

National Gallery of Denmark – priceless art pieces protected by discreet Axis cameras.

Axis network cameras allow gallery visitors to focus on the artwork without being distracted by cameras and cables.



Organization:
National Gallery of
Denmark (SMK)

Location:
Copenhagen, Denmark

Industry segment:
City surveillance

Application:
Safety and security,
theft and damage
prevention

Axis partners:
G4S, Mirasys,
EET Europarts

Mission

The National Gallery of Denmark (SMK) in Copenhagen is the Danish government's main museum for visual arts. The gallery has approximately 115 employees and 60 students who occupy the building. Extremely valuable and priceless artworks are on public display in the galleries. While the art pieces must be protected from theft and damage, the employees and the thousands of people visiting the gallery daily must also be safe and secure in the building. In 2012 the entire CCTV system was extensively upgraded. An important consideration was that the cameras should be discreet and not distract attention from the paintings, and that they should also be easy to move, as the building is often reorganized internally.

Solution

Approximately 60 analog cameras were replaced with AXIS P3304 Network Cameras, which mainly monitor the public areas of the gallery. The video management software, Mirasys NVR 5.1, was supplied by the Finnish company Mirasys. SMK still has a large number of analog cameras in the system, but the plan is to replace even more of these with IP cameras.

The remaining analog cameras are currently connected to AXIS Q7406 Video Encoders that convert the analog signal to IP and in that way even the older cameras are integrated into the system. This solution was developed jointly with Axis partner G4S in Denmark.

Result

Everyone involved in the installation is satisfied with this new system. Gallery visitors – the most important group – do not even notice the cameras. Exhibition designers need not concern themselves with the cameras, as they are discreet and easy to locate. The security manager can simply install cameras after reconfiguration, while security guards appreciate the advantages provided by the system. They can design their own views with the cameras located in their area and also see the exact location of each camera in the building using floor plans. Since the entire system is based on an open platform, it can be simply upgraded in line with rapid technological development. There are also plans to exploit the opportunities of using intelligent applications, for example, to calculate the number of visitors and analyze how they move around the building.

"Our exhibition designers find the cameras fantastic. We're not used to hearing that."

Mike Coffman, Security Manager at the National Gallery of Denmark.

A building in constant change

The exterior of SMK is the same from year to year, but the interior changes shape two to three times annually. Walls are moved, new walls are erected and old walls dismantled. In 2012, for example, the gallery showed a major Matisse exhibition.

IP cameras made the work simpler, cheaper and faster. "All you need to do is install the camera, program the IP address and run the cable. And then it takes a couple of minutes to adjust the camera angle and the lens," says Claus Bjerg at Axis partner G4S. Moreover, one cable per camera is sufficient, as the cameras are powered via the network cable. (This is important as SMK is a listed building in which running cabling, drilling and structural alterations are strictly limited).

For the exhibition designers, the cameras do the most important job – they are inconspicuous. Thanks to AXIS P3304's fixed dome design, the cameras blend discreetly into the environment, and visitors can devote all their attention to the artworks on display. Since the cameras provide high-definition images, they are also easier to locate. "I've not heard any of the designers complain about the AXIS P3304 cameras. On the contrary, several have actually praised the decision to make the conversion," says Security Manager Mike Coffman.

But although the cameras are barely visible, they do the job. The high-definition cameras provide the security guards with a good overview and enable them to plan their own rounds.

"G4S has been working in the building for a long time so they understand our needs. They were therefore able to present us with good proposals for both products and software," said Mike Coffman.

In the same way as SMK is constantly changing and being renewed, the needs and facilities for protecting visitors, staff and artworks will constantly change and be renewed. Products and services from Axis and its partners will enable this process without eating into unnecessary time and money.

Intelligence is the future

So far the cameras are wholly used as safety and security cameras. This may change in the future according to Mike Coffman, who sees major opportunities. "Apart from using them to calculate how many people are in the building, it's possible to see how visitors move around and between the galleries. This is very useful information when planning exhibitions. It would also be good to be able to use intelligence in case of an evacuation, to know whether there are people left in the building and in that case, their location."

Priceless art treasures and people

An art museum does what is considered inconceivable by most people. It allows public access to priceless objects. Over the years countless spectacular thefts from art museums have been committed, often when the galleries were full of visitors. Unfortunately, visitors also sometimes, intentionally or unintentionally, vandalize the artworks. It is therefore necessary to keep a close eye on the exhibitions the whole time. Leonardo da Vinci's Mona Lisa, without a doubt the world's most famous artwork, can be taken as an example. It was stolen in 1913 and missing for more than a year. Since being recovered, it has been damaged in two vandal attacks, and as recently as 2009, a Russian tourist threw a teacup at the painting, which escaped damage on that occasion.

However, the most important thing is nevertheless the people. Each year the gallery has around half a million visitors, many of them children. Security efforts are therefore largely focused on creating security for visitors, with the cameras having an important job to do.

