

# Intelligent street lighting starts here

Remote streetlight cabinet inspection and management is now done easier than ever before thanks to widest wireless network in the world. Now all streetlight information is accessable online anytime and everywhere.











## **Owl Controler**



## **GSM** Antenna



## RF Antenna



## Door switch



Current transformers









Flat-headed screwdriver

Cross-headed screwdriver





DIN rail

Drill







Wires Wrench

#### Caution

Only qualified persons are allowed to install and start up the CITYOWL products.

Inappropriate opening of the products is prohibited.

Prior to installing and commissioning the OWL CONTROLLER, read these instructions carefully.

Please keep these instructions as you may need them later.

## Warning



Ensure that the AC power mains are turned OFF before removing the cover, handling the wiring, or or any other work is carried out on Owl Controler.



DO NOT apply power to the device until you have checked all wiring connections and you are instructed to apply power.



Observe all the applicable safety and accident prevention regulations.







NOTE: Make sure the SIM card is activated in data transmission mode and that the PIN code is removed.



**1.** Remove the front cover of the device using a flat-headed screwdriver.



NOTE: When inserting the SIM card, ensure the correct direction!



2. Insert the SIM card into the holder.



NOTE: To remove the SIM card,



**3.** Secure the SIM card into the holder by pressing on it. Put on the front cover of the device and press it to fix it in place.



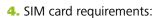


**1.** Open the fixing brackets of the Owl Controler using flat-headed screwdriver.





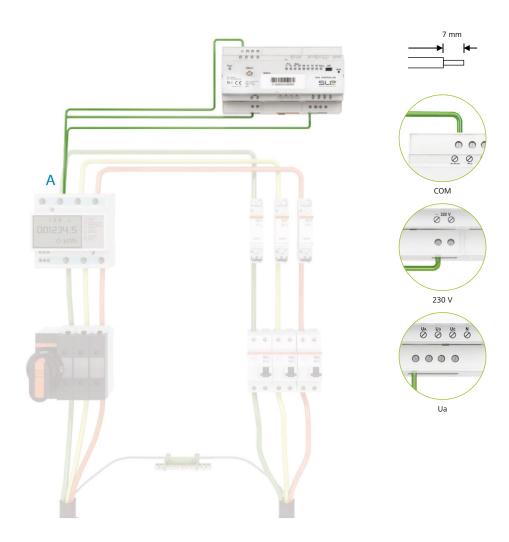
2. Place the Owl Controler on the DIN rail and fasten it by closing the fixing brackets.



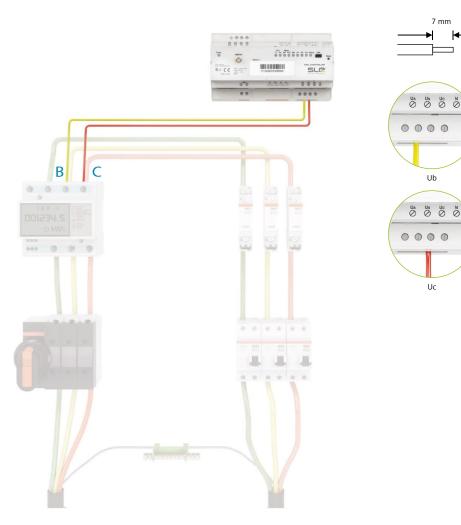
- data transmission GPRS
- min. 2G network (2G, 3G, 4G)
- data consumption up to 15 MB / month
- PIN code disabled



7 mm



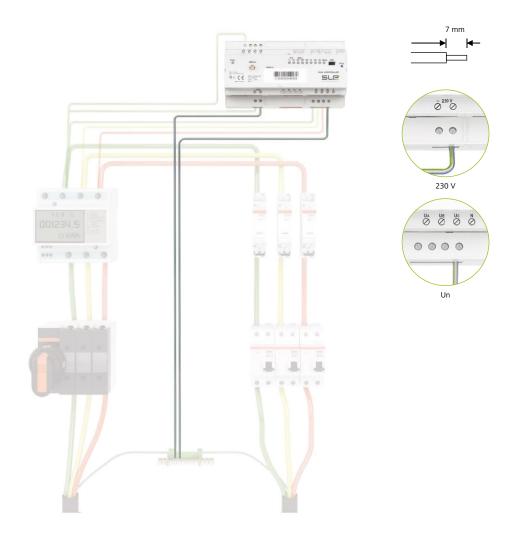
1. Connect the A phase cable to the Owl Controler mains input (230 VAC), to the relay switching (COM) and voltage measuring inputs (Ua) according to the symbols on the device.

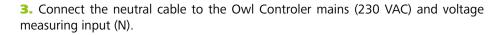


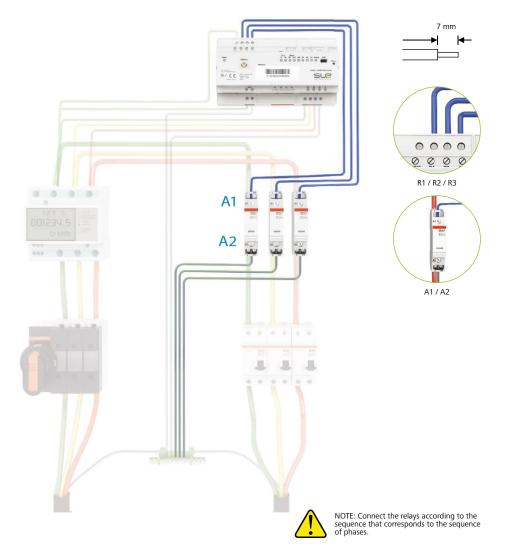
**2.** Connect the B and C phases to the voltage measuring inputs on the Owl Controler. Make sure the phases are connected according to the symbols (Ub and Uc).



WIRING







**4.** Connect the contactor signal input (A1) to the Owl Controler relay outputs. Connect the contactor signal input (A2) against the neutral cable.





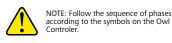
**1.** Remove the front cover of the device using a flat-headed screwdriver.





**2.** Place two-wire cable wires into clamps of current transformer. Fasten the clamps with cross-headed screwdriver.





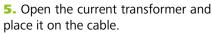
**3.** Using a flat-headed screwdriver, press down the upper jaws of the plug and insert the sensor cable wires into the lower jaws. Fasten the wires by releasing the upper jaws.





4. Insert the plug into the Owl Controler.







Close it and check if the current transformer has been entirely closed and fully fixed.



NOTE: Sequentially connect the current transformers according to the sequence of the phases.





**1.** Using a drill create a holes in the casing of the streetlight cabinet.



**2.** Insert the GSM and RF antenna and fasten it by tightening the nut with the wrench.



**3.** Connect the GSM and RF antenna plug to the Owl Controler and fasten it.



**1.** Fix the door sensor to the streetlight cabinet wall and its doors, so that in an closed state the distance between the sensors does not exceed 10 mm.



**2.** Using a flat-headed screwdriver, press down the upper jaws of the plug and insert the sensor cable wires into the lower jaws. Fasten the wires by releasing the upper jaws.





**3.** Insert the plug into the Owl Controler.







**1.** Fasten the light sensors to the wall or pole using screws.





**2.** Using a flat-headed screwdriver, press down the upper jaws of the plug and insert the sensor cable wires into the lower jaws. Fasten the wires by releasing the upper jaws.





3. Insert the plug into the Owl Controler.



In case when change configuration of device is needed is necessary restart this device to factory settings using button Reset (press and hold 10 sec).



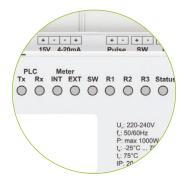
Service connection PC – This action can do only properly trained person for this problem, in critical situation it can be done by novice (layman) working directly by the instruction of properly trained person.

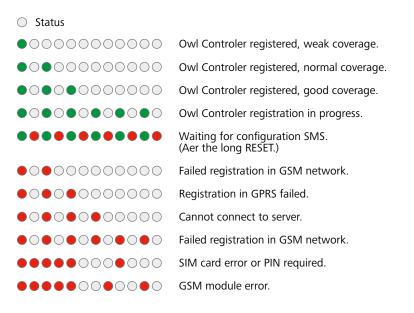


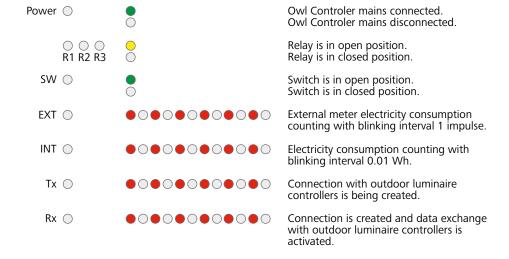
NOTE: Contravention of this warning leads to loss of warranty.



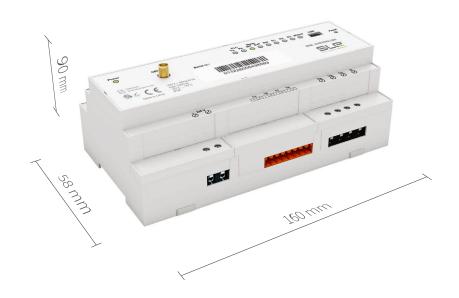
## LED INDICATION











## **Size and Weight**

Width: 160 mm Depth: 58 mm Height: 90 mm Weight: 350 g

Enclosure IP class 20 Mounting on DIN rail 35 mm

## **Environmental requirements**

Operating temperature: from -35° to +65° C Storage temperature: from -40° to 85°C Relative humidity: < 95% non-condensing

#### **Server communication**

#### **GSM**

Quad-band GSM/GPRS (850/900/1800/1900 MHz) TCP/IP network protocol **Ethernet (Optional)** 

#### **Luminaire communication**

## **PLC (Optional)**

CELENEC A (9-95kHz) or B (95-125kHz) or C (125 – 140kHz) Dynamic mesh topology Network size up to 350 nodes Network depth up to 16 hops

## **RF (Optional)**

Frequency - 868MHz Dynamic mesh topology Network size up to 350 nodes Network depth up to 14 hops

## **Power and battery**

#### Mains

Voltage: 230 VAC -15% ...+10% Frequency: 50/60 Hz Peak over voltage 3000V Built-in fuse Power consumption <2W (Max peak 6W)

#### **Battery**

Built-in rechargeable Li-Poly battery (750mAh)

#### **Memory**

Flash 8 Mb

## **Inputs and Outputs**

1x Mains power

3x Voltage measurement (PLC communication)

4x Current transformer input

3x Relay outputs

1x OWL Extension port

1x Serial ports (EIA-485)

1x 4-20mA input

1x Digital input

1x Pulse interface

1x USB Service port

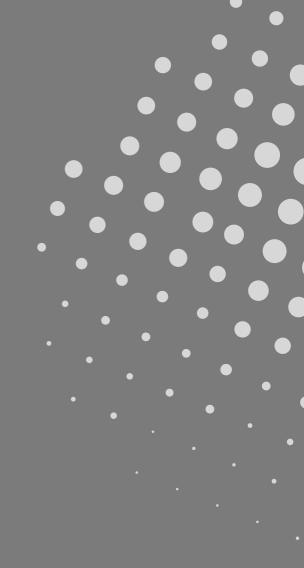
1x SMA external GSM/GPRS antenna

1x SMA external RF868 antenna (only Owl Controler RF)

#### **Firmware**

Over-the-air programming





Dojč 419
906 02 Dojč
Slovakia
+421 34 694 0847
office@sleprojects.com
www.sleprojects.com