



■ Protecting citizens, tourists, and businesses

Ports represent a complex security challenge, with a constant flow of inland and marine traffic. The US has an estimated 300 sea and river ports with more than 3,700 cargo and passenger terminals. In addition to business traffic which brings ships from around the world into the port, major port cities also attract visitors and tourists who enjoy shopping, dining, and special events. As a result, law enforcement agencies must patrol and protect an extremely diverse area, including sections where it's dark and easy to hide. These agencies require the ability to detect and assess security, safety, environmental, and fire threats in the waterways, and near bridges, especially at night and at long distances. In particular, they need the ability to see vessels and critical infrastructure at great distances during periods of darkness with a high level of detail including vessel numbers and names, particularly ones of high interest. Because multiple law enforcement, government agencies and military branches share responsibility for patrolling the ports and surrounding bay areas, security solutions must support shared camera views and interoperability among different systems.

Vumii has extensive experience in supplying effective protection for ports in the United States and Europe.

The broad spectrum of Vumii thermal and near-IR camera technologies provide for a cost-effective solution for helping law enforcement agencies provide the most complete protection to ports. The cameras' ease of use, nighttime performance, and ability to zoom-in to scenes at great distances with clarity and detail provide a winning combination.





■ Selecting thermal cameras

For port security, a comprehensive set of security cameras designed to address the challenges associated with this unique environment is required, including the implementation of active illumination and thermal cameras that meet long distance requirements and support day and night monitoring. The combination of Vumii Discoverii active illumination cameras and Accuracii thermal and CCD cameras meet these needs.

The Discoverii long-range threat assessment cameras feature long range optics with CCD cameras that are optimized for near-IR laser illumination (beyond 4,000 meters in complete darkness). This combination of high performance cameras, optics, and laser illumination creates a camera system that enables natural contrast video providing critical scene details such as facial features, license plate or vehicle lettering, and the ability to see through glass.

Accuracii is a powerful multi-sensor solution with CCD and a day/night thermal camera for mid- to long-range detection and observation. When the cameras are tied to a web-based Physical Security Information Management (PSIM) system, it enables multiple organizations to share views from Vumii cameras.



Vumii Discoverii camera systems leverage the power of directed covert (laser) energy to see incredible details during the day or in absolute darkness at night using powerful long-range optics, this enables rapid threat classification and identification for a quick security response to human, vehicle, or vessel threats using evidentiary quality details.



A near-IR laser illuminator uses a covert, continuous-wave, adjustable laser to produce natural-contrast video in which text can be read, people identified, behavior recognized, and critical scene details observed at more than 4,000 meters away at night and more than 15,000 meters during the day.



■ Summary

With a layered and shared approach to security, Vumii products provide blanket protection within diverse port environments, enabling better and faster protection and more value for customers. By integrating the visual aspect of the Vumii cameras with radar, Automatic Identification Systems (AIS) for gathering ship data, and other software tools, law enforcement agencies can tell what's on the water at all times, day or night, even in bad weather.