

iLighting

Public lighting management

inducta++

What is wireless management of public lighting?



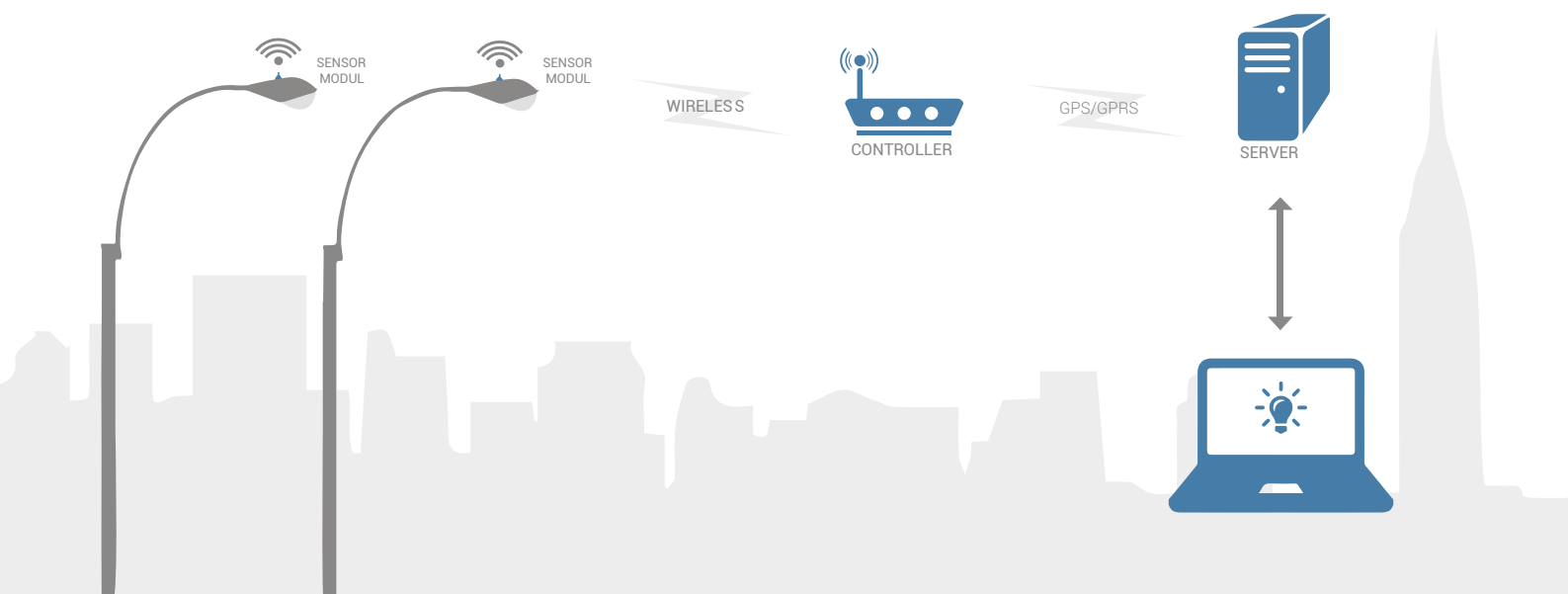
Public lighting system often leads to excessive use of electricity, **40% of public budget is spent for street lights alone.**

The intelligent street lighting works remotely. Our solution offers you lamp - level management capabilities. Every lamp can be switched on and off or dimmed at any time: automatically according to predefined rules or manually through the use of simple user interface.

Sensors establish conditions around the light source, and accordingly change street lighting work mode (muffled, off, amplified).

The iLighting system gathers large amount of data. Current situation, power consumption and malfunctions are reported and stored in the database with the exact time stamp and geographic location.

Basic functions of the whole system are shown in the picture below.



How it works?



The **control module** is composed of:

- ++ Wireless module
- ++ Module for communication with the lamp (DALI - Digital Addressable Lighting Interface, electromagnetic ballasts ...) or an on/off relay.
- ++ Module metering



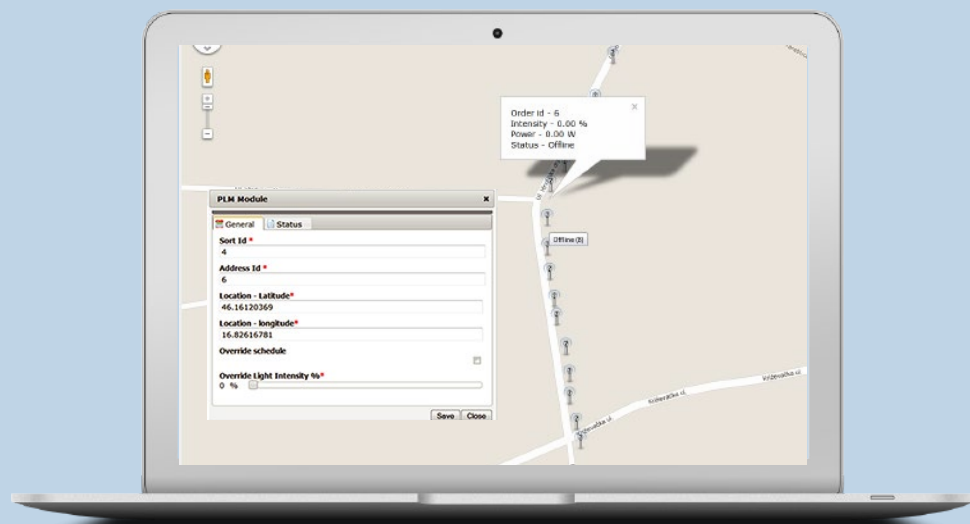
The **sensor module** together with the control module can be incorporated in a lighting fixture, comprising of:

- ++ **Lux sensor** - depending on the amount of natural light, the lamp will light up or be dimmed in order to save energy.
- ++ **Motion Sensor** - if public space / street / park is empty, there is no need for lighting or it may be dimmed. This sensor switches the light on or off depending on the amount of traffic under it.
- ++ **Weather sensors** - due to high humidity in the air (fog), lighting will be enhanced to ensure the best possible conditions on the road.

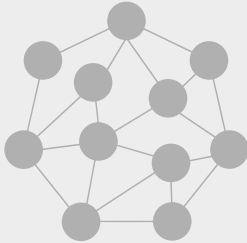


Due to the open architecture, the network of public lighting becomes available from anywhere at any time allowing flexible management.

The user interface is easy to use. With one click on the street light image, options are displayed and they can be changed at any moment.



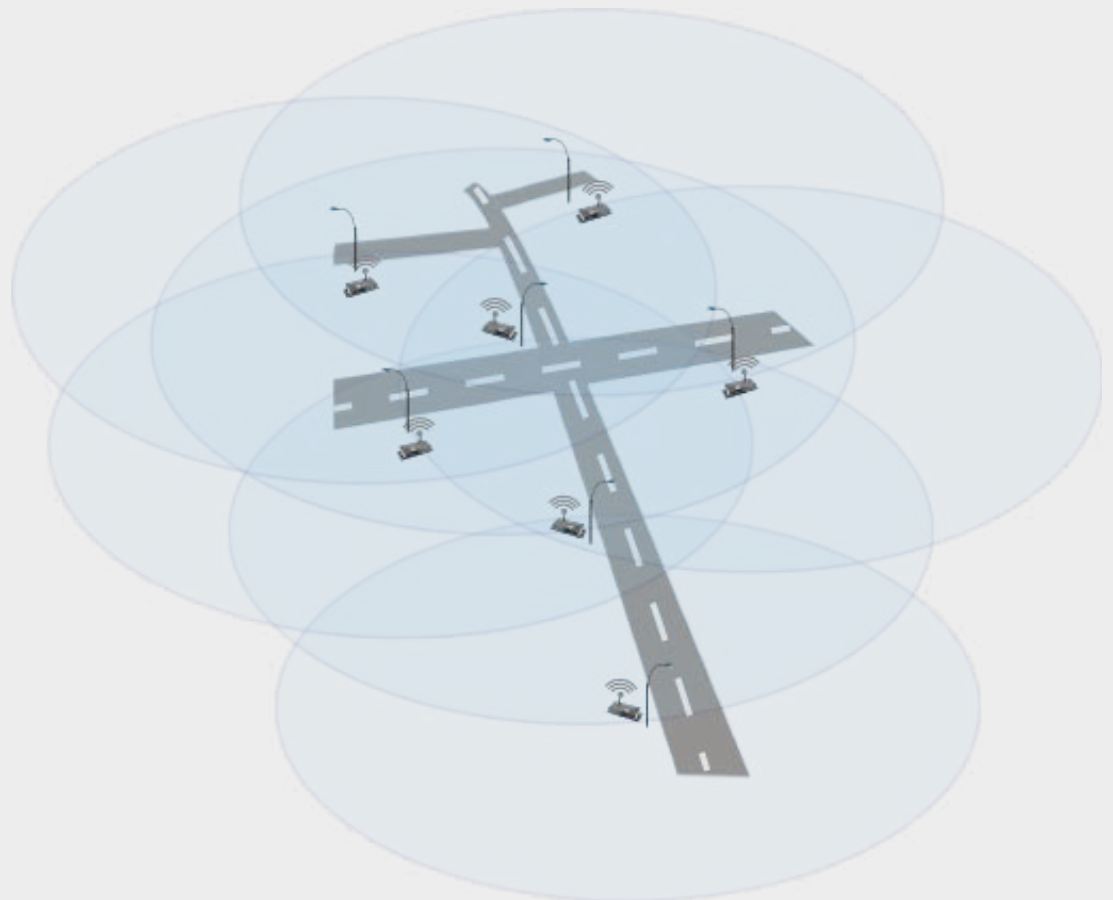
Using reliable communication network



Wireless mesh network - network topology characterized by the absence of a central node through which the entire communication takes place. Instead, each node in the network acts as a transmitter of data to other nodes.

Mesh networks are more reliable than other communication networks because **there are multiple ways in which data can be transferred between users.**

Our solution is ideal for cities that do not have a proper structure because it has a communication range between nodes of more than 1 km.



Benefits of using iLightning

Using iLightning solution achieves:

- ++ Energy saving
- ++ Reduced greenhouse gas emissions
- ++ Improved reliability of outdoor lighting
- ++ Reduced cost of maintenance
- ++ Easier maintenance
- ++ Automatic malfunction alarm
- ++ Dynamic adaptation to user needs
- ++ Constant light output
- ++ Wireless control
- ++ Easy to install in existing infrastructure

It compensates for the reduction of the luminous flux over time and eliminates overexposure.

Luminous flux is reduced over time from 100% at the beginning, to the 80% at the end of light bulb lifespan. Since the efficiency of their light transmission decreases through the years, it is necessary to reduce luminous intensity at the beginning of its life-cycle and increase it over time.



Inducta is a company specialized in ICT solutions adapted to needs of our Customers from various industries.

Our portfolio consists of the following services:

ICT Consulting

Based on our experience and knowledge of the ICT (Information and Communication Technology) trends and developments, together with our understanding of Customer's business, we recommend appropriate ICT solutions to our Customers. Optionally, we select the best solution together with the Customer, depending on the current situation and business plan.

Development of ICT solutions

We design, develop and test solutions according to Customer-specific requirements. In the process we take advantage of our knowledge and experience in the field of ICT solutions architecture, which come from our work on numerous projects in various industries around the world.

Delivery of ICT solutions

Being fully Customer-oriented, we integrate solutions into Customer's technical and business environment, while at the same time providing various forms of education related to the usage of our products.

Products and platforms

Based on our experience in developing solutions, we develop products for a wider market and adjust them according to Customer requirements. In addition, we offer our platforms and modules to other companies engaged in developing software.



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