Flexible surveillance solution adapted for modular development.

Axis high quality video surveillance part of a unified security solution in Liberty Technology Park.



Organization:

Liberty Technology Park Cluj

Location:

Cluj-Napoca, Romania

Industry segment:

Commercial

Application:

Building and office security

Axis partners:

Starnet Consulting, Milestone Systems

Mission

With nearly 46,880 sqm, Liberty Technology Park is the first Romanian technological park. It is located in Cluj Napoca and represents a dynamic ecosystem for local and international companies driven by that particular vision that makes ideas come to life and businesses thrive. Liberty Technology Park is not just offering renting space, but an opportunity to get in touch with companies in IT&C and R&D. The mission of the proposed Starnet Consulting project was to design, implement and configure a smart and modular surveillance system for the entire park. This was needed since the space of the park is continuously expanding and needs to be secured at all times.

Solution

The rental spaces offered by Liberty Technology Park are growing exponentially and have several stages of development. Therefore, the proposed and implemented solution developed by Starnet Consulting is based on specific hardware and surveillance algorithms that acquire information from various sources and interact with external systems.

Thanks to this architecture based on modules and components, it is possible to capture different types of data provided by installed sensors and cameras, analyse them and return a complex response on which the security staff can rely. The centralized data offers better and faster results so that the security stuff does not need to verify the results of each sensing devices and drag out the time it takes to make a conclusion.

Result

So far, the video surveillance solution integrates more than 60 Axis network cameras. AXIS P13, AXIS P14, AXIS P33 and AXIS M30 Network Cameras are used to monitor both outdoor and indoor areas, focusing on entrances, parking barriers, elevators and hallways. The system allows the management and security personnel to connect remotely to the surveillance system at any time, offering live streaming images on demand. The video surveillance system is now part of a unified communication solution that includes voice data, wireless, access control and burglary detection – all using the same copper and optical fiber infrastructure.



"The technological park is based on a special modular concept which allows customers to rent more space once their businesses expand. We found in Starnet Consulting the partner that we needed to develop an IT and security infrastructure that is scalable and flexible. We chose Axis products and technologies because they have high levels of reliability and performance."

Nina Moldovan, CEO Liberty Technology Park Cluj.

The ideal tech habitat

Liberty Technology Park Cluj was built in a revolutionary space, designed using a unique architectural concept that provides exceptional growth and development conditions for IT&C and R&D companies. The customer's profile accommodated in the Liberty Technology Park Cluj completes Liberty's technology concept design. The park has become the home of numerous software development companies that are developing iOS and Android applications.

Flexible, but powerful

So far, more than 60 Axis IP cameras from the AXIS P13, AXIS P14, AXIS P33 and AXIS M30 series have been installed and integrated with a series of cutting-edge software solutions. This mix is capable of offering a high level of security for the entire area, both indoors and outdoors.

Details are important

As a very large site home to many companies, the Liberty Technology Park Cluj needed to secure its surroundings with a very high level of attention to detail. This exact purpose lead to the choice of using the four Axis series, as all models are able to provide incredible, high quality videos. For example, one of the chosen models was the AXIS P1365-E, which is a fixed network camera that is outdoor ready and capable of offering 1080p video in 50/60 frames per second with reduced noise and motion blur, including in demanding light conditions. Alongside the quality, the high density of pixels also means that fewer cameras are needed to monitor an area compared with regular resolution cameras. AXIS P1365-E supports WDR - Forensic Capture capability. Therefore, the video is highly optimized for forensic purposes and provides an extraordinary level of detail - even in scenes with very complex light conditions. This means that the security stuff will have the possibility of doing very good facial recognition and identification as well as an overall review of video footage for use as evidence.

AXIS M3006-V was another camera used for this installation. The model is a fixed mini-dome type camera,

with a 3MP sensor capable of delivering 1080p images. It was chosen based on its quality of image and also because of its capability of covering a wide 134° angle. With its wide horizontal and vertical angles of view, as well as its high resolution, the camera offered complete coverage when installed near a corner. Therefore, fewer units were necessary to cover the space.

Discreet surveillance at its best

Besides the need for top quality sensors, the design of the products was also important, especially for indoor surveillance. This need lead to the choice to use the AXIS M30 series. AXIS M30 are fixed mini-domes for indoor and outdoor use. They are compact and vandal resistant and can offer a wide angle and $360^{\circ}/270^{\circ}/180^{\circ}$ panoramic views. The cameras were installed on the walls and ceilings and are hardly visible – most people think they are simply fire detectors. In this way, the comfort of the people is not affected, as they don't feel the "digital eye" on them at all times.

Hardware and software implementations

In order to provide secure access for vehicles in the parking areas, the Axis cameras were used to provide video streams for Metrici LPR. The software uses the video data to open and close the gates based on validated plate numbers. Also, the software helps the security staff to keep track of every car that enters or leaves the parking lot on a 24-hour basis. The plate number recognition functionality has 100% accuracy both day and night, regardless of harsh weather conditions or vehicle speed. This is possible due to the technical superiority of the Axis cameras, which allow optimal streams in any conditions, and the Metrici software's top of the line software algorithms. If unregistered cars try to enter parking areas, the software automatically alerts the security staff and the access barrier does not open. For this consideration, the VMS provider Milestone Xprotect® Professional was also chosen. The Milestone solution was chosen based on the fact that the system is highly scalable, has a modular design and enables the security staff and managers to manage, control, view, search and export live or recorded image feeds from the Axis cameras.













