# HARSS



Harbor Surveillance Solution ensures comprehensive surveillance with ultra-high-resolution imaging and advanced AI

#### **Advanced Harbor Surveillance**

HARSS combines ultra-high-resolution imaging with sophisticated AI, designed to support high-traffic harbor zones with large-scale surveillance. Its 300-320 MP panoramic cameras provide continuous, clear coverage across expansive areas. Thermal and visible-light imaging ensure accurate visibility in all conditions. Advanced AI features, including object detection, classification, and behavioral analysis, allow the system to track vessels in real time, support water traffic control and alert irregularities, enhancing operational safety and efficiency across the harbor.



# How can you benefit by using HARSS?

- Ultra-high resolution coverage:
   300-320 MP panoramic cameras deliver wide-area coverage, minimizing the need for numerous installations.
- Enhanced situational awareness:
   Al-driven object tracking monitors both cooperative and non-cooperative vessel movements, and detects unauthorized entries and other irregularities.
- Improved security and safety:
   Integrated thermal imaging ensures
   24/7 monitoring capability, enhancing
   safety even in low-visibility situations.
- Streamlined traffic control:
   Early alerts for unauthorized stopping,
   speeding, and other anomalies help
   maintain smooth harbor operations.

- Fast response and incident tracking:
   Advanced investigative tools, such as object-based historical search, allow operators to swiftly locate specific incidents or events, accelerating investigations.
- Customizable geofencing zones:
   Specific rules can be assigned to different harbor areas, such as restricted access zones or traffic flow regulations, ensuring tailored management and security protocols.
- Sensor fusion accuracy:
   Seamless integration with radar systems and transponder data enables reliable tracking and identification of vessels.

# **Intelligent AI Functions Enhance Efficiency**

HARSS combines edge AI and fused radar technology to deliver real-time monitoring in complex harbor environments. It enhances operational efficiency with AI-powered object tracking, classification, and advanced geofencing, enabling tailored security protocols for designated zones. This ensures robust protection against speeding, unauthorized stopping, and restricted area intrusions.

The Logipix Harbor Surveillance Solution's advanced investigation capabilities allows for seamless access to detailed historical data. By registering every object status and incident, the system enables operators to conduct object-based archive searches rather than traditional time-based queries. This approach accelerates investigations, making it easier to locate and analyze specific incidents or objects, reducing response times and improving situational awareness.

### **Reliability in Difficult Conditions**

Harbor surveillance demands solutions that can overcome the unique visibility challenges posed by shifting environmental conditions, such as fog, night operations, and extreme weather. Maritime environments also bring physical challenges – saltwater exposure, corrosion, and temperature fluctuations – which can quickly degrade standard equipment. The Logipix Harbor Surveillance Solution addresses these issues with robust, corrosion-resistant hardware and a dual-vision system that combines ultra-high-resolution visible-light and thermal imaging.





#### **ABOUT LOGIPIX**

Logipix is among the most innovative technological companies in the world, developing and manufacturing smart video monitoring solutions specifically for large-scale projects and wide areas. Our company is deeply engaged with the constant research and development to provide complete, intelligent systems using the latest microelectronic and computer technology available, while considering the specific characteristics of different application areas. With many years of experience improving critical infrastructure facilities around the globe, Logipix can be your trusted company, who contributes to create safer, sustainable and more efficient environments at your harbor.