

Case study

Intelligent, connected and flexible lighting

Torre de Cristal building, Madrid



At 52 floors and 250 m in height, Torre de Cristal is the tallest building in Spain.

Customer challenge

In 2023, its lighting system was completely renovated with LED luminaires managed by an Interact connected lighting system from Signify, achieving energy savings of 50% over the previous lighting system.

Since it was first constructed, the Torre de Cristal building has been a landmark in Madrid. Located in the Cuatro Torres Business Area, it integrates cuttingedge technological advances, including a bioclimatic glass façade.

When considering a lighting system renovation, the owners wanted the most updated and energy-efficient solution possible, one that would be future-proof and ready to accommodate future technological innovations.

Real-time data analysis, accessible via an app or the web, facilitates flexible and efficient management."

Jorge González Cortés, Vice President, Gesternova





The solution

Mutua Madrileña, the company that owns Torre de Cristal, wanted to work with a single supplier for the renovation of the building's lighting system.

Signify specified 500 wireless button panels and 6,800 new Philips PowerBalance LED luminaires, which integrate a multisensor that allows the lighting to be adapted based on the occupancy of each room or the amount of natural light entering the building.

The project also included an Interact connected lighting management system. Interact is an advanced, flexible, scalable, and future-proof system that empowers both building owners and employees to personalize the lighting levels in each workspace.

The new lighting system enables building owners and office employees to regulate, personalize, and adjust light levels according to the specific requirements of each moment or work to be done. Interact gives building managers a complete overview of lighting consumption and usage in real time, and helps to streamline and simplify maintenance.





A new lighting system to meet the needs of Torre de Cristal

The Torre de Cristal building boasts significant architectural innovations, and has been awarded the maximum energy certification: Class A. The concern for energy efficiency was an essential consideration in the planning for a lighting system.

The combination of cutting-edge LED luminaires and the Interact connected lighting management system reduced the building's lighting energy consumption by 50% over the previous system, while at the same time increasing lighting levels throughout the tower. A new IT network dedicated entirely to the new lighting management system was installed as part of the renovation.

The result is an exceptional lighting experience, better visibility, and greater visual comfort, allowing employees and visitors to conduct their business in the best possible conditions. The Torre de Cristal now possesses a system that guarantees maximum flexibility in light management.

The lighting renovation was performed in coordination with the employees and personnel in the Torre de Cristal, in order to avoid causing any interruption to daily activities.

Key benefits



Flexible lighting

Interact connected lighting enables individual management of each room and space in the building. Interact makes it possible to regulate light intensity, detect occupancy levels, and adjust the color temperature according to changing needs.



Improved maintenance

Interact enables monitoring and management of the lighting in each workspace, both point-to-point and in zones. It is a totally flexible system that can be used to regulate the lights in real time according to the needs of each employee at any given moment.



Comprehensive lighting service

At Torre de Cristal, Signify delivered a turnkey lighting project, providing everything from the initial lighting study to the luminaires, the control system, and system commissioning. As the sole supplier, Signify supported the client from the concept to completion.



Intuitive system

Interact offers a simple and intuitive interface, which allows the owners to easily and centrally manage the lighting of the entire building, and to adapt the lighting and ambience of each workspace individually to support the needs of each employee.





