. expressways	**ST1.2a** – For normal roads, with wider mast spacing
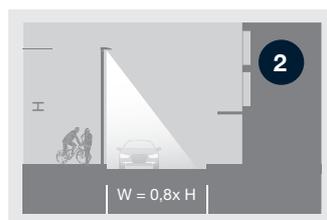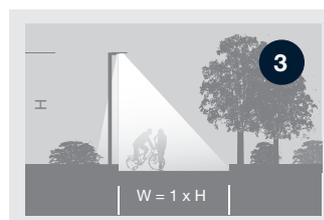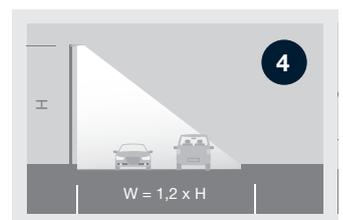
Optic concept
Lens-based with toughened
safety glass cover
Inclination possibilities
± (0° / 5° / 10° / 15°)
Mounting
Post-top / side entry
Ø 60 / 76 mm (post-top)
Ø 42 / 60 mm (side-entry)

Protection rating
IP66
Insulation class
II
Impact resistance
IK09

Light colors
3000 / 4000 K
1750 K (light distribution 1, 3)
Color rendering
CRI > 70 / 80
Luminaire luminous efficacy
up to 119 lm/W
Luminous intensity class
G3 / G4

Optic concept
Lens-based with toughened
safety glass cover
Inclination possibilities
± (0° / 5° / 10° / 15°)
Mounting
Post-top / side entry
Ø 60 / 76 mm (post-top)
Ø 42 / 60 mm (side-entry)

Protection rating
IP66
Insulation class
II
Impact resistance
IK09

Light colors
3000 / 4000 K
1750 K (light distribution 1, 3)
Color rendering
CRI > 70 / 80
Luminaire luminous efficacy
up to 137 lm/W
Luminous intensity class
G3 / G4

Optic concept
Lens-based with toughened
safety glass cover
Inclination possibilities
±(0° / 5° / 10° / 15°)
Mounting
Post-top / side entry
Ø 60 / 76 mm (post-top)
Ø 42 / 60 mm (side-entry)

Protection rating
IP66
Insulation class
II
Impact resistance
IK09

Light colors
3000 / 4000 K
1750 K (light distribution 1, 3)
Color rendering
CRI > 70 / 80
Luminaire luminous efficacy
up to 145 lm/W
Luminous intensity class
G3 / G4

Optic concept
Lens-based with toughened
safety glass cover
Inclination possibilities
Post-top: +(3° / 8° / 15°)
Side entry: -(0° / 3° / 8° / 15°)
Mounting
Post-top / side entry
Ø 60 / 76 mm (post-top)
Ø 42 / 60 mm (side-entry)

Protection rating
IP66
Insulation class
II
Impact resistance
IK09

Light colors
3000 / 4000 K
Color rendering
CRI > 70 / 80
Luminaire luminous efficacy
up to 147 lm/W
Luminous intensity class
G3 / G4
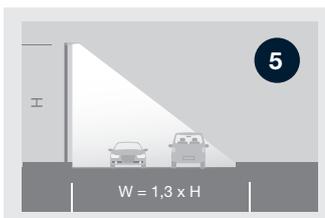
ST1.3a – For wide roads,
e.g. expressways
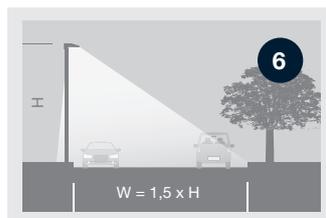
ST1.5a – For very wide roads and
car parks, e.g. in conflict zones
such as intersections and streets
with adjoining areas

PC-L/R – For pedestrian crossings

Protecting resources with a sustainable recycling economy

Creating added value for companies and nature with a recycling economy

With its EU action plan for the recycling economy, the European Union is creating new and advanced incentives for avoiding waste and residual waste throughout the entire life cycle of a product. This process starts at the product design stage with ecological design and takes in waste avoidance and consumption in operation through to maximized reuse of raw materials. By consistently implementing these measures, net annual savings of EUR 600 billion or 8 percent of the annual turnover of companies in the European Union could be achieved.

The predictability of raw material supply increases by switching to the recycling economy

In addition to energy efficiency, an environmentally-compatible design, or eco-design, also includes aspects such as the long life, repairability, retrofitting and recycling ability of a product

The recycling economy can provide for innovation, growth and employment (creation of 580,000 jobs in the EU)

Raw materials

Design

Recycling

Recycling can reduce CO_2 emissions by 2 to 4 percent

Manufacture Remanufacture

Recycling economy

Residual waste

Sales

Collection

Use, reuse, repair

Recyclable products increase competitiveness

Reducing waste to a minimum is part of the value chain. Waste separation and collection supports cleaner recycling

Consumers in a recycling economy benefit from longer life and more innovative products, which lead to cost savings and a higher quality of life

# Safety in road traffic
Reassuring for the animal world

Amber-colored light scores in terms of safety and environmental protection—
SITECO's contribution to lighting solutions in very special places

Attentiveness in road traffic

Luminaires from the Streetlight 20 range are also available with a light color of 1750 K. The result is warm, amber-colored light. Luminaires with this light color are the ideal solution for supplementing conventional installations with high-pressure sodium lamps (SON) or modernizing with LED technology without changing the visual impression. They can also improve road safety. A deliberate change of the light color increases attentiveness in potential danger zones, for example at crosswalks, junctions and intersections.

Light—made for nature conservation

The major advantage of "orange" LED light, however, is in its color spectrum, which has almost no blue component. The fewer blue components, the less light pollution and the less insects are attracted. This makes Streetlight 20 an ideal solution in the environment of observatories as well as for nature reserves, national parks and biosphere reserves, but also at locks and around shipping lanes. And particularly because amber-colored light also reduces the attraction of nocturnal insects and disturbs them to a lesser extent in their natural behavior. Streetlight 20 is therefore a win-win situation for both municipalities and the environment.

Intelligent lighting control: smart systems for cities and companies

Energy saving and more: Your advantages with modern lighting control

For a long time, energy savings were the decisive factor for installing intelligent lighting control. However, increasingly efficient hardware and software solutions are now giving cities and companies the opportunity to use integrated control and monitoring solutions to achieve safety and sustainability goals. The basis for this—"intelligent lighting control" with sensors and interfaces to existing municipal systems, for example traffic computers and inventory databases, and always tailor-made for individual requirements.

The benefits of modern lighting control are extensive

- **Reduce costs:**
  Dimming and temporary switching off save energy and increase the service life of the luminaire

- **Protect the environment:**
  Targeted dimming reduces light pollution and protects flora and fauna

- **Protect the climate:**
  Improved CO_2 balance through dimming at low-traffic times in parks and industrial estates

- **Increase visibility:**
  Lighting levels controlled according to time and situation for optimum visibility at night

- **Increase safety:**
  Illuminance levels modified to traffic, weather and events

- **Design for tourism:**
  Timed lighting levels emphasize landmarks and attractive architecture

- **Reduce vandalism:**
  Movement-related increases in illuminance protect your facilities

- **Optimize operational management:**
  Central documentation, switching, monitoring and diagnosis of the system enables the planned, targeted deployment of technicians, e.g. in the event of damage

How advantages become technical reality

Reduce costs

Protect the environment

Protect the climate

Switch-on/off via timer or light sensor

Two-step dimming with control wire

Increase safety

Design for tourism
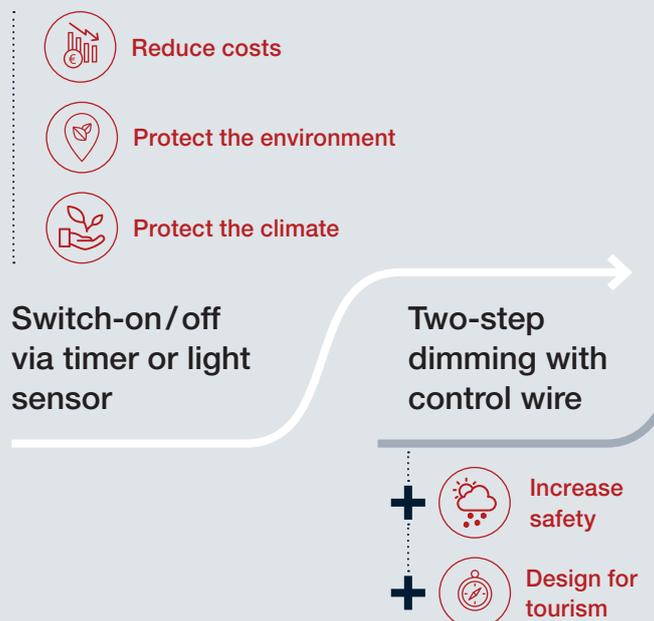
The four main advantages of modern lighting control

Energy efficiency improvements via dimming according to requirements

**Safety** for people, in traffic and against vandalism

Sustainability via the protection of ecological resources and the animal world

Optimized operational management via current diagnostic data and documented systems

LEVEL OF SYSTEM INTELLIGENCE

+ Increase visibility

+ Optimize operational management

Multi-step dimming via electronic control unit

Dimming according to movement

Switching, dimming and operation with a networked telemanagement system

+ Reduce vandalism
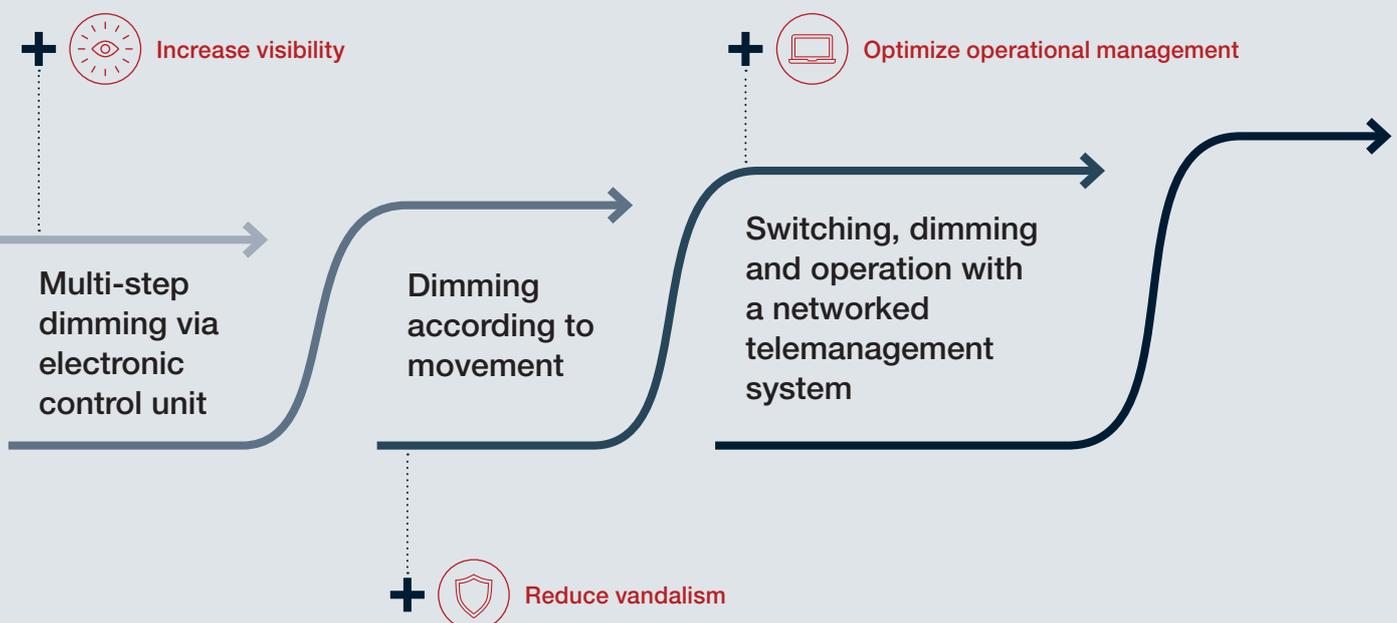
Telemanagement:
simple, secure and flexible thanks
to SITECO's Smart Interface

The new standard for your technological flexibility

Central control of lighting systems—as offered by modern telemanagement. SITECO customers have additional advantages with immediate effect: With the Smart Interface, SITECO is equipping its outdoor luminaires with a standardized interface compliant to Zhaga Book 18. This means in future operators will be able to fit their telemanagement system to the luminaire themselves, and lighting controls which are also designed according to Zhaga Book 18 can be connected to the luminaire simply and without further modifications.

Your advantages:
- **Future-proof:** SITECO luminaires with Smart Interface prepare operators for the future use of a telemanagement system.
- **Flexible:** The time of retrofitting a telemanagement system is freely selectable and easy to implement. Thanks to the integrated, standardized interface, the Smart Plugs can be connected to the luminaire without any additional tool.
- **Independent:** SITECO customers will find many telemanagement system providers on the market. With the Zhaga standard they remain independent in their selection, and can even simply test several systems on location and exchange between individual luminaires as required.

Smart Plug
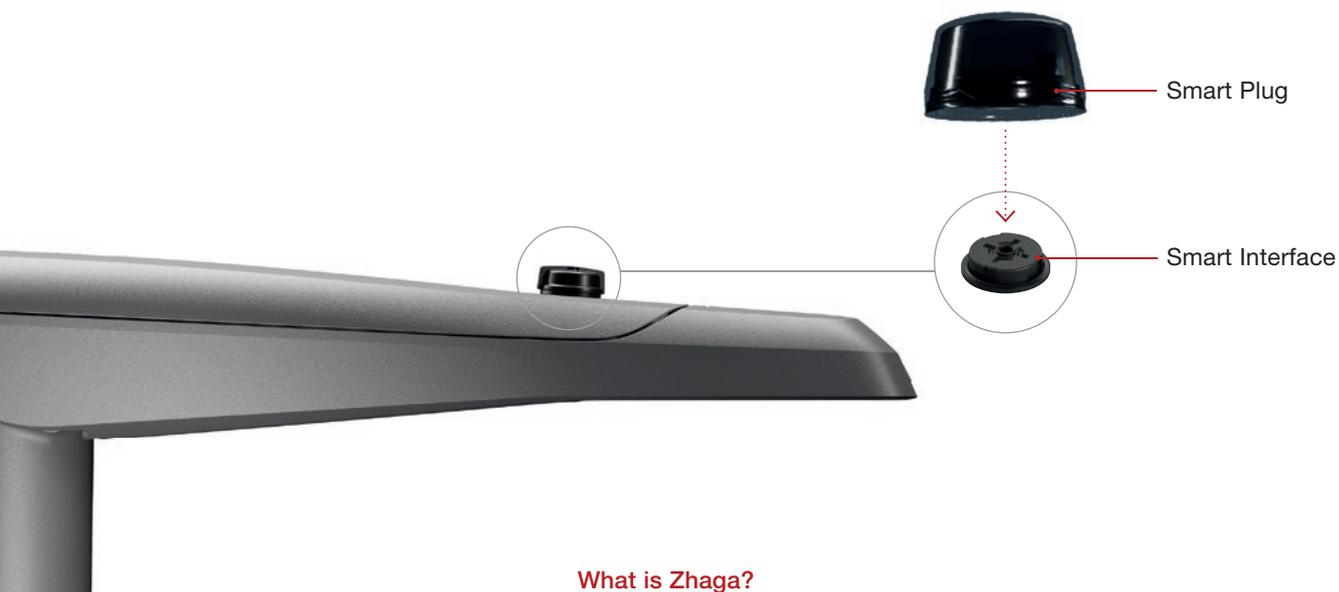
Smart Interface

What is Zhaga?
Zhaga is a global consortium of companies in the lighting industry. It standardizes essential LED luminaire components in specific books, the "Zhaga Books". Zhaga Book 18 defines the interface between a Smart Interface on the one hand and a Smart Plug on the other.

LumIdent: lighting data management in the digital age

Our concept for simple commissioning and management of your luminaire infrastructure

The larger, more complex and more individual a lighting system is, the more important it becomes to have structured inventory and system management as well as simple tools for operating and setting the luminaires.

SITECO provides a state of the art set of tools for precisely such tasks in the form of LumIdent: The LumIdent QR code for quick information on luminaire type and basic data, the app for setting e.g. the dimming level, and the web tool for viewing the lighting system documentation on a PC.

| At a glance:	Information	Setting	Diagnostics	Management
	Determine luminaire type and equipment with the QR code, e.g. the light distribution.	Reset the luminaire with the app, e.g. modify the dimming level.	Locate errors and track implemented settings, e.g. dimming level.	Gain an improved overview of the system with the luminaire registry.

LumIdent QR code

- Quickly identify luminaires via QR code
- View electronic data sheet
- With common QR code app or LumIdent app
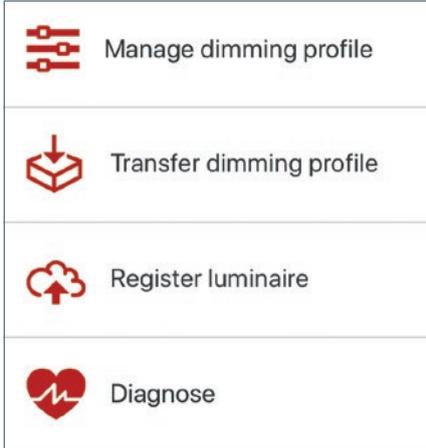
LumIdent app

- View & change luminaire settings
- Digitize luminaire inventory & create luminaire registry
- Diagnose errors
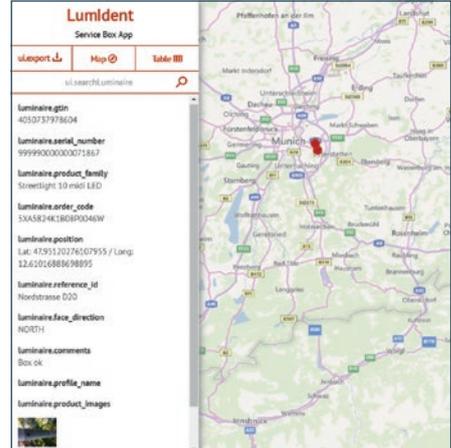
LumIdent web tool

- View captured luminaires on a PC
- Table or map view
- Export captured luminaires as file

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