São Paulo police adopt high-tech solutions for expressways.

High-definition cameras provide support for a strategic initiative on the most important roadways in the city.

Organization:
São Paulo Military Police

Location:
São Paulo, Brazil

Industry segment:
City surveillance

Application:
Traffic management, safety and security

Axis partner:
Genetec

Mission

Marginal Tietê and Marginal Pinheiros are the two most important expressways in São Paulo. Together they are 47 km long and handle more than 500,000 vehicles a day. These roadways are the scenes of accidents, acts of protest and various types of criminal activity. The job of policing these expressways and maintaining law and order falls to the São Paulo State Military Police (PMESP), who are concerned with finding strategic initiatives to improve intelligence and prevention. This search for analytical capabilities led the military police to expand and modernize its monitoring system along these routes.

Solution

The surveillance system uses 82 AXIS Q60-E Network Cameras which are managed using video surveillance software from Genetec, an Axis partner. Their high-definition images allow a detailed and comprehensive overview of events on the two roadways, day and night. Operators at the control center can select persons or objects and use auto-tracking to monitor their movements.

Result

The success of the Axis cameras on Marginal Tietê and Marginal Pinheiros led the military police to try out the AXIS Q6045-E Mk II Network Camera integrated with an AXIS Q6000-E unit as an accessory camera. The test was conducted using the open space underneath the suspended structure of the São Paulo Art Museum (MASP), one of the greatest symbols of the city, located on Avenida Paulista. The solution, which allows the operator to zoom in to view details without losing wide-range overview capabilities, was evaluated as a potentially important tool to assist the São Paulo police in their strategic crime-fighting efforts. In the end, the military police decided to purchase 20 AXIS Q6000-E units. This way, in addition to monitoring Marginal Tietê and Marginal Pinheiros, São Paulo has become the first city in South America to undertake a large-scale deployment of the simultaneous display concept using AXIS Q6000-E.

AXIS COMMUNICATIONS

65700/EN/R1/1601

> **"The broad portfolio of Axis cameras was critical to our primary goal in 2015: reinventing our image-based surveillance platform."**
>
> Captain Fabiano of the Military Police of São Paulo State.

Daily support

Marginal Pinheiros and Marginal Tietê are often used by fleeing criminals. In April 2014, for example, a customer who was stowing her shopping bags in a supermarket parking lot was approached by armed kidnappers who forced her into the back seat of her own car. The criminals fled using Marginal Pinheiros.

On another occasion, the military police conducted "Operation Street Racing" on Marginal Pinheiros to combat drag racing. This investigation lasted two months and led to charges filed against 25 drivers.

This type of investigative work makes use of images captured by the cameras installed along the expressways, speeding up the work of the police. The cameras also prevent crimes, such as robbery and theft, from being committed, and monitor for possible criminals escaping via these roadways.

The equipment can also check if objects are stopped and monitor how long they remain motionless; it can even look out for cars driving against traffic and abandoned vehicles. With all this technology, the IP surveillance system is also benefiting four other users: the Traffic Control and Senior Command departments, the Military Police Operations Center and the CPD (Data Processing Center).

An Operational Control Center, a monitoring point that is part of the military police Operations Center, receives signals from cameras at specific locations. This way, the military police can use automated tools to foresee incidents that may pose a risk to their officers and the general public.

By deploying these technologies, the military police can track captured images at all times, with greater convenience. These images provide support for patrols throughout the day, since the cameras have automatic presence detection and show nighttime images that may go unnoticed by the human eye.

Saving time and space

As part of their focus on adopting technologies that improve their intelligence work, after the São Paulo Miliary Police deployed the Axis cameras on Pinheiros and Tietê they conducted tests of a solution that combines the AXIS Q6045-E Mk II Network Camera with AXIS Q6000-E as an accessory unit. The test was conducted over several weeks in Avenida Paulista, specifically at the iconic São Paulo Museum of Art, MASP.

The idea was to test the cameras' capabilities for simultaneous display of wide areas and zoomed-in images. MASP is a very popular museum and often serves as a gathering point for large public demonstrations and protests.

During this test, the military police were able to capture facial details of persons in Full HD quality without losing the big picture; this capability improves their ability to respond quickly in the event of violence, as well as helping with investigations.

This test at MASP was a deciding factor in the subsequent purchase of 20 AXIS Q6000-E accessory units for use at various strategic points in the city. The police now have an innovative technology for simultaneous display of images, making São Paulo a pioneer in South America for its large-scale adoption of AXIS Q6000-E.