

Axis cameras ensure safety and surveillance for the largest shopping center in Tyumen city.

Stroiproject selected Axis cameras to create an intelligent video surveillance system for region-size shopping center.



Organization:
Crystal Shopping Center

Location:
Tyumen, Russia

Industry segment:
Retail

Application:
Loss prevention, safety and security

Axis partners:
Stroiproject, Milestone

Mission

When deciding to construct a new shopping and entertainment center, the owners encountered a problem of creating an intelligent video surveillance system to ensure the safety of tenants, visitors and property of the shopping center as well as to provide staff supervision and quick response to emergency situations. The solution was a scalable and redundant security system capable of properly responding to any incidents and emergency situations.

Solution

The size and distributed architecture of the shopping center required the use of cameras with a wide functionality that can be easily integrated into a single network. The Milestone XProtect® software perfectly meets these requirements, and supports the most of currently available IP cameras, and enables to create a large network.

Result

As a result, the customer benefits from a single video surveillance system covering all distributed areas of the shopping center. The system is fully scalable and can be easily controlled by operators in the monitoring center. After introducing the system, the number of accidents significantly decreased while efficiency and response to emergency situations greatly increased.

“Professional cameras offered by Axis gave our engineering designers virtually unlimited freedom for creativity. Every detail was accounted for: from camera installation options down to preferable hardware. With Installation Display, installers and engineers can easily and quickly reveal and eliminate any problem at assembly unit level during commissioning stage. Axis’s technical staff greatly helped our personnel to quickly solve various problems, so project was completed in time.”

Tatiana Obydenova, Director, Stroiproekt.

The Crystal shopping mall was opened on December 6, 2014 and can be considered as the largest shopping and entertainment place in Tyumen city. Offering a total of 75 thousand square meters for tenants, the mall also incorporates an eight-screen movie theater Kinomax, a large food court on the second floor and a parking lot for 3,000 cars. This is the first shopping mall in the region that can be considered as a super-regional format center.

Camera selection

A wide range of tasks requires an integrated approach to the surveillance system design. In addition to safety and security, the surveillance system had to ensure staff activity supervision and quickly respond to any incidents (fire, communication failures), therefore more than 150 Axis network cameras were installed in total. To meet the abovementioned requirements the integrator selected several types of Axis network cameras with different functions. As extreme climatic conditions in Tyumen city may occur, outdoor AXIS Q6035-E Network Cameras were selected and installed along the outside walls of the shopping center as they support Arctic Temperature Control feature to ensure camera performance down to -40 °C. AXIS M3004-V vandal-resistant cameras were installed in aisles where ceiling is as high as 2.2 m. Two types of cameras were installed in service corridors – AXIS M3204 compact models and AXIS P3364-12 mm with telephoto lens (for 10 m or longer corridors). In areas where highly detailed images are required (mall entry, unloading docks) AXIS P1357 and AXIS P1357-E Network Cameras supporting wide screen format were installed. AXIS M1114 was selected for video surveillance in mall areas, while AXIS 212 IP PTZ Network Cameras were selected to provide surveillance for food court areas.

Infrastructure solution

The size of the mall’s surveillance system assumes a continuous video stream that needs to be processed and stored. Therefore, two servers with mirroring capability were selected allowing viewing, analyzing and storing of archive records for long period of time. The operation system comply to high standards in terms of conditioning or power failure to ensure continuous operation in case of emergency situation.

Software selection

Milestone XProtect® software was selected to ensure efficient system operation, allowing to correct operator activities, analyze video and collect historical data. Such software offers a user-friendly intuitive interface, and can be integrated with most commercially available cameras, thus making it possible to create a video surveillance network using cameras with different functions.

Project summary

All systems with active equipment were successfully commissioned and tested for several weeks in the contractor’s territory, and then active equipment was delivered for installation in the shopping mall. An integrated Axis IP surveillance system offers high efficiency and improves safety as well as gives the customer an opportunity to benefit from added-value applications such as people counting, to evaluate the effectiveness of advertising efforts.

In addition, network architecture and server hardware selection enables to extend capabilities with such options like Wi-Fi that can be easily used by visitors and internal network for personnel (an interactive navigation panels, screens and other equipment). Axis cameras offer the customer virtually unlimited possibilities for using advanced intelligent features that can be, in future, integrated to the single IP surveillance system of the Crystal mall.

