

Infinet Wireless deployed its wireless technology in more than 110 smart posts to make the community of Las Condes in Santiago de Chile a safer place



In 2019 Infinet Wireless' smart security and connectivity technology was deployed in the Las Condes community in Santiago, improving safety for the residents. The more than 110 smart posts feature strategic interconnection points for the complete monitoring of zones (squares), panic buttons, Wi-Fi and PTZ cameras for the citizens' security.

Mission

The Las Condes community is a neighborhood in the northeast of Santiago, Chile, which together with Providencia and the community of Santiago embodies the commercial, financial and touristic hub of the capital.

Its commercial zone is the most vibrant in Chile. Situated between Avenida Andres Bello and the El Golf neighborhood, two large hills, Calan and Apoquinado, stand out as landmarks.

When the organization "Seguridad Las Condes" decided to strengthen citizen surveillance and offer connectivity and interaction with control personnel services, it was deemed necessary to install more secure technological tools.

Solution

WebPCX is a Chilean IT company with a wealth of experience in the installation and maintenance of security cameras and IT systems since 1999. The company has rapidly become a key player in the provision of technology solutions in the smart city and public security sector.

Ticashop Chile has been a partner of Infinet Wireless since 2017. It plays an important role in Chile's technology market and has established its presence on a national level. The company specializes in the wholesale distribution of communication and security solutions and offers high-end world-renowned brands such as Infinet Wireless.

WebPCX developed a smart post designed to improve security and quality of life in the Las Condes municipality. Installation began in February 2019 and last year the project progressed with the implementation of more smart posts, together with Infinet Wireless' radio links. The 110 smart posts were delivered in stages over 2019 and 2020 to the complete satisfaction of the client; residents and visitors of the area now enjoy a complete service.

Each smart post is equipped with enhanced security tools, such as panic buttons, and mobile PTZ cameras to monitor the squares; video and audio is transmitted via the wireless links of Infinet Wireless. In addition, a Wi-Fi network has been included for the use of visitors to the squares, as well as megaphones with SOS buttons, which can alert security personnel in the event of an incident. Communication goes directly to the municipality's monitoring room, namely, to the control room.

Coverage and details

The project consisted of placing Qmxb base stations on Calan Hill to interconnect the squares and the XG1000 solution towards the monitoring room. Featured is an XG1000 link and three radio base stations with beamforming technology and forty InfiLINK sets. The distance covered is 3-5 km with a capacity of 20 megas per post or square guaranteed. Due to the excellent performance of the wireless solutions, to date the project has pole concentration nodes where continued growth is predicted along with further installation of equipment from the Quanta family of Infinet Wireless.

In the initial phase, TicaShop went with the client to test the terrain. A demo point was installed, which took 4 to 5 months. The first posts were placed here, along with an antenna that transmitted the full signal. TicaShop also gave recommendations, carried out the engineering survey, provided pre-sales and after-sales support and carried out the training and certification of the team.

“The most complicated part of the project was that a competitor’s brand was already installed in the same tower, occupying a large frequency spectrum. Faced with this complex issue, Infinet Wireless helped us hugely, thanks to its spectral efficiency, which performed extremely well from its installation, delivering the required 20 megas per point,” confirmed Cristian Laude, manager of WebPCX.

Mr. Laude, as an engineer himself, opted for Infinet Wireless because of the high level of reliability it offers and the characteristics represented by the brand in complex or intensive spectrum management tools, saying that as the tower was already congested, an expert brand in radio frequency was needed.

Results

“The client and the users enjoy essential benefits provided by Infinet’s solutions. When it comes to spectral efficiency, a signal in excess of 20 Mbps was delivered and less Hertz was used. I consider that there will be more projects with this client in the near future, with a view to expand,” confirms Nicolás del Valle, technology manager of Ticashop Chile.

“It is important to highlight that in the sectors where smart posts were installed there was a lot of electromagnetic noise and sightline obstruction due to the number of trees in the area. With the technological implementation and Infinet’s products we were able to go above and beyond the expectations and challenges of the client,” concludes Mr. del Valle.

Requirements:

- Achieve better spectral efficiency
- Provide safe and efficient technological solutions for a citizen’s security project
- Achieve the lowest possible latency (lag)

Solution:

- Base units QMXB
- Units XG1000
- Units R5000 Lite

Benefits:

- Important growth of the Citizen’s project with Infinet Wireless’ solutions
- Higher bandwidth
- Low latency (lag)
- Increased reliability
- Multiple levels of SLA for different types of traffic