

Easily control networked street lighting – regardless of the manufacturer

SITECO Connect Wireless Outdoor

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The reasons for intelligent lighting control are increasing.



Lighting as required

Places with changing usage, e.g. Town hall or market squares can be **dimmed automatically**, depending on the time of day or the event.



Increase security

Lighting adapted to events or rescue operations **increases visibility** and thus security.



Reduce vandalism

Lighting increases when there is movement to **protect municipal and private facilities** such as sports facilities or schoolyards.

The reasons for intelligent lighting control are increasing.



Protect the climate

A conscious reduction of the lighting level in suitable places **reduces the CO₂ balance**, e.g. by dimming at times of low traffic in nature reserves, parks or industrial areas.



Protect the flora and fauna

Targeted dimming in the deep night **reduces light pollution** and protects the flora and fauna, e.g. in parks and nature reserves.



Public funding

Lighting control technologies enable the **implementation of environmental guidelines** and the application for public funding.

Dimming creates better results than switching off.

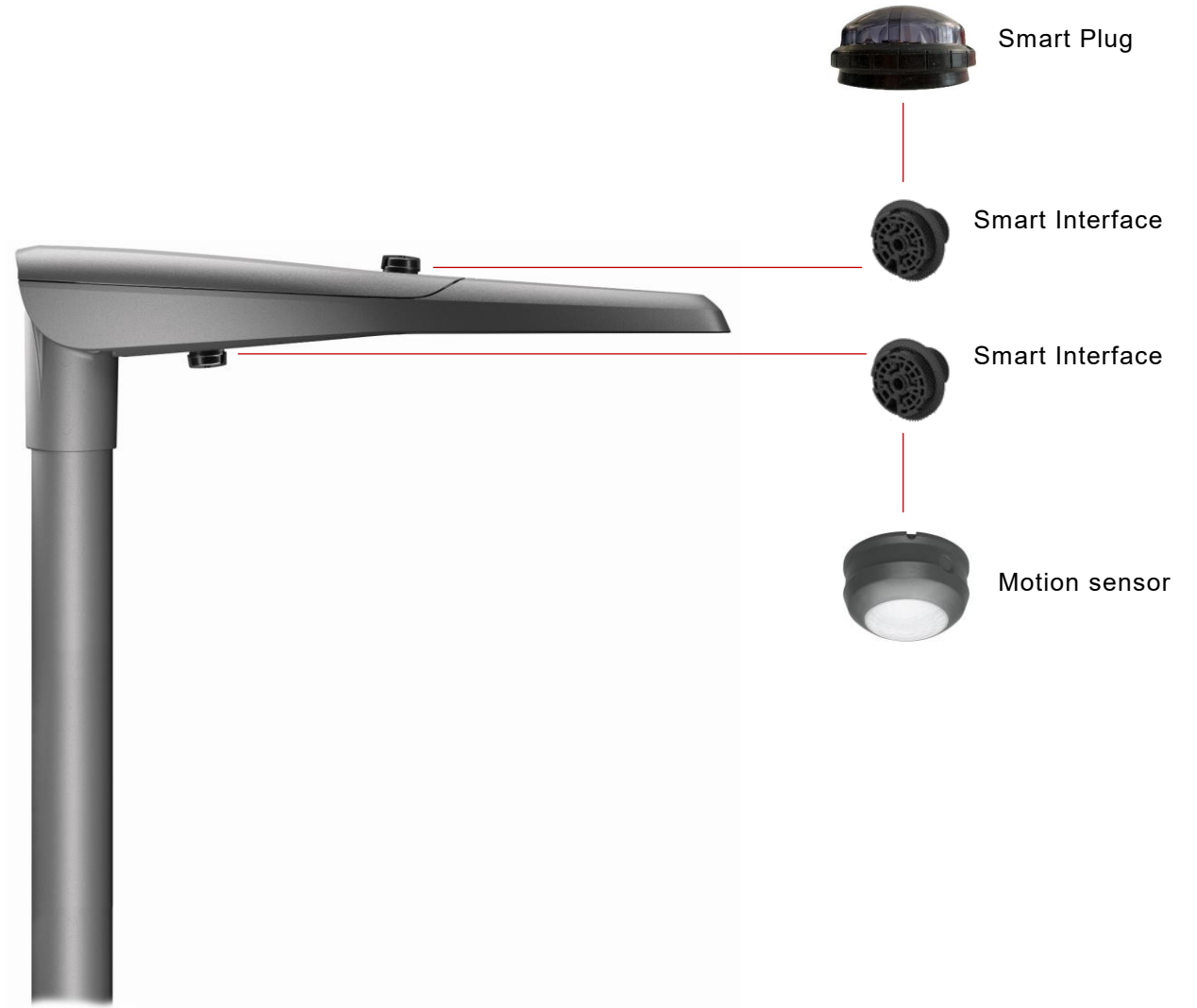
An exemplary calculation

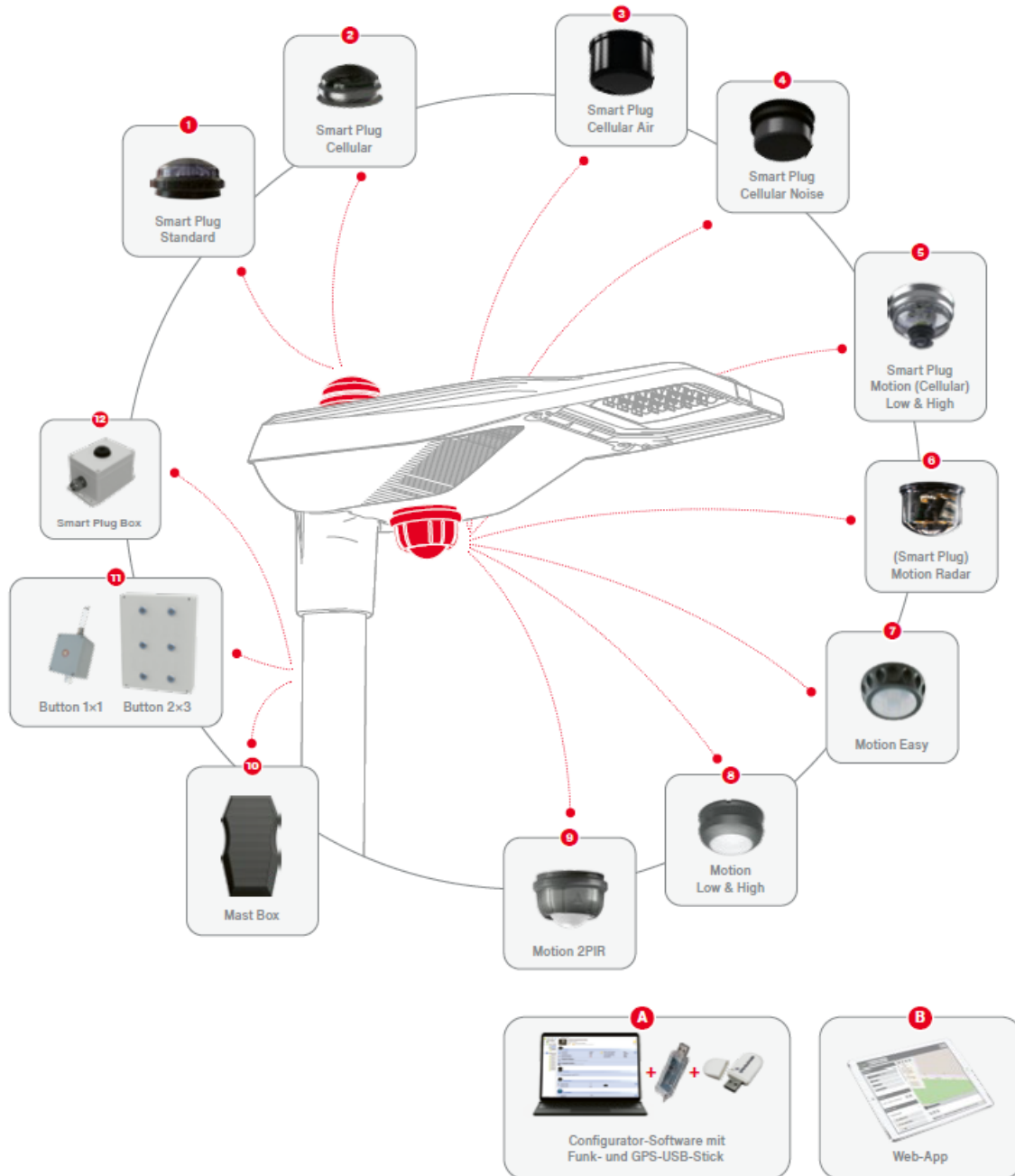


Safety and energy savings well combined

Smart Interface + Smart Plug – a system as a solution.

- A **standardized connection** ensures compatibility between the luminaire, lighting controller and sensor.
- The Zhaga/D4i connection enables a lighting control system or a sensor to be **retrofitted**.
- The time of the investment into luminaires, lighting control or sensors is **flexible**.
- As SITECO customer you may **now prepare for the future** and at a later time add a lighting control system of your choice.
- The lighting control system can be used for **many types of luminaires**.
- A later **system change is possible** at any time.



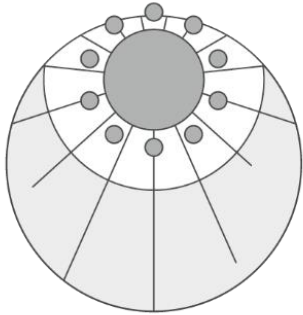


SITECO Connect.

Easy-to-use controls and sensors for the Smart Interface .

1. **Smart Plug Standard:** Zhaga D4i lighting controller for local networks.
 2. **Smart Plug Cellular :** Zhaga D4i lighting controller for local and remote access. Remote access and software usage for 5 years included within the price.
 3. **Smart Plug Cellular Air:** Device like 2 with sensors for particulate matter, nitrogen oxide, volatile organic compounds, humidity, temperature, position and mast inclination.
 4. **Smart Plug Cellular Noise:** Lighting controller like 2 with noise level sensor.
 5. **Smart Plug Motion (Cellular) :** Like 1. or 2. with PIR motion detector.
 6. **Smart Plug Motion Radar:** Like 1. with radar motion detector (also without radio).
 7. **Motion Easy:** Pre-set wide area PIR motion detector. Adjustable via Smart Plug.
 8. **Motion Low & High:** PIR detector adjustable via Smart Plug or smartphone app.
 9. **Motion 2PIR:** Dual PIR motion detector adjustable via smart plug.
 10. **Mast Box:** Like 1 or 3, for DALI luminaires without Smart Interface (mast mounting).
 11. **Buttons:** Wireless buttons for 230 V to activate scenes (sports field, rescue, etc.).
 12. **Smart Plug Box:** External smart interface, e.g. for motion detectors above doors.
- A. **Configurator :** On-site setup with laptop and USB stick.
- B. **Web app:** Remote commissioning and operation for cellular devices.

Many control options are given.



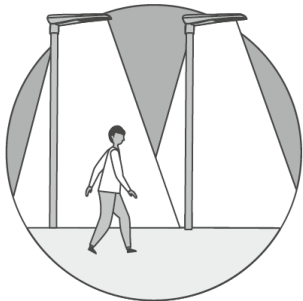
Day light



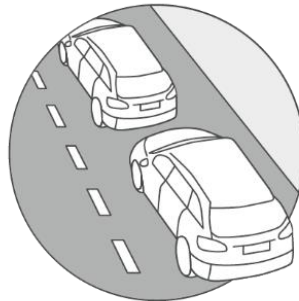
Time



Day of the week or date



Motion



Traffic volume



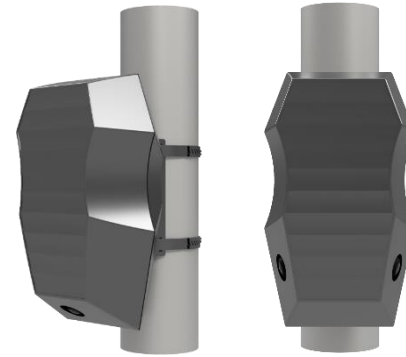
Noise and weather

Mounting options for motion sensors.



- Smart-Interface according to Zhaga book 18 & D4i.
- Large choice of motion sensor types.
- Sensors available with radio inside.

At the luminaire



- Mast mounting for luminaires without Zhaga.
- Connection to 230 V and DALI wires leading towards the ECG.
- The radio is integrated.

At the mast



- Integration into the luminaire.
- Additional radio controller (Smart Plug) on top of the luminaire.

In the luminaire

Available motion detector products for the Smart Interface.

PIR motion detectors
for pedestrians and vehicles
up to 40 km/h

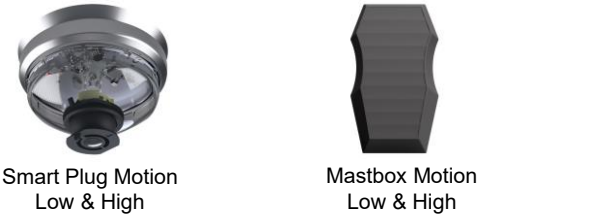
Radar motion detectors
For large distance detection
and vehicles above 40 km/h

**Single motion detectors
without radio**



Locally networkable
by means of adding
a Smart Plug.
Optionally with
remote access

**Locally networkable
motion sensors with
integrated radio**

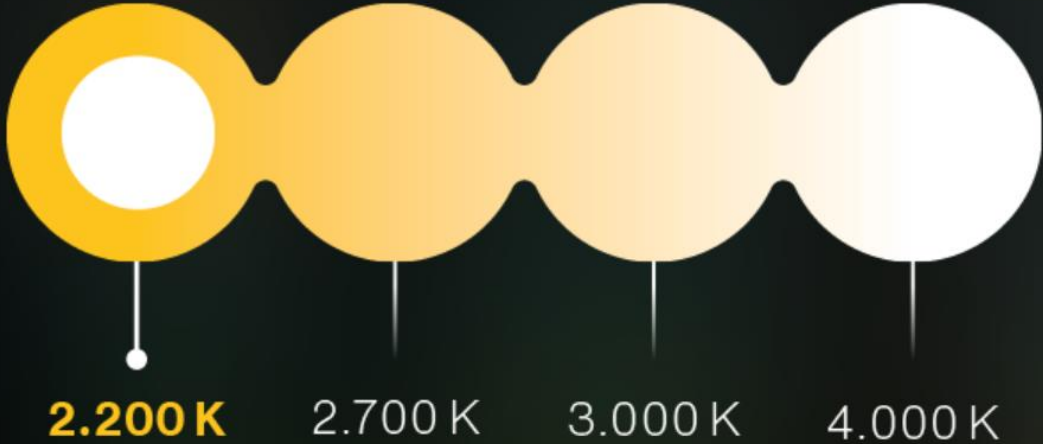


Optionally with
remote access

**Locally networkable
motion sensors with
remote access**



Nature protection and safety combined!



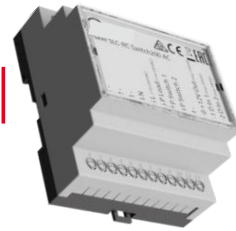
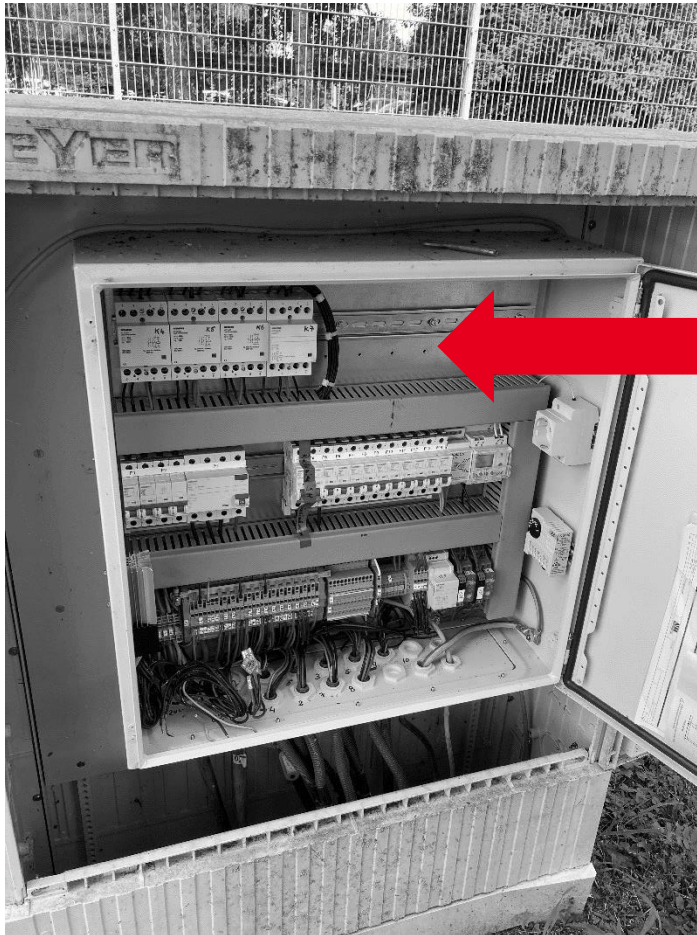
Warm dimmed light when it is quiet,
Clear white light when there is traffic.



Networked motion sensors make it happen!

RF group and segment control

- **Cabinet control** with 3 relay outputs for connection to contactor, control wire and architectural lighting.
- **Further actuators or sensors** such as twilight, traffic or weather sensors can be integrated with cable or RF.
- **Remote configuration** and control via Siteco Connect. Can be seamlessly integrated into Siteco Connect 11 and 21 networks.
- Remote access via
 - Cellular SIM (LTE CAT M1 And NB IoT NB2 and GPRS (included in the scope of delivery with a term of 5 years, flexibly expandable))
 - Local mesh network with Siteco Connect 11 or 21.
- **Astro clock, radio clock and automatic positioning** detection (GPS).
- **Plug & play DIN rail installation:** Antennas for cellular radio, mesh and GPS integrated (i.e. only for non-metallic control cabinets), no external antennas to be connected.
- 5EA1EM02 **electricity meter** can be connected via RS485 interface.



5EA1ECL01 Group Control with integrated antennas

5EA1ECL02 Group Control with connections for external antennas, e.g. 3in1 puck antenna 5EA1EAT01 (0.5 m cable) or 5EA1EAT02 (5 m cable)

Your options for configuring the controller.

Our services.

Configuration by the customer

Simply configure the system yourself.

Requirements:

- Order of the software and system training 5EA0DES01
 - For up to 3 participants
 - Up to 1.5 hours
 - Either via video conference or on site with 5EA0DER01

SITECO Configuration on site

Convenient system configuration by SITECO on site.

Requirements:

- Order of these services:
 - 5EA0DEA01 per facility/section
 - 5EA0DEE01 per device
 - 5EA0DER01 per km, travel expenses
- When the service is performed, the devices must be installed, electrically connected and energized by the customer

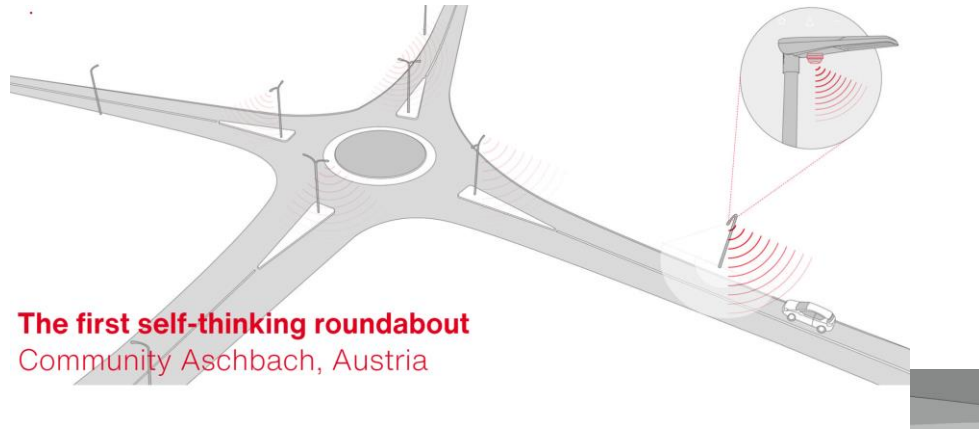
SITECO Remote configuration

Flexible system configuration by SITECO remotely.

Requirements:

- Order of these services:
 - 5EA0DEA01 per facility/section
 - 5EA0DEE01 per device
- Possible for products with a SIM card: Smart Plug 5EA3CM000001, Smart Plug Motion 5EA40ELC01 or 5EA40EHC01 and Group Control 5EA1ECL01
- When the service is performed, the devices must be installed, electrically connected and energized by the customer

Realised project examples show how it works



The first self-thinking roundabout
Community Aschbach, Austria



Night light for tired truck drivers
Berlin-Schönefeld, Germany



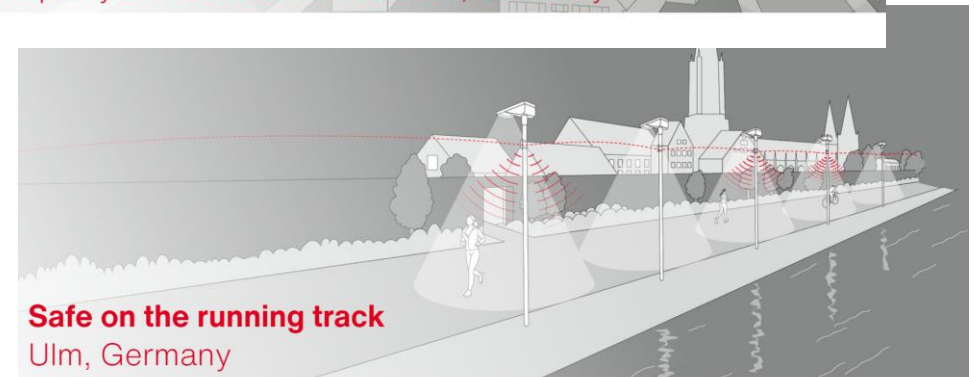
Well protected. Well saved.
Community Reutlingen, Germany



**When all options
of energy saving are available.**
Municipality of Steinheim am Albuch, Germany



Train station parking. With light on demand.
Merklingen, Germany



Safe on the running track
Ulm, Germany

Thank you a lot for your attention!

