Camera system at the Spartak Myjava Stadium.

Sports stadium IP cameras protect and even entertain visitors.



Organization:

Spartak Myjava Stadium

Location:

Myjava, Slovakia

Industry segment:

Stadiums and venues

Application:

Safety and security, remote monitoring, broadcasting

Axis partners:

MMS servis, s.r.o., Netrex

Mission

Myjava features a large sports center with a playing field, which is used for the preparation of all the sportsmen in the region. As per the law, every first league stadium must operate a permanent specified camera system, which continuously monitors the individual visitor sections, stadium access gates and entrances, and all the public areas inside the stadium. A camera system had to be built at the stadium in accordance with the valid legal regulations of the Slovak Republic.

Solution

The IP camera choice was clear as the specified laws and regulations require the use of IP cameras with the emphasis on their future applications at sports facilities, especially at entrances (face biometrics, etc.). In accordance with the valid legislation, the investor's initial specification required a system with its minimum resolution of 100 pixels per meter; however, to meet the minimum infrastructure requirements per the UEFA criteria, it was eventually changed to the minimum resolution of 180 pixels per meter.

Result

The whole system is exclusively based on Axis IP cameras. The stadium features 32 installed units of these cameras. The client's original goal was to "meet its legal obligation and secure its stadium premises"; however, it currently uses the camera system to "entertain" its visitors as well. The cameras are connected through a software video cutting room, and when they are not monitoring visitors, they generate video data for "replayed" views of the game displayed on a large screen. One camera also generates data for the club's website. It features a live online stream based on the ACAP CamStreamer application of Netrex.



"Today, the installed cameras not only support security, they entertain visitors as well. The cameras are connected to a large screen through a video cutting room. In the case of problem-free visitors, the PTZ cameras do not monitor them. Instead, they follow the game, generating video data for replayed views displayed on a large screen."

Peter Marek of MMS servis s.r.o.

Achievements of Spartak Myjava

Since its foundation in August 1920 (Myjava Sports Club), Myjava's soccer tremendously advanced and realised many achievements over almost 100 years. Spartak Myjava currently plays in the Corgoň league, the highest Slovak soccer level, which it reached after its victory in the second league in 2011/2012. Thanks to the City of Myjava and its sponsors, Spartak became economically stable, and its sports premises support the cultural-social events of the city and its surroundings. The premises also provide comprehensive services in support of all the sportsmen in the Myjava region. A long-awaited playing field with floodlit artificial surface and heating and cooling was eventually built.

Stadium camera system

A camera system had to be built at the stadium in accordance with the valid legal regulations of the Slovak Republic (Regulation No. 274/2014 of the Ministry of Interior of the Slovak Republic on the camera security system details, Act No. 1/2014 on organizing public sports events, and on amending some acts). The whole system was eventually exclusively based on Axis network cameras. Although the client's original intention was only to "meet its legal obligation", it currently uses its camera system to "entertain" its visitors as well.

IP cameras protect...

Out of the total number of 32 stadium cameras, nineteen AXIS P1357 Network Cameras permanently record visitors, and 8 AXIS P1428–E units cover the stadium's surrounding areas and its individual entrances. Two AXIS Q6115–E Network Cameras are primarily designed to search for a problematic visitor in a crowd. These cameras provide resolution exceeding 500 px/m even at the most distant location of the stadium.

One AXIS P3364-VE generates data for the club's website as it features an online stream based on the ACAP application of Netrex. Two additional AXIS V5915 Network Cameras were then installed. They primarily follow the game and they are directly connected to a video cutting room through SDI.

The whole solution is designed for very simple operation without any need for complicated training.

...and entertain spectators

The installed cameras currently do not only meet their legal obligation, they entertain visitors as well. The cameras are connected to a large stadium screen through a software video cutting room (www.vmix.com).

In the case of "problem-free" visitors, the AXIS Q6115-E PTZ Network Cameras do not follow any visitors. Instead, they follow the game, generating video data for "repeated" views of the game displayed on a large screen.

The operator uses his touch monitor, which "tells" the system where the ball is located on a virtual playing field. Using four PTZ cameras, the system is able to automatically focus on and follow the ball on the whole playing field. In the case of any incident, the operator may use his AXIS T8311 joystick, and a camera selected by the operator will immediately stop following the game to help him record every detail of the event or even locate the participants of the incident.









