Virtual Boundaries Protect the Church of Kangasniemi

The Church of Kangasniemi needed an innovative surveillance solution that wouldn’t disrupt the beauty of the building. When the Church of Kangasniemi was looking to increase security, they turned to Sony for an innovative hybrid solution.

Background

The arson of the Porvoo Cathedral a few years ago tightened the insurance terms for all Finnish churches. Today insurance companies require that the church buildings must have a video surveillance system that sends an alarm to a manned control room for suspicious movement during the night. Without such surveillance, the customer’s responsibility is approximately threefold.

Challenges

The beautiful wooden church of Kangasniemi, located about 60 km to the southeast of Jyväskylä, is a challenging surveillance site. The church is located at the top of the church hill, right at the city center, along an oft-travelled pedestrian path. “The church has so many angles, and we didn’t want to cover the walls of this beautiful old church building with separate motion detectors” says Hannu Pasanen, the designer of the surveillance solution from the security company Turvallisuuspiste.
Sony Professional delivered a solution that not only enabled definition of virtual boundaries, but also worked well with existing security measures.

Solution

Sony Solution

The solution was found from Sony’s new SNC-RH164 and SNC-CH140 surveillance cameras. The unique DEPA™ system of these cameras enables the defining of “virtual” boundaries directly to the device. These are one of the first surveillance cameras in which image detection can be directly programmed in the camera. “We defined four monitoring conditions. The cameras give an alarm only when the object is sufficiently close to the church, when the object is sufficiently large, and when it moves sufficiently fast,” Mr. Pasanen explains. Two cameras, both of which are controllable, were placed in each of the angles of the double cruciform. This means that two cameras are always facing one oblique angle. New poles, painted black, were installed in the angles. As the cameras were also painted black, the entire system elegantly fits into the old church exterior.

Results

“We have been able to eliminate almost all false alarms due to the weather, moving tree branches or flying birds,” Mr. Pasanen relates. According to our surveillance company, at their sites based on movement detection, the number of false alarms typically ranges from 5 to 50 in a month. For the Church of Kangasniemi, there have only been two false alarms so far, of which one was “a fairly large rabbit”.

Why Sony were Selected

“We enquired various distributors for an intelligent motion detection system but no-one seemed to know anything about it”, explains Pasanen. In addition, the surveillance company, was not very keen on using a video detection system because, according to them, it caused too many false alarms. Existing intelligent motion detection systems are based on server software, and the systems of the surveillance company should be compatible with it. Sony’s DEPA™ system was a perfect fit.

Product List

- SNC-RH164
- SNC-CH140