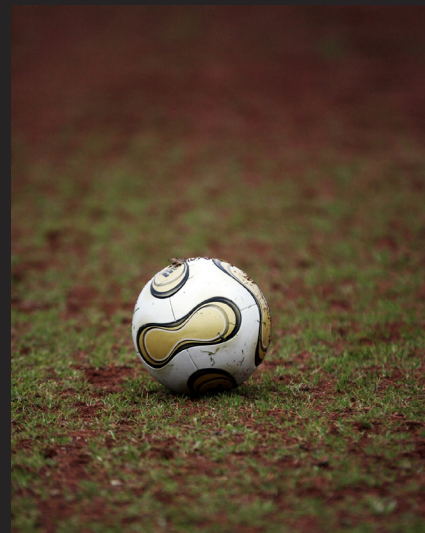


Case Study:

Video System Equipped with Pixim[®]-powered Cameras by March Networks[®] Keeps Football Violence in Check



Football fans watching their beloved ACF Fiorentina at the Stadio Artemio Franchi in Florence are on their best behavior since the installation of a state-of-the-art March Networks video surveillance system complete with Pixim-powered cameras.

March Networks draws upon a rich heritage in IP-based networking and video processing technologies to design and support IP video software and systems. These solutions help businesses enhance physical security, work more effectively and protect themselves against theft and fraud.

March Networks is a Pixim Brand Partner dedicated to producing industry-leading enterprise video capture solutions based on Pixim's award-winning Digital Pixel System® technology.



Fiorentina supporters are passionate about their hometown club, contenders in Italy's Serie A, the top echelon of the Italian football league system, but passions at a hotly contested football match can quickly escalate to violence. Such was the case in Catania, on February 2, 2007, when a police officer was killed in a clash with hometown fans following a loss to Palermo, a rival Sicilian team. Coming on the heels of the death the previous week of an amateur football official following a riot elsewhere in the country, the tragedy in Catania mobilized the Italian government and football officials to take action on stadium security.

One month after the incident in Catania, a March Networks VideoSphere™ IP video surveillance system utilizing Pixim-powered cameras was up and running at Artemio Franchi Stadium in Florence, allowing police in an onsite monitoring center to view live video of the stands, stadium entrances, and parking lots during and after the heat of a match.

The design of the system took into consideration the unique challenges associated with a stadium environment, including the large number of people and the range of scenes with variable lighting to be monitored.

Artemio Franchi security management selected the March Networks VideoSphere CamPX cameras powered by Pixim's revolutionary Digital Pixel System video imaging technology, to monitor stadium entrances, which are a challenge because of changing light conditions. Equipped with Pixim's video acquisition system, the CamPX IP cameras feature a 720x540 pixel progressive scanning sensor and a dedicated digital signal processor that work together to efficiently capture the highest resolution, natural color, and clarity of a scene, as well as the highlight and shadow detail, regardless of lighting conditions. In addition, Pixim's

technology yields more highly compressed images that can dramatically lower the costs of storing video on DVRs.

For parking lots and stadium access roads, CamPX cameras with built-in VideoSphere Analytics artificial intelligence are able to analyze live video in real time, alerting security staff to behavioral anomalies such as unexpected changes in the movement of crowds, which could be an indication of panic. To optimize the effectiveness of the built-in video analytics, the CamPX cameras begin with clear, accurate images, in all kinds of lighting. Pixim's Digital Pixel System technology enables ultra-wide dynamic range, for image quality that is optimal for video analytics: delivering crisp images with accurate color, even in high-contrast lighting, with reflection off windows and chrome, or in the glare of direct sunlight.

The Pixim-powered cameras work effectively with the entire March Networks security system which includes dozens of cameras as well as a monitoring center. March Networks provides full remote management of all the networked cameras, encoders and recorders, as well as multi-server IP networks.

"We are pleased with our video surveillance system," said Rinaldo Profeti of the City of Florence, the stadium's owner. "We have had a number of visitors from other stadiums who have come here to learn about our security system. They were all very impressed. It's definitely helped us to intervene and prevent situations from escalating."

TV and newspaper stories about the stadium's video surveillance system have also had a deterrent effect, he noted. "Just knowing that the system is there and capable of identifying troublemakers has made fans think twice about engaging in any disruptive behavior."



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