

Quality in nautical service.

Brazil's largest marina uses video surveillance cameras not only for security but for 24/7 monitoring of operations.



Organization:

Marina Itajaí

Location:

Itajaí, Brazil

Industry segment:

Transportation

Application:

Marina security and safety

Axis partner:

Traders Service
Communications
Technology

Mission

Marina Itajaí is a nautical complex that holds up to 900 vessels and 600 cars in its parking lot. From the beginning, security was defined as a priority to protect the boats and yachts that were tied up. This included the ability to visually track the most critical operations, such as identifying vessels approaching the harbor and monitoring their departure from Brazil's largest marina.

Solution

The video surveillance project was developed by Traders Service Communications Technology, using a wide range of Axis Communications camera models to cover the entire undertaking. AXIS P1357-E Network Cameras were installed on the platforms to monitor an area that includes all the wet slips in the marina. This model offers 5MP resolution that enables coverage of large areas. To monitor dry storage areas, the system uses AXIS M3027-PVE, with their 180 degree panoramic view. AXIS Q6045-E MKII ensure that any suspicious activity is captured, along with the day-to-day operations of Marina Itajaí.

The perimeter monitoring set-up uses AXIS P1365-E Network Cameras, while AXIS Q1615-E units, also a Full HD camera, can be found at vehicle entrance points. The convenience store and restaurant inside Marina Itajaí have adopted AXIS M3006-V. The reception office uses AXIS M3005-V, and the gas station uses AXIS P1354.

Result

In two years of operation, there has been no failure of any kind out of the 15 cameras installed. Even in bad weather, no unit needed to be replaced or maintained. What's more, the Axis cameras have gone beyond security, by contributing to marina operations, including improved confidence in day-to-day procedures, and third-party control. The system has even minimized staffing needs, resulting in a significant cost reduction in security staff.



Demanding users

Marina Itajaí is one of the few marinas in Brazil located in an urban environment. In addition to handling vessels of up to 120 feet, it is home to a shopping center with nautical shops, a gym and even a movie theater. This greatly increases the flow of people, and consequently the need for video surveillance.

Since its first month in operation, Marina Itajaí has considered security to be a priority (given that safety of the vessels is critical). It started its operation using Axis equipment exclusively. "We have boats of every price range that we need to safeguard so that our customers can rest assured knowing their assets are safe," said the general manager of Marina Itajaí, Wolfgang Roedel.

Because it is so well cared for, Marina Itajaí was the choice of the Schurmann Family, who have already crossed three oceans and landed on all 7 continents aboard a sailboat. Another family also chose the marina not as a place to make a stopover but as a place to live. "We have one family that lives on a catamaran in the marina, because they have confidence in what we offer," Roedel added.

Weather particularities

In addition to its responsibility for and commitment to protecting its customers' assets, the security project also demanded high quality and robust cameras that could withstand the weather conditions in the city, including heat, sea air, and rain. The high temperatures and humidity of the coastal climate demand high-performance and durable security equipment.

"The environment presents a lot of challenges. The marina is on the edge of the ocean and deals with ocean air, wind, and heavy rain. Other equipment would have already failed. Trusting in the quality of Axis products, the robustness of their housings (with an IK10 degree of protection) and climate control that allows them to withstand a range from -40 °C to 50 °C make all the difference in a surveillance project like the one at Marina Itajaí," explains Eder Warmling, sales director for Traders Service, who was in charge of the project.

Axis partner Traders Service has two certified technicians who were able to get the most from each selected model in order to optimize video surveillance.

A PoC (Proof of Concept) was developed to identify the best points for viewing each specific area so that cabling and infrastructure could then be installed. The first part of the project, which includes 15 cameras, was installed over the course of about 25 days, including infrastructure, routing of fiber optic, system installation and set-up.

Point-to-point communications antenna were used in places that couldn't be reached via the wired network. This approach facilitated the operation, since it did not require digging trenches to lay cables, allowing the coverage area to be expanded.

According to the sales director, if another camera brand had been used it would have required 3 times as many units to cover the same area. "The image quality is exceptional. What you can see with an Axis camera can't be achieved by any other equipment," Roedel said.

Vehicles and boats

Image capture starts when vehicles enter Marina Itajaí. Using AXIS Q1615-E Network Camera, the monitoring room is able to clearly identify vehicle license plates, drivers and passengers, allowing tighter control of access. The equipment works with active WDR to compensate for lighting if a car comes in with their high beams on.

AXIS M3005-V cameras were installed for the service area and at the front desk. For a wider angle of view, AXIS M3006-V cameras were chosen for the convenience store and restaurant. Both models are vandal-proof.





AXIS P1354-E covers the fuel station, offering Axis' Lightfinder technology that can capture details of images at night.

The cameras also track the entry of service providers and the flow of people in the shopping area, with restaurants and shops. "Recently, a restaurant customer claimed that his vehicle had been scratched in our parking lot. Using the security cameras we were able to see that the car was already scratched when it came in," says Wolfgang Roedel.

Boat slips in Marina Itajaí are divided between wet and dry storage. Boats in the water are protected by AXIS P1357-E, while AXIS M3027-PVE is on the side of the dry storage area. "We considered the camera's viewing angle for the site to be monitored. AXIS M3027-PVE captures at a 180 degree angle and offers us images of all the marina's dry slips," says Eder Warmling.

Another factor that led to this choice was the equipment's Lightfinder technology, which provides color images even at night, under low light conditions. However, the director of Traders Service points out that Axis cameras in general work at very low lux values, which enables quality images even in low lighting.

Operational supervision

Open areas are monitored by AXIS P1365-E, as well as AXIS Q6045-E MKII, a PTZ camera installed in order to capture a 360-degree view of Marina Itajaí. This device is heavily used, both for safety and for operational purposes.

"With the PTZ camera, you can even view operations as they are being performed. The marina has a boat lift with capacity of up to 75 tons; this lift takes the boats from the wet area to dry storage. Using the images allows us to monitor the operation closely," Warmling says.

In addition, the cameras operate 24/7 identifying vessels arriving in the harbor and help in managing the marina's security teams, both day and night.

Business model

Because the entire security project is leased by Marina Itajaí, the initial investment is spread out and the technologies used can always be updated. "The customer doesn't need to make a high initial investment in a project like this. Over the entire term of the contract, the equipment operates at no additional cost. Traders Service does the work of leasing the entire surveillance project, and the customer is assured that the monitoring system will always be up and running at no additional expense for maintenance and upgrades," says Eder.

Next journey

The Marina Itajaí project was separated into three stages, which will be implemented as needed. The system will ultimately have about 90 cameras installed throughout the nautical complex that surrounds the boat berthing area.

Another plan is to give access to videos online so that all customers can monitor their boats in real time.

"The cameras are good quality. No piece of equipment has presented any problems; we are quite satisfied."

Wolfgang Roedel, general manager of Marina Itajaí.



About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to customers through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 2,600 dedicated employees in more than 50 countries around the world, supported by a global network of over 90,000 partners. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

For more information about Axis, please visit our website www.axis.com.