Safety in cargo transport

The Colombian port of Barranquilla uses cameras for improved cargo tracking, reducing the risk of contamination and other logistics challenges.



Organization:

Port of Barranquilla

Location:

Barranquilla, Colombia

Industry segment:

Transportation

Application:

Safety and security

Axis partner:

AP Ingeniería, Aimetis

Mission

The Port of Barranquilla is the premier seaport on the Caribbean coast of Colombia and serves as a full-service logistics company. Its financial master plan (2015–2017) included a project to strengthen its current security plan, with the aim of preventing incidents that may threaten cargo integrity while also supporting the country's foreign trade dynamics and its development of national industries.

Solution

It was determined that among the organization's needs were providing better cargo tracking and implementing a video surveillance system that could cover various areas of operation including parking lots, inspection platforms, and refrigeration and freezer warehouses, among others. As a result, with the help of Axis Communications, they installed a series of cameras capable of withstanding extreme temperature conditions – and offering remote zoom and focus capabilities – while delivering a high level of detail, despite some cameras being situated about 23 feet above ground.

Result

As a result of this security-strengthening project that included the installation of Axis network cameras, the organization has increased the confidence level of its clients.

In the project's first year of implementation there were zero incidents of cargo contamination, successfully demonstrating the effectiveness of the system while complementing the efforts of the port's experienced work team.



"The installation of this equipment has lended great support to the dynamics of foreign trade, creating favorable conditions that mitigate the security risks to our clients' cargo."

Enoc Rubio Luque, Head of IT & Communications Infrastructure for the Port of Barranquilla

More comprehensive security

With a focus on becoming the premier port logistics platform for the Caribbean coast of Colombia, the Port of Barranquilla outlined an investment plan consisting of 117 projects that would allow for the port to differentiate itself from its competitors and deliver logistics efficiency.

Within this framework, the organization placed into operation the first warehouse in Colombia within a port terminal designed specifically for the movement and storage of refrigerated and frozen cargo – ideal for the preservation of the supply chain of cold, perishable products for import and export – consisting of a total area of almost 35,000 square feet with 2,640 spaces, of which 1,884 are located in the freezer area.

The warehouse was already using Aimetis as a VMS provider, with which Axis cameras were easily integrated, making use of technological features such as Lightfinder, WDR and long-lasting infrared LED lighting.

According to Froilán Molina, Engineering Director of AP Engineering, it was possible on this project to provide a functional and reliable solution for such a unique space, with the areas being cooling zones in a region where the climate is so hot, and where it is generally required to use equipment that can withstand high temperatures.

The cameras used included three models with Zipstream technology, significantly reducing bandwidth and storage needs while maintaining a high level of image quality. This has made it much easier for the port to conduct real-time monitoring.

The three models that incorporate this technology were: AXIS P3707-PE, which generates four images and efficiently monitors large interior and exterior zones with its 360° viewing area, and which is resistant to dust, rain, snow, ice and corrosion; AXIS P1364-E, with

day & night functionality and P-Iris lens to maximize image sharpness; and AXIS Q6054-E, providing instantaneous focus even under low-contrast and other demanding lighting conditions.

Another technology that was taken into account for the implementation of the project was 4K resolution, providing four times that of Full HD. It allows them to view details over a vast area, improving any part of a scene and capturing detailed images for investigative purposes.

AXIS Q3709-PVE cameras were strategically placed throughout the area around the warehouses. It captures images in great detail, rendering a level of clarity that provides for facial recognition over distance as well as real-time monitoring.

Additionally, the AXIS Q6044–E PTZ Dome Camera was included among the equipment providing oversight of the warehouse area. As a result of the camera's Active Gatekeeper functionality, it can automatically move to a pre-set position when motion is detected within a predefined area and continually track the object or subject in motion.

Security is a prerequisite for the operation of the Port of Barranquilla, and as a result of the help of companies such as Axis Communications the terminal continues to solidify its position as the leading seaport on the Colombian coast of the Caribbean, providing its clients with cargo transport services that adhere to the highest of security standards.









