## Product Description

The SLC-Hub203-C is a smart street light controller that incorporates motion sensing, GPS positioning, and global cellular connectivity for LED luminaires with Zhaga connector system.

It offers intelligent street light control and a "light on demand" solution in one highly integrated product. Communication is enabled via an automatic 2.4 GHz mesh network between controllers and gateways. Support for motion sensors to meet a wide variety of functional requirements.

The SLC-Hub203-C is a D4i ready / Type A device and SR certified.

## BENEFITS

- Operational cost savings through remote monitoring and real-time maintenance.
- Display of the current luminaire status data.
- Track and evaluate your energy use.
- Remote monitoring of individual controllers without gateway (eSIM included).
- Support DALI DT6 and DT7

## FEATURES

**Remote Management**
The Light Management Platform provides real-time and historical data of the entire lighting network. It allows the remote management and control of all connected lighting points using a user-friendly cloud interface.

**On-Site Management**
The intuitive, easy-to-use configuration tool allows the on-site configuration of all parameters (i.e., dimming level etc.) for either an individual or a group of luminaires.

**Global Cellular Connectivity**
Preinstalled eSIM for instant data connection worldwide. Protocols supported: LTE Cat M1, NB-IoT NB2, EGPRS.

**Automatic GNSS Positioning**
The GNSS receiver provides precise, geo-located date/time data, enabling the accurate and automatic control of the lighting behavior.

**Mesh Network**
The Communication is ensured via an automatic, organizing 2.4 GHz mesh network. Each streetlight communicates with all luminaires which can be reached.

**AstroDim**
AstroDim provides the accurate sunrise and sunset timing of the very location as a basis for the definition of the light control profiles.

**Brightness Sensor**
With the integrated brightness sensor, the light can be automatically switched on or off depending on the ambient light level.

**Tilt Sensor**
Detects X, Y, and Z-axis movements through integrated inclination sensing. Generates alerts when changes in inclination occur, such as in the event of a collision of a road user with a pole.
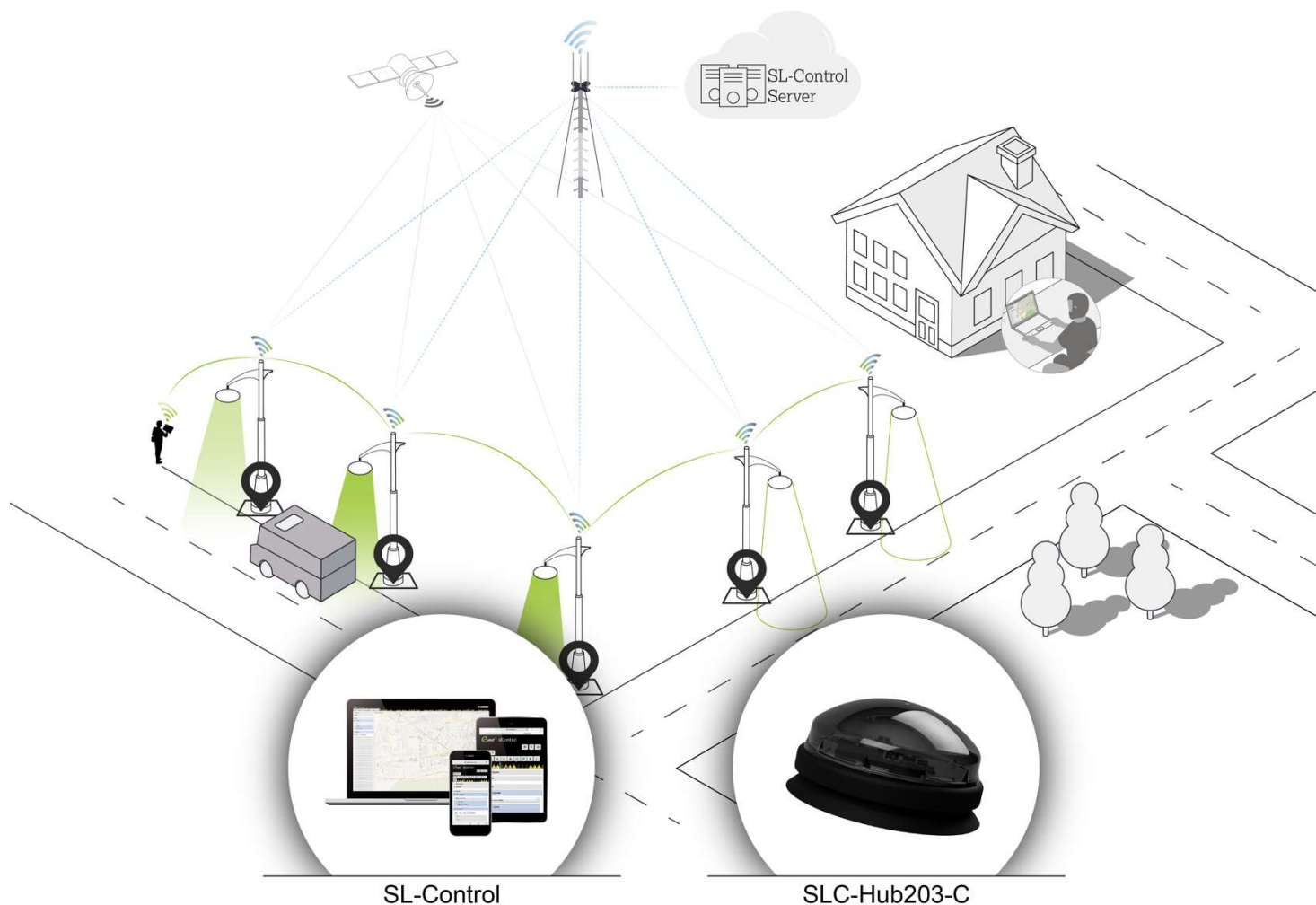
**Temperature Sensor**
With the integrated temperature sensor, the controller can be actively monitored. By regularly checking the information about the luminaire status, proactive maintenance and failures can be avoided.

**Gateway Function**
Remote monitoring of individual controllers without gateway (eSIM included).
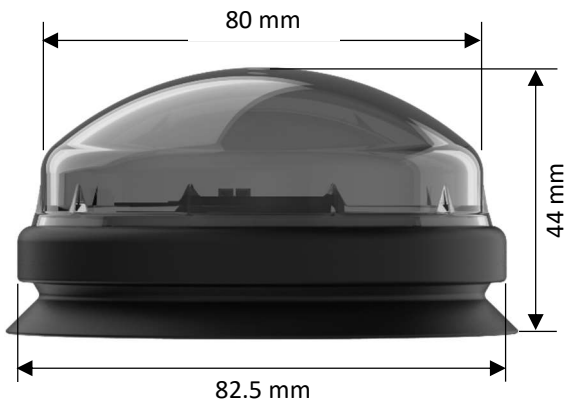
SL-Control

SLC-Hub203-C

Thanks to the integrated eSIM and gateway function, an SLC-Hub203-C can establish a connection to the SL-Control web platform while maintaining a network with all other esave equipped lights within reach.
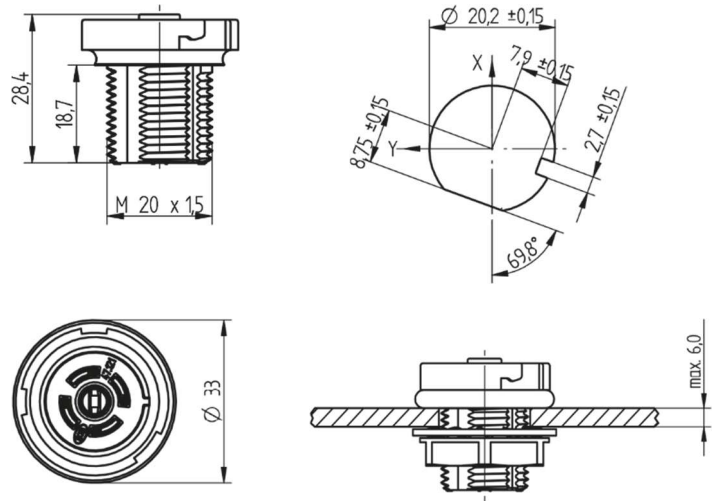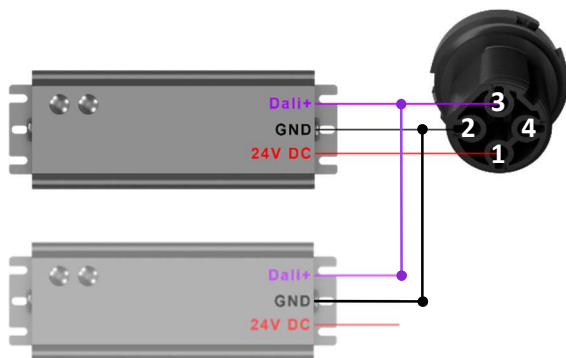
# SLC-Hub203-C

## DIMENSIONS & WEIGHT

### SLC-Hub203-C



| Width | 82.5 mm |
|---|---|
| Dome width | 80 mm |
| Height | 44 mm |
| Product weight | 73 g |

### Zhaga Connector



| Outer diameter | 30.0 mm |
|---|---|
| Height without plug | 28.4 mm |
| Thread length | 18.7 mm |
| Thread pitch | M20 x 1.5 |
| Material | PBT |
| Wire size | 20-16 AWG (0.5 - 1.5 mm$^2$) |
| Mounting | Torque mounting nut 1.8 to 2.4 Nm using a 27 mm hex socket |

## WIRING



**Note:** The controller supports up to 4 LED Drivers simultaneously.

## Maximum Ratings

| | |
|---|---|
| **Supply voltage** | 0 – 34 V DC |
| **Current input** | 6 – 60 mA |
| **Storage temperature** | -40…+90 °C |

## Operating Characteristics

| | |
|---|---|
| **Supply voltage range** | 12 – 30 V DC \| typ. 24 V DC |
| **Current input (24 V DC)** | 7 – 15 mA |
| **Average Power usage (24 V DC)** | 180 mW |
| **Signal input (motion detection)** | $V_{MOT\ HIGH\ Level}$: $12 - V_{cc}$ \| $V_{MOT\ LOW\ Level}$: $0.0 - 0.5$ V |
| **Operating temperature** | -40…+80 °C |
| **DALI input current** | max: 250 mA |
| **Protection class** | IP66 |

## Mesh characteristics

| | |
|---|---|
| **RF frequency range** | 2.420 – 2.480 GHz |
| **RF nominal output power** | +8 dBm |
| **Receiver sensitivity** | -100 dBm |

## Cellular characteristics

| | |
|---|---|
| **Protocols** | LTE Cat M1, NB-IoT NB2, EGPRS |
| **Frequency Bands (MHz)** | CAT M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B8<br>NB-IoT NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B28/B66/B71/B8<br>EGPRS: 850/900/1800/1900 MH |

## Materials & Colors

| | |
|---|---|
| **Dome material** | Polycarbonate |
| **Dome color** | Transparent Smoke Gray |
| **Body material** | PBT |
| **Body color** | Grey |