

Real-time Parking Data in Buildings

Powered by MultiTech



Libelium's IoT parking technology is helping one of the biggest hotels in the center of Madrid to optimize the performance of its parking spaces.

This hotel has become a tourist attraction in Madrid. In its first year of activity, an average of 2,500 a day have visited its 360° terrace-viewpoint on the 27th floor. Since August 2019, its rooms have welcomed 130,000 people, and now is one of the capital's landmarks.

Located in an emblematic building completely renovated, the hotel has almost 100 parking spaces across two floors. Due to its location in the nerve center of leisure, commerce and business in Madrid, these facilities are available to both guests and outsiders.

The company responsible of the hotel surveillance services, Prosegur SIS Spain, chose **Libelium** IoT technology to provide a control system for hotel parking occupancy levels that allows real-time monitoring and a forecast of such occupation.

"Prosegur generates added value to the surveillance services through innovative technology", says Antonio Enrique Salas, who leads the area of innovation, engineering and support for special projects in Prosegur SIS Spain. In fact, this leading multinational security company has been developing innovative surveillance services with IoT technology.

Problem

Understand real time occupancy of hotel parking and guarantee vehicle safety.



Solution

MultiTech Conduit® IP67

a ruggedised IoT gateway solution, specifically designed for outdoor LoRa public or private network deployments.

Benefits

Real time management of the hotel parking lot and optimizing the limited vehicle spaces.

What has been the challenge of this Smart Parking Project?

Know in real-time the occupation of the hotel's parking lots and guarantee the safety of the vehicles of both the guests and outsiders.

Which IoT solution has been implemented for this project?

100 Libelium parking nodes installed sending the data to the control panel via LoRaWAN'.

Management of parking places and users at the hotel

One hundred nodes installed in each of the hotel parking spaces send the signal through the LoRaWAN communication protocol using two MultiTech gateways, one for each garage floor.

Through a simple web interface, developed by Libelium's partner, Tap Consultoría, the occupation level is shown in real-time. This way, it is possible to assign free places according to the type of vehicle, selecting the specific place, and assigning the necessary days and hours to the end-user.

The main objective of the IoT platform is the management of the parking lots in the hotel and the users that utilise the spaces in different formats: temporary use, reserved spaces for special occasions and assignment.

Then, the system contemplates two types of end users: users with assigned spaces and temporary visitors.

- In the first case, for the person who has a fixed place assigned to their vehicle, their space will always be marked as assigned (in orange). When the node detects the vehicle, it sends the information to the panel where a red sign marks the space.
- In the second case, temporary users must be previously registered in the system to request the reservation and use of a space for a certain period of time. The parking lot manager must validate this request and, once it has been validated, the space is reserved on the parking for this period. If it is denied, the space will be available.

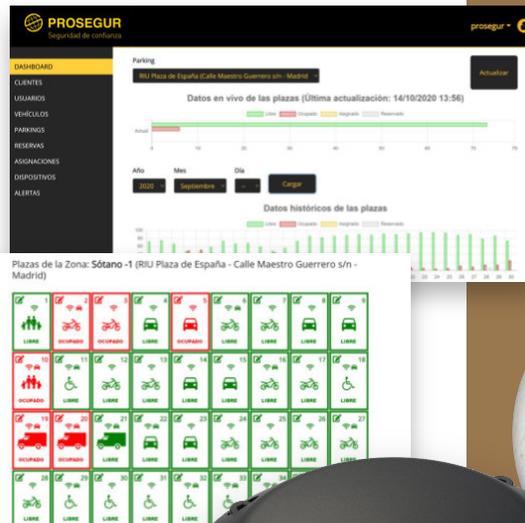
Internet of things applied to the hotel parking panel

Since the control panel includes an analytical area, the manager can view the temporary occupation data and the use of the different clients, parking lots, zones and spaces. It is also possible to collect information about the time of use.

The administration staff at the hotel reception assign the places to the users. In this way, the management of the parking lot is centralized fulfilling one of the requirements of the project. This minimizes the infrastructure and improves the usability.

Ready to learn more about how MultiTech products can take your business to the next level? Contact our team of experts online at MultiTech.com today!

For additional information, contact: sales@multitech.com



"In cities like Madrid where the environmental impact of traffic is so high, putting private parking spaces at the service of citizens and maximizing performance from its parking facilities is a priority."

*Alicia Asín
CEO
Libelium*

MULTITECH

www.multitech.com

2020-12 · © 2020 Multi-Tech Systems, Inc. All rights reserved.