

SMART CITIES

Smart Outdoor Lighting

HOW CAN TELEFÓNICA TECH HELP?

It manages outdoor lighting in a more efficient and sustainable way, saving energy, optimizing operation and maintenance, and helping to reduce light pollution.

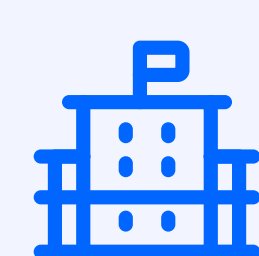
Energy efficiency and sustainability are priorities for urban areas. Traditional street lighting accounts for between 40% and 70% of local councils' electricity bills. It is therefore essential to adopt energy-efficient solutions that enable smart remote control of lighting systems.

Telefónica Tech offers a Smart Outdoor Lighting solution that enables the **remote management of luminaires in real-time** using IoT technology. Its main objective is to facilitate the control and maintenance of luminaires through a smart system, contributing to energy savings and sustainability.

WHO IS THIS SERVICE FOR?



Town halls: Municipalities that want to migrate their outdoor public lighting to LED luminaires or that already have LED technology and are looking to reduce costs associated with energy, maintenance, and light pollution.



Companies and public bodies: Entities that want to optimize and manage their outdoor lighting systems in a more sustainable and efficient way.

OUR VALUE PROPOSITION

Our service

Our point-to-point Smart Outdoor Lighting solution combines technologies such as IoT and Artificial Intelligence, optimized and managed by Telefónica.

Thanks to the **installation of *plug & play* remote control devices** in the luminaires, managed by an advanced control platform, you will be able to remotely manage the lighting system. This includes turning the lights on or off according to specific needs, as well as efficiently monitoring and regulating the lighting.

Our Artificial Intelligence-based platform also offers **recommendations on lighting profiles adapted to the conditions of the city**, taking into account the movement patterns of citizens, points of interest, and weather conditions. This will allow you to maximize the energy efficiency and sustainability of your street lighting.

What does it allow you to do?

- › **Remote management and remote metering of point-to-point lighting:** Remotely control each luminaire individually.
- › **Switching on, switching off, and dimming:** Adjust lighting according to the specific needs of each moment or location.
- › **Optimization of lighting profiles:** Take advantage of urban mobility data and other sources to customize lighting according to environmental conditions.
- › **Energy consumption monitoring:** Obtain accurate real-time data to improve energy efficiency.
- › **Fault and alarm management:** Detect incidents or problems in the lighting system and receive immediate alerts.
- › **Maintenance task management:** Plan and optimize maintenance operations to reduce costs and response times.

Benefits

Greater energy efficiency

Thanks to IoT technology, public lighting optimizes energy consumption, generating significant savings on municipalities' electricity bills.

Increased efficiency in operations

The solution provides a comprehensive view of the lighting system, streamlining the identification and resolution of incidents quickly and efficiently.

Savings in operating costs

Remote management and monitoring extend the useful life of the luminaires, reducing maintenance costs and maximizing the initial investment.

Increased citizen satisfaction

Efficient lighting management, reduced light pollution and improved response times to incidents offer a higher quality service to citizens, increasing their satisfaction.

EQUIPMENT, TEAMS AND ACHIEVEMENTS

Our teams

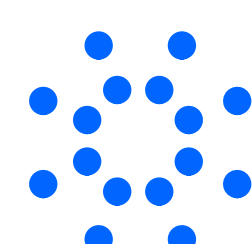
- › **+ 25.000 remote control nodes deployed** in outdoor street lighting.

Telefónica Tech's differential value



End-to-end solution

It integrates IoT devices, Big Data, Artificial Intelligence, and NB-IoT connectivity, offering a single point of contact for incident management and maintenance, simplifying the operation for the customer.



Data-driven optimization

Provides smart recommendations for lighting profiles through massive analysis of mobility data, points of interest, and weather conditions, maximizing energy efficiency and promoting sustainability.

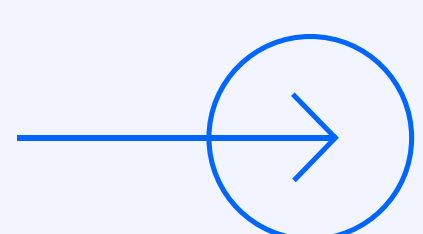
BUSINESS MODEL

We offer a comprehensive **end-to-end service** that covers everything from the provision of IoT nodes for remote management of individual luminaires to connectivity and a management platform, integrating an advanced analytics layer. This approach enables companies responsible for managing outdoor public lighting in municipalities such as energy service providers, engineering firms, installation companies, and maintenance providers to enhance energy efficiency and sustainability, delivering a better service to citizens.

RELATED SERVICES

Smart Parking

Accurate, real-time information on city parking zone occupancy. This solution enables better management and planning of available resources, enhancing operational efficiency and improving citizen satisfaction.



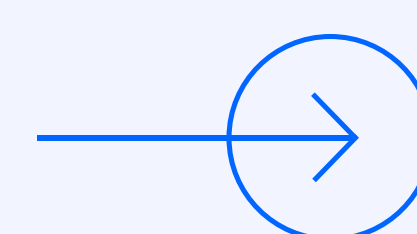
AI & Data Consulting

We design a master transformation plan centered around data, guided by your business priorities. Based on these priorities, we build a technological ecosystem of IoT and Artificial Intelligence, enabling your company to leverage the potential of these new technologies to generate new revenue streams, optimize costs, or reduce risks.



OT & IoT Security Professional Services

Our experts support you in developing industrial cybersecurity master plans, conducting regulatory compliance analyses, providing technical consultancy, and performing penetration tests, including security assessments for robots.



Contact us to start the digital transformation of your organization.

