

## The value of experience.

The JCPM group, with stakes in 13 shopping centers in the Northeast and Southeast regions of Brazil, chose Axis cameras for its newest venture.



**Organization:**  
RioMar Presidente  
Kennedy Shopping Center

**Location:**  
Fortaleza, Brazil

**Industry segment:**  
Retail

**Application:**  
Safety and security

**Axis partner:**  
Estrela Sistemas  
Eletrônicos, Genetec

### Mission

Representing an investment of R\$ 500 million, the RioMar Presidente Kennedy shopping center has 157,000 square meters of floor space, of which 54,000 square meters are devoted to stores. The development contains 275 stores, including 6 major department stores, 13 "big box" stores, a cinema, restaurants, food court and services. To ensure the safety of the mall's 3,000-plus employees and customers, the JCPM group looked for a security system that could manage and integrate the subsystems of video surveillance, access control, people counting, fire detection and alarm, and the public address system.

### Solution

In designing the project, Estrela Sistemas Eletrônicos, the integrator responsible for the project, focused on coverage areas and image quality, selecting smart devices that offered video analytics, motion detection and anti-tampering alarms.

The more than 380 cameras include anti-vandal models (including AXIS M3004-V and AXIS P3214-V Network Cameras), PTZ cameras with Zipstream for additional compression (including AXIS P5624-E and AXIS P5635-E), and bullet cameras with optimized infrared (such as AXIS P1425-LE). All these devices are managed using the open platform software Security Center, offered by Axis partner Genetec.

### Result

The security system installed at the RioMar Presidente Kennedy shopping center allows monitoring of all areas of interest, inside and outside, with the quality and details essential to ensuring the safety of customers, tenants and employees.

**“Our priority was to install a high quality, reliable system using technologies proven in large-scale developments. We picked Axis due to the quality of its products and solutions, because it's one of the world's leading camera manufacturers and its equipment offers a good cost-benefit ratio.”**

**Francisco Bacelar, engineer responsible for the construction of the development and director of the Real Estate Division at the JCPM Group.**

### Pixels per meter

The new shopping center in Fortaleza invested in a video surveillance system equipped with the latest cameras from Swedish manufacturer Axis Communications. The security plan for the RioMar President Kennedy shopping center was guided by a need for high quality images. More than 380 digital cameras with HDTV or full HD quality were connected to the shopping center's central monitoring and security station without interruption to operations.

The project, developed by Axis partner Estrela Sistemas Eletrônicos, applies the concept of pixels per meter, evaluating each scene in order to get the ideal image for each situation. Thus, each camera model was chosen taking into account the need for range and image usability in various scenarios. The outdoor PTZ cameras, for example, have a range of between 200 m and 250 m for the intended recognition objectives of the shopping center, and the indoor PTZ cameras offer a range of approximately 60 m when considering physical interference such as pillars and decor.

Images are displayed in real time on screens installed in two rooms: one CCTV monitoring room that covers the shopping center and another CCTV monitoring room covering the 3,198 space parking facility. The system is also used to guide the work of the security staff who patrol all areas of the development, receiving information from operators via radio.

### No blind spots

The biggest challenge in deploying the system was to avoid blind spots. “In addition to the size of the project, shopping centers include many features that interfere with the line of sight, such as columns and beams, architectural details, visual communication and the installation itself, which can disrupt the cameras' field of view. But we were able to work around all of that”, Francisco Bacelar said. Another major challenge was the size of the development, keeping in mind the entire TCP/IP system and equipment using PoE technology. To work around this, different technical rooms were set up for the equipment, all connected to the video surveillance

center via an optical backbone with redundant core switches for greater security in communication. Some cameras were also interconnected via optical fiber because of the distances involved and the impossibility of constructing technical rooms at these sites.

### Integration

In addition to the primary concern for image quality for recognition purposes, integration capacity has gained importance over the years. Estrela Sistemas Eletrônicos Project Manager Gersio Chiminazzo notes that the video surveillance market increasingly requires solutions with full interaction between the subsystems involved in the project. At the RioMar shopping center, putting together Axis IP technology with the open platform software from Genetec enabled integration with other systems, such as the fire detection and alarm system.

### Technology resources

The RioMar Presidente Kennedy shopping center uses a number of advanced features in its video surveillance system, including:

- > Motion detection to optimize data transfer in areas with lower foot traffic;
- > Tampering alarms, for early response against any vandalism attempts;
- > Smart infrared, or OptimizedIR, which provides intelligent management of the need for infrared light to prevent the cameras from overheating and prolonging service life;
- > WDR with Forensic Capture for automatic compensation of differences in light levels in the image, including for use as evidence in court;
- > Zipstream, which offers approximately 50% savings in the bandwidth and storage requirements.

The customer gives the system a “very satisfactory and positive” review. “The equipment developed by Axis is excellent and meets our expectations. We've had great results in both the quality of equipment supplied and the result of the images,” Bacelar said.



“These technologies add value to the video surveillance project and enhance the customer experience with the system in the long term,” Gersio Chiminazzo boasts.

