BOSCH

Protection and visibility with Intelligent Video Analytics

Robust monitoring solution secures Puerto Paracas port terminal and overcomes environmental challenges.

Summary

PROJECT

Puerto Parcas,
Peru

Benefits

- Reliably sharp images even in adverse weather conditions
- Seamless integration into existing video management
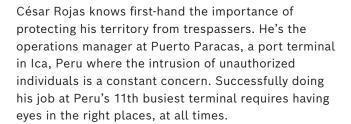

Product solutions

Moving cameras PTZ
MIC IP ultra 7100i PTZ camera

Visibility is key to port safety

View of Porto Paracas

César Rojas knows first-hand the importance of protecting his territory from trespassers. He's the operations manager at Puerto Paracas, a port terminal in Ica, Peru where the intrusion of unauthorized individuals is a constant concern. Successfully doing his job at Peru's 11th busiest terminal requires having eyes in the right places, at all times.

According to the World Drug Report (UNODC, 2022), almost 90 percent of cocaine seized worldwide is trafficked in containers or by sea. At Puerto Paracas, the hot, windy climate and exposure to salinity present César Rojas and his team with unique challenges in preventing drug traffickers from entering forbidden areas. They needed an extremely robust monitoring solution that delivers top-quality images and could withstand the elements.

Terminal Porto Paracas

High-quality cameras with seamless integration

The port's operations manager was able to overcome environmental challenges, and effectively detect and document attempts at criminal activity, by installing high-performance Bosch cameras on 40-meter-high poles.

- **Operate in adverse weather conditions**
- **Reliably deliver sharp images despite vibrations**
- **Seamlessly integrate into the existing video management system**

More information: **boschsecurity.com**

Past solutions failed to deliver

"Located just 70 km from an area known for drug trafficking, our port must take extensive precautions to protect ourselves from criminal activity," said César Rojas. His security team needs full visibility of the 11 hectares with red or sensitive points. "We must be able to see who is there," said César Rojas.

César Rojas, Operations Manager at Porto Paracas

Past solutions merely showed smudges going up and down, failing to provide the team with the insight and evidence they need. The images looked stable at first glance but became unclear upon zooming in. Attempts to mitigate the problem were unsuccessful. Security gaps were also a concern since the past pan-tilt-zoom (PTZ) cameras would all monitor the same area when motion was detected.

The team's initial idea was to position a radar pointing in one direction. If an intruder penetrated the beam, a pan-tilt-zoom (PTZ) camera would swivel and zoom in on a point. But the metal fence distorted the electromagnetic wave, rendering this option unsuitable. An additional attempt to install a jumper also failed to stabilize the image. A new approach was necessary.

Bosch cameras uphold port's high security standards

The Bosch MIC IP ultra 7100i PTZ camera now replaces four old cameras and provides the excellent images needed.

César Rojas and team were relieved to discover that Bosch's effective technical solution overcame their challenges and met the high-security standards in place at the port. Despite being placed on top of 40-meter-high poles, the images are reliably sharp – even with regular wind gusts of up to 35 knots and the high salinity environment.

Intelligent Video Analysis (IVA) constantly monitors the area for motion and automatically tracks objects moving within the camera range. This closes the security gaps the team faced in the past. "We now have a single Bosch camera on a pole instead of three to four units like in the past. And our security gap has successfully been closed," said César Rojas.

Solution intelligently detects and classifies objects

With its intelligent video analysis algorithm, the high-performance video cameras support the team by:

- **Detecting and classifying objects** such as people and vehicles, in their exact location based on coordinates and integrated with the RSA module of Genetec.
- **Helping generate precise intrusion traceability** by using PTZ sensor resources efficiently and automatically.
- **Activating corresponding security protocols** without distracting the operator.

Optimizing resources while improving visibility

Using technology improves monitoring, minimizing the risk of omissions, especially in environments that require a high level of security, such as ports, industrial plants, or critical facilities. While technology does not completely replace the need for people and hardware, it optimizes the resources used and supports the team so they can do their job.

César Rojas is proud of the new solution at his place of work. "Where we were once blind, now we can see," he said. This sums up the positive impact Bosch has had on the operation of the Puerto Paracas, which now enjoys a high level of protection and safety

The port's solution at a glance

Installed on around 10 poles, the **MIC IP ultra 7100i PTZ** camera with Intelligent Video Analytics also provides:

- **4k UHD resolution**
- **Wind resistant up to 290 km/h**
- **12x zoom**
- **Vibration-free monitoring with optical image stabilization**

"We're happy as long as we keep unauthorized persons out of the terminal. Our goal is to ensure the people at Puerto Paracas are the right ones and those passing through the container area are identifiable," said César Rojas.

More information: **boschsecurity.com**