

Pyeongtaek City installs cutting-edge security system with Axis network cameras.

IP-based security system provides operators with reliable and efficient crime prevention tool.



Organization:
Pyeongtaek City

Location:
Gyeonggi Province, South Korea

Industry segment:
City surveillance

Application:
Public safety

Axis partner:
Marblequest

Mission

Through balanced development, promotion of public welfare, a culture of sharing, and public service for citizen satisfaction, Pyeongtaek City makes all efforts to realize its vision of becoming a leading cultural city. Pyeongtaek City puts public safety and security on top of the list to create a better living environment. With recent crimes in the southern parts of Gyeonggi Province making headlines, it became a must for the city to improve its security system and increase the feeling of safety of workers and visitors of the Center for International Exchange where foreigners and locals are expected to meet and communicate frequently.

Solution

Initially, the city considered expanding its analog CCTV system but quickly realized the limitations in terms of surveillance coverage and integration possibilities. The analog system would also imply high maintenance and labor costs. Finally, Pyeongtaek City decided to opt for a cutting-edge IP-based security system based on network cameras, thereby ensuring low system maintenance and

operating costs. Pyeongtaek chose Axis Communications for its extensive experience in similar applications locally and around the world. The city introduced AXIS 214 PTZ and AXIS 216FD Network Cameras, and AXIS Q7401 Video Encoders for special areas where only analog cameras were supported.

Result

Pyeongtaek City established the CCTV network for special circumstances and attached the analog cameras to Axis video encoders for full interoperability. In areas where new installation was required, the city introduced Axis network cameras, enabling operators to monitor wider areas with excellent image quality. Unlike analog cameras, only 30% of network cameras were needed to monitor the same areas. Work efficiency has greatly improved thanks to full compatibility with third-party systems, and the Axis products' ability to minimize the use of bandwidth and storage space has also provided a highly cost-effective solution.

"We introduced the network video system to address the problem of display distortion of analog image and deterioration of cameras. The Axis network cameras and video encoders dramatically improved the quality of images. The SSL solution also provides an opportunity to ease concern over privacy. As such, I am very satisfied with the system."

Pyeongtaek City official.

A reliable and cost-effective video surveillance system

The city installed AXIS 214 PTZ and AXIS 216FD Network Cameras, and AXIS Q7401 Video Encoders. A single AXIS 214 PTZ Network Camera is capable of monitoring areas that used to require two or three analog cameras, thus minimizing blind spots. The sensor in AXIS 214 PTZ is able to detect fire by sounding an alarm and sending an alert message.

In addition, the new image compression technology H.264 in the AXIS Q7401 Video Encoder helped reduce bandwidth consumption for the distribution of video feeds and ensure consistent data transfer speed. As a more advanced technology than MPEG-4, H.264 practically doubled the transfer speed.

PTZ and zoom enable visitor monitoring and crime prevention

With the 18x optical zoom, AXIS 214 PTZ can monitor any distant area with exceptional clarity; in fact, even a vehicle's license plate can be identified within 50 meters from the camera. In addition, it can detect any object in the darker areas of the scenes, thanks to the 128x backlight compensation. "It allowed us to monitor every corner of areas vulnerable to crime and view the scenes precisely regardless of circumstances. Thanks to this surveillance system, we can track criminals easily and further prevent crime," a city official said.

The camera's sensor and pan and tilt function are used for more aggressive crime prevention. According to the city official, the pan and tilt camera - which can move up, down and right, left and identify an object in detail - plays a significant role in preventing crime. Specifically, it can detect a suspicious person or object, thus helping protect against potential danger. Moreover, since it shows detailed images of the scenes by zooming in on particular areas quickly and easily, operators can respond to any emergency immediately. The outside microphone and speaker also allow listening to audio on the spot and sending a warning, thereby enabling the city to ensure public security.

Strict security for recorded images using SSL

To avoid image and data leaks, Pyeongtaek's security system is configured to transfer data through SSL. All images recorded by the Axis network cameras are encoded through SSL and transferred to the center, thus preventing hacking. By establishing a security system that ensures physical and information security, the city can prepare against all kinds of risks or threats to public safety.

