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THE GEWISS SERVICES FOR THE CITY LANDSCAPE















# SAFETY COMFORT CONNECTION COST SAVING

# 

#### WHICH ELEMENTS TO PRIVILEGE TO CREATE THE RIGHT FUTURE FOR OUR CITY?







#### INTERRELATED SOLUTIONS

Design and realize Interrelated Solutions means to use tools that are able to talk together in a Simple and Intuitive way.



#### EASY ACCESSIBILITY

The digital experience teaches us about how the complexity can be simplified thanks to an easy interface, that translate Data and Products in Services, Flexibility and Accessibility.



The city physical space requires an intelligent evolution. Think and design the space as a net of data that allow a flexible and efficient management of urban landscape.

# PEOPLE FIRST



08.09

Is it possible to respond to the needs of Public Administrations to design the city of the future? What are the goals of the Smart City? **Respect for the environment, Energy Saving and Wellbeing.** 

This is why Gewiss presents the program of Smart Systems and Solutions that make it possible to improve the safety and the efficiency of the city in a simple and intuitive way. Offering complete solutions from design, supply, turn key solutions, maintenance, in a totally flexible way.



Wellbeing



Eco-sustainability



**Energy Saving** 



## Thanks to the combination of solutions **LIGHTING**, **INTERACTIVE** and **MOBILITY**, Gewiss proposes intelligent systems that talk like an interoperable network of poles, which adapt and can be managed through a Simple Interface also open to third parties.





# Interactive

Gewiss made a partnership with URBANA Smart Solutions, the company that has developed an IoT platform that allows for an open and flexible infrastructure, capable of integrating and being integrated into digital ecosystems of any type. For this reason, it is able to guarantee a complete solution in terms of hardware, software and data management that makes the system interactive.

## In this way it will be possible to immediately evaluate the advantages of the integrated solution, Lighting and Interactive,

thanks to the easy and intuitive interface that allows to control and manage in real time all the information about the city.

## **City Landscape Solutions**

Managing and Control urban complexity in a flexible and dynamic way is a possible and achievable goal through the interconnection of systems that have been designed to communicate with each other, or with external devices, in an **intelligent way**.

















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# PARKING Better efficiency and comfort for parking areas



Intelligently managing the parking areas is equivalent to improve the traffic flow of the cities, avoiding unnecessary traffic congestion in search of available parking areas. Is it possible to manage real-time information on the availability of parking spaces in the various areas of the city?





## Parking detection

Have a continuos update on the occupation of places in the parking areas allows to **optimize search times** for drivers and, indirectly, also **improve traffic flows**. Thanks to appropriate sensors it is possible to detect, in real time, occupancy of places and communicate it to users through a smartphone interface or info panels located in strategic points of the city.

Less traffic, less traffic jams greater service for citizen.





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## Parking Sensor Smart Pro 2.0



## Lighting and Safety of Outdoor Parking

**Light the parking areas** is extremely important both for the visual comfort that for the **safety of the citizens**, but to improve energy saving it is possible to use motion sensors that allow to increase the lighting level only when it is necessary. This ensure the right visual comfort and safety for Citizens, ensuring low energy consumption. With the Artificial Intelligence camera it is also possible to detect

dangerous scenario and **alert promptly the security** 







### Camera Al Smart Pro 2.0





## Lighting of Indoor Parking

To optimize the energy consumption and **guarantee the citizen safety,** even the indoor parking lighting can be combined with movement sensor that allow to raise a lighting level only when it is necessary. This can provide the **right visual comfort keeping low the energy costs**.

LED technology and intelligent systems Plus comfort and safety





# Electric refill for an Eco-sustainable mobility

To give greater support to **electric mobility**, protecting the environment and the healthiness of the city, it is possible to add also JoinOn electric charging stations in the parking areas. In this way citizens can also optimize parking hours by recharging their own vehicles. Moreover, the **JoinOn mobile app** also allows users to identify the nearest available column.

Zero emissions, clean air and empowering services for citizen.







# HOW TO DESIGN SMART PARKING AREAS

# THE SMART SYSTEM FOR OUTDOR PARKING AREAS





**Products Outdoor Parking** Lighting


### Smart [Pro] 2.0

SMART [PRO] 2.0 is the range of flood light LED extremely flexible and modular, suitable for outdoor working area illumination, large parking or road junctions. Thanks to the dimmable or DALI control gear, it is possible to manage the amount of luminous flux, based on the necessity of illumination, and manage the luminaires through IoT systems. The wide range of optics and powers, together with to the modularity of the fixture design, it makes this range extremely flexible and suitable to different applications



Products Outdoor Parking Interactive





### Application Suite

A simple and intuitive interface allows monitoring all the functionalities of the new plant SMART in real time. It becomes immediate to interact by optimizing energy costs and increasing safety in public areas.



### Gateway Outdoor

The gateway is been designed to collect radio signals with LoRaWan radio communication protocol. The following Internet connection can be chosen for the Gateway:

- Ethernet connection
- Wi-Fi connection
- 4G connection.
- provided an enabled
- SIM



### vay Camera oor Al

Al is a video device for real times event detection analysis as:

- Data safety analysis
  Data objects classification
- Traffic jam monitoring
- Queue monitoring



### Wireless Node

It's Radio LoRaWan converter from DALI and/or 1-10V signal. Wireless node is able to manage up to a maximum of 64 devices, individually addressable, for a maximum power of 1800W.



### Parking Sensor

Designed to collect:

Car presence

• Residence time is transmitted by radio LoRaWan protocol to the Gateway thanks to a long-lasting battery.



### Metering Node

Developed to provide simples and seamless integration of telemetry and data control of: • Energy parameters

- Gas usage
- Water usage Designed to be used even in extreme condition with strong temperature variation.



Products Outdoor Parking Mobility







### JOINON I-on

[OINON is more than just a simple range of products for charging electric vehicles. It is a component and hardware offer with the addition of a platform, maintenance service included. A complete eco-sustainable offer thanks to the smart network with the integration of the charging stations and the app for smartphone and tablet. The charging stations are equipped with a 3G communication kit connected to the JOINON digital platform, the driver can use the app and activate the I-ON charging units linked to the JOINON network.

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Products Indoor Parking Lighting



### Smart [3]

The elegant shape of the waterproof SMART [3] have been designed to adapt this luminaire to the compact LED technology and give a touch of elegance to any kind of application. SMART [3] has also received the famous RED DOT DESIGN AWARD 2017, which confirms that functionality and design can coexist to offer the maximum performance, without compromises.



Products Indoor Parking Interactive



### Application Suite

A simple and intuitive interface allows monitoring all the functionalities of the new plant SMART in real time. It becomes immediate to interact by optimizing energy costs and increasing safety in public areas.



### Gateway indoor

The gateway is been designed to collect radio signals with LoRaWan radio communication protocol. The following Internet connection can be chosen for the Gateway:

- Ethernet connection
- Wi-Fi connection
- 4G connection, provided an enabled SIM



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Node It's a radio converter

from DALI and/or 1-10V to LoRaWan signal. Wireless node is able to manage till to 64 devices, individually addressable, for a maximum power of 1800W.



### Light Sensor

It's part of a range of sensor modules that have a range of functionalities like lighting control, parking management and environmental factors analysis. The Light Sensor provides presence detection through an active radar and a motion detection range.



### Metering Node

Developed to provide simples and seamless integration of telemetry and data control of: • Energy parameters • Gas usage • Water usage Design to be used even in extreme condition with strong temperature variation.



Products Indoor Parking Mobility







### JOINON I-on Wall

I-on Wall is the wall installation version of the range of electric columns, JOINON. Like all charging solutions JOINON by Gewiss, also I-on Wall it is safe, reliable and conform to the requirements of recharge for any kind of electric vehicles. Thanks to versions equipped with automatic reset, ReStart with Autotest, it is guaranteed the constant vehicle charging and the maximum safety for the user.



### **Energy saving and secure driving**

Street lighting had enormous improvement thanks to the **energy saving** LED technology and to the use of telemanagement, that has allowed to program lighting scenarios during daytime to set lighting output and **optimize energy consumption**.

With the Smart City it is possible to do more and design an adaptive and **intelligent lighting**. Thanks to sensors of movement and detection of the amount of traffic, twilight sensor, pollution and anemometer sensors, it is possible to adapt the amount of light dynamically, based on lighting norms and decide how to manage traffic condition to **protect air healthiness reducing traffic**.







# Lighting only when it is needed

The Gewiss lighting luminaires can be equipped with Telemanagement antenna and twilight sensor to improve the system efficiency that it **turns on only when light is needed**.

The energy saving LED lighting system and the ZHAGA antenna (or NEMA when the luminaires has not a dedicated electric wire), allows a luminous flux management on the base of time setting, guaranteeing a **good energy savings without excessive investments**.







# Traffic-based lighting

Thanks to the Camera of artificial intelligence it is possible to detect of traffic amount and **adapt the lighting level** in a dynamic way, on the base of street lighting norms classification, and respect in a flexible way the relative indication of lighting level. Thus to guaranteeing the **right visual comfort and citizens safety**, together with **energy saving**.





# Pollution control

Thanks to the sensors that detect air speed and pollution level, the lighting luminaires become a tool to obtain even a punctual survey of critical areas of the city. With these instruments it is possible to intervening with timeliness, and in a selective way, **limitating the traffic to improve the city air healthiness**.

More care for the environment and to the air quality





# HOW TO DESIGN SMART STREET ROUTE

# THE SMART SYSTEM FOR THE STREETS





Products Street Lighting



### Road [5]

Road [5] is range of LED street lighting luminaires with a compact design and small dimensions, designed to light from highway to urban centre. The Road [5] range has two types of optics, different powers and many kinds of control (bi-power, stand alone and dimmable), plus the telemanagement feature though Zhaga or NEMA antenna. Road [5] is the perfect streetlight solution for roads, junctions, parking areas, roundabouts and cycle way both urban or suburban.



Products Street Interactive





### Application Suite

A simple and intuitive interface allows to monitor all the functionalities of the new SMART installation, in real time. Interact with the various systems to optimize energy costs and guarantee the become the safety of public areas will be prompt and easy.



### Gateway Outdoor

The gateway has been designed to collect radio signals with LoRaWan radio communication protocol. The following Internet connection can be chosen for the Gateway: • Ethernet connection

- Ethernet connection
- Wi-Fi connection
- 4G connection, provided an enabled SIM



#### Anemometer Sensor

The wind speed sensor allows to detect the atmospheric phenomena with any kind weather condition and send the results constantly updated, allowing to track them and to activate eventual alerts, if needed.



Pollution Sensor

The pollution detection sensor track, through a laser sensor, the amount of particles of: • PM1 • PM2.5 • PM10 in the air and their dimensions. Thus allows a detailed detection of the air quality and of reached pollution level.



### Antenna Zhaga and NEMA

The Zhaga and Nema antennas perform the same functions but it is different the kind of luminaires that can be combined with the one or the other. The Zhaga antenna has a dedicated power line because it has an internal transformer, while the Nema antenna is used when the luminaires do not has a dedicated power line. Both of them have the following functions:

- monitor energy consumption
- to detect the level of ambient light
- manage the lighting consuption



# Visual Comfort, Safety and Control the ingredients of Ideal city



The public areas of the city, or the residential areas, are places that can be affected during the night by crime phenomena. The light can improve not only the comfort and livability of these places, but even reduce the criminality. This factor has been widely demonstrated by specific studies on the topic.

With the Smart City it is possible to do even more. Thanks to the intelligent control systems that are able to detect dangerous objects, during special situations like manifestation ot events, it is possible to guarantee even more safety for the persons.

To design Urban areas more safety and beautiful





# Lighting and Safety

Thanks to the Artificial Intelligence Camera, it is possible make **more safety and livability the urban** areas, specially the residential areas, parks and squares. Events like concerts, manifestations, neighborhood Markets or simple groupings of people can be monitored at the sole purpose to detect critical or dangerous situations. The camera continuous learn from the previous experiences or thanks to the recognition of objects and dangerous behaviors, sending alert signals, to **guarantee a better safety for the persons**.





### Camera Al

# Urban [O3]





# Lighting and Environmental Information

Visual comfort and information on air Humidity and Temperature allow to design intelligent and interactive urban areas, where citizen can socialize and live the city even during the night with the **maximum comfort**.







### \_T&H Sensor

# ---- Urban [03]




# HOW TO **DESIGN** SMART **URBAN AREAS**

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# THE SMART SYSTEM FOR THE URBAN AREAS





Products Urban Lighting



### Urban [O3]

Urban [O3] is a city landscape luminaire designed to be suitable for residential and city centres. The range foreseen different kind of configuration for installation on decorative pole, head pole, side bracket or suspension. It is also available in different types of optics and powers, to match the needs of any kind of context and applications.

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Products Urban Interactive





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### Camera Al

Al is a video device for real times event detection analysis as: • Data safety analysis • Data objects classification • Traffic jam monitoring

• Queue monitoring



### Wireless Node

It's Radio LoRaWan converter from DALI and/or 1-10V signal. Wireless node is able to manage up to a maximum of 64 devices, individually addressable, for a maximum power of 1800W.



### T&H Sensor

It has been designed to detect the level of:

Temperature
Air humidity
that it is transmitted
via Radio LoRaWan.
It is suitable for
indoor or outdoor
environments and
provided of a long-lasting battery,
thanks to an efficient
monitoring system.



### Metering Node

Developed to provide simple and seamless integration of telemetry and data control of:

- Energy parameters monitoring
- Gas consuption

• Water consuption Designed to be used even in extreme condition, with wide temperature variation..



# **THE GEWISS SERVICES** FOR THE CITY LANDSCAPE

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## The Gewiss services for the design, installation and maintenence









# WE TAKE CARE ABOUT ALL!







































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