

# Protecting the present and future with Axis network video at Sookmyung Women's University in Seoul.

Network video enables immediate response to emergencies and theft reduction.



Organization:  
Sookmyung Women's  
University

Location:  
Yongsan gu, Seoul,  
South Korea

Industry segment:  
Education

Application:  
Campus security and  
prevention of theft

## Mission

Since Sookmyung Women's University began promoting computerization of library tasks in 1988, it has operated loan, catalog, and search systems. In 1999, in addition to operating an electronic information room, it also constructed a digital library. Since then, the University opened a website of video archives, developed an integrated electronic library system and in 2005, completed extension and renovation of the library. Because of the library remodeling and construction, alternative ideas were needed to prevent the loss of data and equipment, and to effectively manage areas where there were no available onsite managers.

To resolve campus security issues, and at the same time prevent thefts of library's assets and personal belongings, the suggestion was made for real-time monitoring, storing and searching using network video technology. The existing analog CCTV system in place proved inefficient because of image quality degradation, making it difficult to ensure positive identifications. The system

needed to provide evidence with high-quality video in case of incidents, high reliability, and utilize the existing network infrastructure in a cost-effective manner. The Axis network video solution fulfilled all these requirements.

## Solution

In 2006, timed with the completion of the first phase of building renovation, an Axis network video system was introduced. In 2007, during the second renovation phase, additional network cameras were installed. The University built an IP-based video surveillance system, which manages the campus library. An approximate total of 69 network cameras were installed, including AXIS 206, AXIS 207 and AXIS 211 Network Cameras, with all configuration done through the network.

"The network cameras with progressive scan provide a much better image quality compared to the existing analog cameras. Deployment of the network video solution and overall system configuration were very easy. We are satisfied with this cost-effective system that provides sharper images and intelligent features such as motion detection, enabling us to trigger video recording only on specific events."

Seong-Hee Park, Team Director of electronic information support team.

## Result

By adding the network cameras to the existing network, the University achieved major cost savings. In comparison, the former analog CCTV system generated high installation and maintenance costs and was difficult to maintain. The network video system resolved this thanks to seamless integration into the network infrastructure, enabling the use of one network cable for intelligent detection and the transmission of video and audio surveillance feeds. The University can now ensure better campus security and theft prevention using more intelligent, event-driven surveillance.

## Effective management with intelligent network cameras

With existing analog surveillance cameras, all images were collected and motion detection recording performed in central DVRs. If they wanted external sensors and audio detection, separate wiring was necessary for every camera and between the central DVRs. With Axis network video products, recording is performed intelligently using features such as audio detection, alarm sensor surveillance, and high sensitivity motion detection. This enables more event-driven surveillance, and better management of bandwidth consumption and efficiency.

## Taking full advantage of Power over Ethernet (PoE)

The network infrastructure was already established in all areas of the university buildings, so compared to expanding the existing analog CCTV system, the cost could be reduced dramatically. During installation of surveillance cameras, the electric installation takes up a large part of the whole construction. Costs for electric wiring of cameras can be quite costly, taking an electrician's labor costs as well as costs for electrical materials such as cables, fuse-box, etc. Thanks to Power-over-Ethernet support, the network cable could be used to power the camera, reducing not only installation costs but also installation time. Uninterruptible Power Supply systems are added to PoE switches, so that if the elec-

tricity goes off by mistake, network cameras, switches and recording servers can continue to operate. In the case of future school building extension, PoE was a key requirement of the customer to ensure easy and cost-effective expansion of the system.

## Increased ability to cope with an emergency

With Axis network cameras, the situation inside the library can be monitored using information desks on each floor. In the case of reading rooms open 24 hours a day, full monitoring and recording on event is possible during unattended times. In the case of incidents and emergencies, immediate response is also possible. And by identifying the number of users in each reading room, the reading rooms without students can be closed, reducing usage and maintenance costs.

## Increased theft prevention effect

Theft occurrence rates have been significantly lowered for library's assets and personal belongings. Unauthorized removal of books for example was dramatically reduced. In spite of the controversy of possible privacy violations, the library staff admits that the network cameras were desperately needed. A Sookmyung Women's University library official said: "The whole system configuration is very simple and good. For the purpose of safety and crime prevention, network cameras were installed and operated. But it was also clear that they can cause problems as to infringement of individual privacy rights. That is why the purpose for introducing cameras needed to be clear, just as it was important to establish the right data recording processes."

## Continuing extension, the leap to an advanced IT library

After building the West Wing of the Main Library, and the recently successful deployment in the administration building and in other campus buildings, the University plans to expand the system further. The library has been receiving a great deal of attention as an advanced IT library through domestic and international book fairs and events.



Black Hound, the recording monitoring software from Axis ADP partner Nine Plus was introduced.



With one LAN cable alone, all video, audio, motion surveillance and tampering alarm are resolved.

