



A City Intersection Monitored by the Local Police Department – Cameras over Wireless Connection

Reason for Upgrade

The Police Department of a major Midwestern city had an antiquated video surveillance system to monitor high-traffic intersections. The previous integrator did not provide adequate support for the Hikvision cameras they installed several years ago, and the system was not working anymore. With the cameras out of service and wireless chains not communicating, they called i2c Technologies to help design a reliable and affordable system.

Our Solution

i2c Technologies established a solid wireless connection between the police station and the intersection. From the roof of the tallest building in the city we aimed a chain of wireless units around several city blocks to reach the intersection. With an established data connection, we were able to feed video directly back to the station for live monitoring.

Two fixed Axis P3228-LVE 8MP cameras were mounted on utility poles on opposing corners, creating a square zone focused specifically on the intersection. In conjunction with the fixed cameras we installed an Axis P5624-E PTZ camera that can be used to focus in on known trouble spots for a more detailed capture. Additionally, with the use of Vaxtor, a license plate recognition (LPR) software, onboard an Axis 1786-LE camera we were able to dedicate a camera to capture license plate data.

Four cameras and LPR software can be a strain on bandwidth but the Ubiquiti wireless units we installed have a high throughput and can handle the demand. However, in the event a wireless unit went down the police force wanted redundancy for recordings. Therefore, we mounted a local edge-based server at the top of the utility pole and hardwired it to each camera so that in case a wireless unit went down there would never be lost recordings. Additionally, an officer can remotely connect to the server at the pole with their laptop and download the video footage.

The Lieutenant who was in charge of this project was very pleased with the system we designed and is impressed with the reliability and quality of the cameras. They plan to cover the entire city with a similar system at every major intersection. With the combination of license plate recognition and higher optics cameras the police department is more equipped to protect the community and efficiently utilize their resources.

Total Price: under \$10K

Camera Models:



Axis Q1786-LE

Robust, first-class 4 MP video with 32x optical zoom



Axis P3228-LVE

Streamlined outdoor-ready 4K fixed dome for any light conditions



Axis 5624-E

Continuous 360° pan in HDTV 720p