

AIRPORT SOLUTIONS

Proactive Vision Intelligence with
Hanwha Vision

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Table of Contents

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Hanwha Vision

Sections

- 01 Introduction
- 02 Budget Efficiency Without Compromise
- 03 Key Features & Core Technologies
- 04 Key Products
- 05 Core Capabilities
- 06 Video Management System
- 07 Proven Solutions for Aviation
- 08 Cybersecurity Commitment
- 09 The Benefits of a Unified Approach to Airport Safety & Technology Management

INTRODUCTION

Hanwha Vision: **A Trusted Partner** for **Proactive Vision Intelligence**

Commercial aviation environments must transition from passive, reactive monitoring to **unified, AI-enabled surveillance layers** so they can:

01

Achieve facility-wide situational awareness to prevent threats

02

Create better and more seamless passenger experiences

03

Support operational resilience & regulatory compliance

04

Safeguard infrastructure assets amidst traffic surges



BUDGET EFFICIENCY WITHOUT COMPROMISE

Delivering Long-Term Value

Hanwha Vision delivers enterprise-grade performance at a cost that aligns with the financial needs of airport operators. Our solutions are engineered to reduce both upfront investment and long-term operational expenses, maximizing value at every stage of deployment.

01



Competitive Pricing

Across all performance tiers from essential models to advanced AI-powered cameras.

02



Lower Total Cost of Ownership

Long product lifecycles, durable construction, and reduced maintenance needs. Multi-sensor and fisheye models cover more area with fewer devices

03



Efficient Bandwidth & Storage

Advanced data compression cuts infrastructure costs without sacrificing image quality.

04



Flexible & Scalable Upgrade Paths

Allows airports to modernize gradually, integrating new devices with existing systems. Optimize existing legacy systems with solutions like Hanwha Vision AI Box.

KEY FEATURES & CORE TECHNOLOGIES

Hanwha Vision: Proven Solutions for Airports

Hanwha Vision offers a comprehensive range of technologies that help airports create safer and smarter environments, including:

CERTIFIED COMPLIANCE



NDAA
compliance



TAA
compliance



FIPS 140-3
FIPS 140-2

OUR SOLUTION [See Hanwha Vision's most requested solutions for aviation >](#)



Key Features include:

01

High-Quality Imaging

Reliable and clear video for investigations and real-time monitoring.

02

Flexible Form Factors

Cameras designed for every other area within airport grounds, including perimeter, terminals, and parking lots.

03

Reliable Performance

Rugged, tamper-resistant, and weatherproof models that ensure consistent operations.

KEY PRODUCTS

Advanced Security Cameras in Diverse Form Factors for Airports

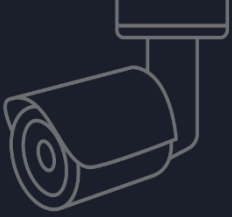
Hanwha Vision offers a comprehensive range of NDAA-certified security cameras that are highly effective at both increasing safety and improving operational efficiency in airports.

 Multi-Sensor Cameras	 PTZ (Pan-Tilt-Zoom) Cameras	 Dome Cameras	 Fisheye Cameras
APPLICATIONS Building exteriors, ledges, indoor and outdoor areas spanning apron, hangar, terminals, maintenance, parking lots KEY BENEFITS • Less cameras doing more. • Multiple lenses in one housing deliver 180°/270° panoramic views with unified cabling and licensing.	APPLICATIONS Baggage claim, entry/exit drop-offs, terminals, maintenance and storage areas, buses, shuttles, AirTrains KEY BENEFITS • Pan 360° and tilt up/down to effectively cover large areas with fewer cameras. • Highly-visible solution that enhances accountability, and helps deter misbehavior – fighting, theft, vandalism.	APPLICATIONS Baggage claim, entrances/exits, parking, security checkpoints, terminals, ticketing KEY BENEFITS • Delivers wide-area coverage for monitoring passengers, staff, and visitors, across various airport locations. • Highly durable and vandal-resistant.	APPLICATIONS Baggage claim, jetways, maintenance areas, retail zones, terminals, ticketing KEY BENEFITS • Cost-efficient surveillance option that delivers wide-angle, 360° views from a single unit, reducing need for multiple cameras. • Eliminates blind spots in expansive areas.
POPULAR MODELS <u>PNM-C16013RVQ</u> <u>PNM-C12083RVD</u> <u>PNM-C16083RQZ</u> <u>PNM-C32083RVQ</u>	POPULAR MODELS <u>PNM-C19183RVTP *</u> <u>XNP-C9310R</u> <u>PNM-C34404RQPZ *</u> <u>XNP-6120HW</u> * Multi-Sensor cameras with integrated PTZ functionality.	POPULAR MODELS <u>XNV-A9084R</u> <u>QNV-C9083R</u> <u>PNV-A7082RZ</u> <u>QND-C8013R</u> <u>QNV-C9011R</u>	POPULAR MODELS <u>XNF-A9014RV</u> <u>QNF-C9010V</u> <u>QNF-C9010</u> <u>AI fisheye cameras</u>

KEY PRODUCTS

Advanced Security Cameras in Diverse Form Factors for Airports

Hanwha Vision offers a comprehensive range of NDAA-certified security cameras that are highly effective at both increasing safety and improving operational efficiency in airports.

 Bullet Cameras	 Panoramic Cameras	 License Plate Recognition (LPR) Cameras (License plate recognition/ Automated number-plate recognition)	 Mobile Cameras
APPLICATIONS Perimeter areas, entrances, fences, gates, hallways, parking lots KEY BENEFITS - Extended coverage area captures longer-range scenes. - Highly-visible form factor style serves as visible deterrent and early threat identification.	APPLICATIONS Baggage claim, building exteriors, hangars, maintenance areas, parking lots, tarmacs KEY BENEFITS - Provides a full room view with no blind spots. Compact size enables discreet monitoring and blends into the environment. - Anti-ligature design prevents tampering IK10+ vandal resistance & IP66 weather protection for indoor & outdoor use.	APPLICATIONS Arrivals and drop-offs, car service pickup areas, parking lots KEY BENEFITS Increased safety and streamlined drop-offs and pickups by automatically reading license plates.	APPLICATIONS Transport between terminals via buses, AirTrains, shuttles KEY BENEFITS - Significantly boost safety on transport vehicles and shuttles by identifying medical emergencies, or disruptive /threatening behaviors. - Document incidents to track missing passengers, left behind luggage.
POPULAR MODELS PNO-A9311R XNO-A9084R QNO-C9083 4K AI Camera TNO-C3032TRA Thermal Camera	POPULAR MODELS TNV-C8011RW PNM-C9022RV PNM-A13022RV	POPULAR MODELS PNO-A9081RLP PNO-A9311RLP 4K 31x zoom LPR/ANPR/MMCR IR bullet camera	POPULAR MODELS XNF-9010RVM XNV-6013M TNV-C8041RM T series AI 5MP IR mobile camera

CORE CAPABILITIES

AI Data Analytics & Intelligence

01 Built-in AI-Powered Capabilities

Hanwha Vision cameras, with **built in, license-free AI analytics**, help security teams detect threats earlier, respond faster, and improve situational awareness facility wide.

02 From Reactive to Proactive

AI-driven analytics help turn security from reactive to proactive and predictive, with **precise object detection, loitering alerts,** and **license plate recognition** via LPR/ANPR cameras (license plate recognition and automated number-plate recognition).



CORE CAPABILITIES

Advanced Software Analytics & Intelligence Layers

By shifting security and operations monitoring from **reactive to proactive**, airports can enhance situational awareness, significantly decreasing the time needed for footage review, while ensuring **privacy and regulatory compliance**.

01 Real-Time Behavioral Tracking

Automates instant threat tracking by triggering **intelligent alerts for suspicious loitering** and **unauthorized entry into restricted zones**.

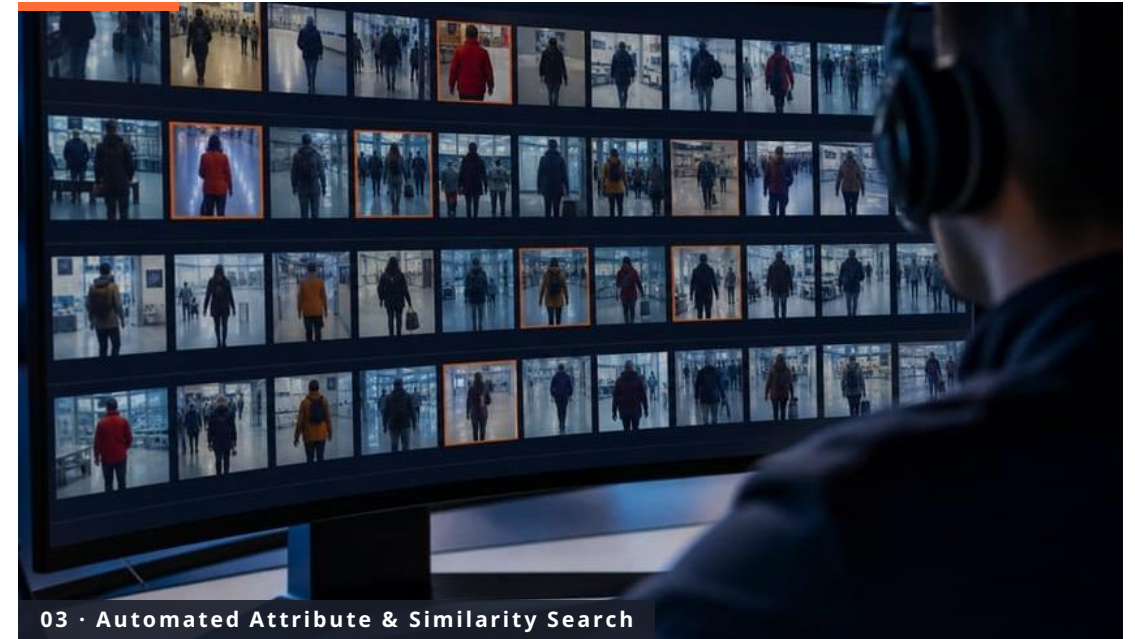
02 Advanced Object Detection & Classification

Real-time object detection and classification of **people, vehicles, and other objects** with deep-learning precision, helping to reducing false alarms and improve situational awareness.

03 Automated Attribute & Similarity Search

Speeds up forensic investigations with advanced object detection and classification for people. Search historical video files by **specific visual attributes**—clothing colors, bag profiles, or vehicle models—to quickly locate missing passengers or misplaced luggage across cameras and timeframes.

SEE IT IN THE FIELD



CORE CAPABILITIES

Advanced Software Analytics & Intelligence Layers



WHAT IS DPM?

Dynamic Privacy Masking (DPM)

Helps airport operators to comply with key privacy mandates in their region. Automatically detects and masks faces, bodies, license plates and vehicles to ensure privacy without compromising security.

WHAT DPM MASKS



License Plates

Vehicle registration data



Faces

Facial biometric identifiers



Vehicles

Vehicle information including color, make/model



People

Full-figure silhouettes

CORE CAPABILITIES

Deliver AI Capabilities to Legacy Non-AI Cameras

The Hanwha Vision AI Box converts any standard ONVIF, legacy camera into an active, deep-learning intelligence sensor, **without incurring cost of replacing existing infrastructure.**

It serves as an ideal force multiplier for airports seeking quick, cost-effective modernization and added analytics with minimal disruption.

KEY BENEFITS

- 01 Get AI Power from Legacy Cameras**
Transforms any current ONVIF-compliant legacy camera into an intelligent, deep-learning security sensor.
- 02 Expand Predictive Threat Detection**
Integrates edge-based AI analytics onto old infrastructure to protect passengers, personnel, and high-value airport assets.
- 03 Enhance Capital Budget Efficiency**
Eliminates the need for costly device overhauls, major on-site structural construction, or recurring monthly hardware overhead.
- 04 Future-Ready Scalability**
Units easily redeployed via a modular structure that fits seamlessly into multi-step, gradual modernization plans across extensive airport upgrade lifecycles.

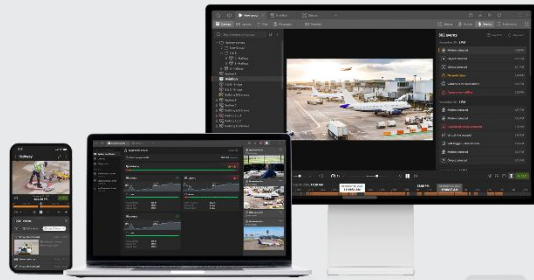
AI Box

An 8-channel AI Box that easily adds advanced object classification, business intelligence, and privacy masking to existing ONVIF-compatible surveillance systems.

VIDEO MANAGEMENT SYSTEM

Flexible and Scalable VMS Options

Hanwha Vision provides flexible VMS solutions for airports, enhancing campus monitoring and turning camera footage into actionable data. Our wide range of surveillance cameras are also compatible with other leading VMS solutions from companies like Genetec and Milestone.



Hanwha Vision Blaze

Hanwha Vision's BLAZE is a next-generation, hybrid cloud video management system (VMS) that unifies on-premise AI surveillance with cloud-based management.

Blaze runs on dedicated, pre-configured appliances for simplified deployment, and offers AI-powered, natural language searching (semantic search) to support rapid object and attribute searches across multiple sites using Hanwha Vision's WiseAI technology.



Wisenet WAVE VMS

Wisenet WAVE VMS offers a secure video management system with remote-access capabilities that is built for scalability and can be seamlessly integrated with other popular VMS solutions.



Wisenet SSM

Hanwha Vision SSM offers a centralized video management system with intelligent analytics that is built for enterprise-level surveillance and can be efficiently scaled across multiple sites.

* Wisenet SSM availability varies by market and is not offered in the United States or Canada.

PROVEN SOLUTIONS FOR AVIATION

Our Solutions: Secure & Optimize Every Airport Environment

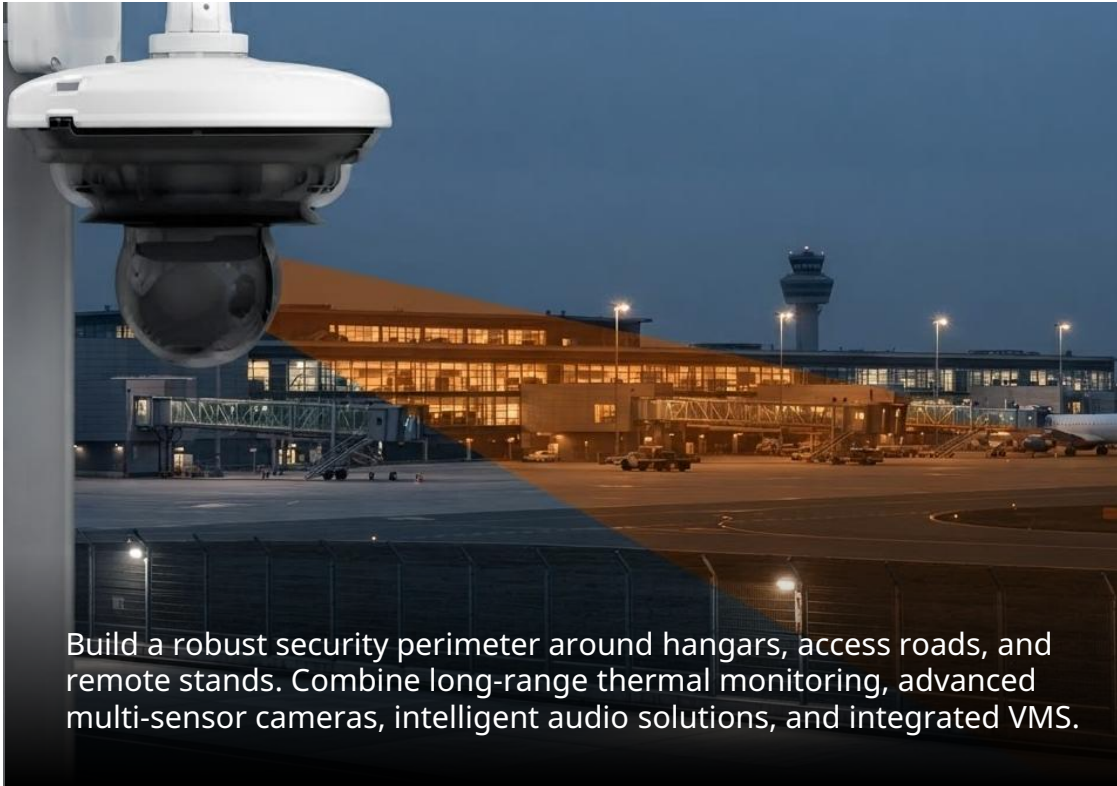
By delivering **real-time visibility** and **intelligent analytics**, our solutions protect every part of an airport, while enabling **centralized management and real-time response for security teams**.



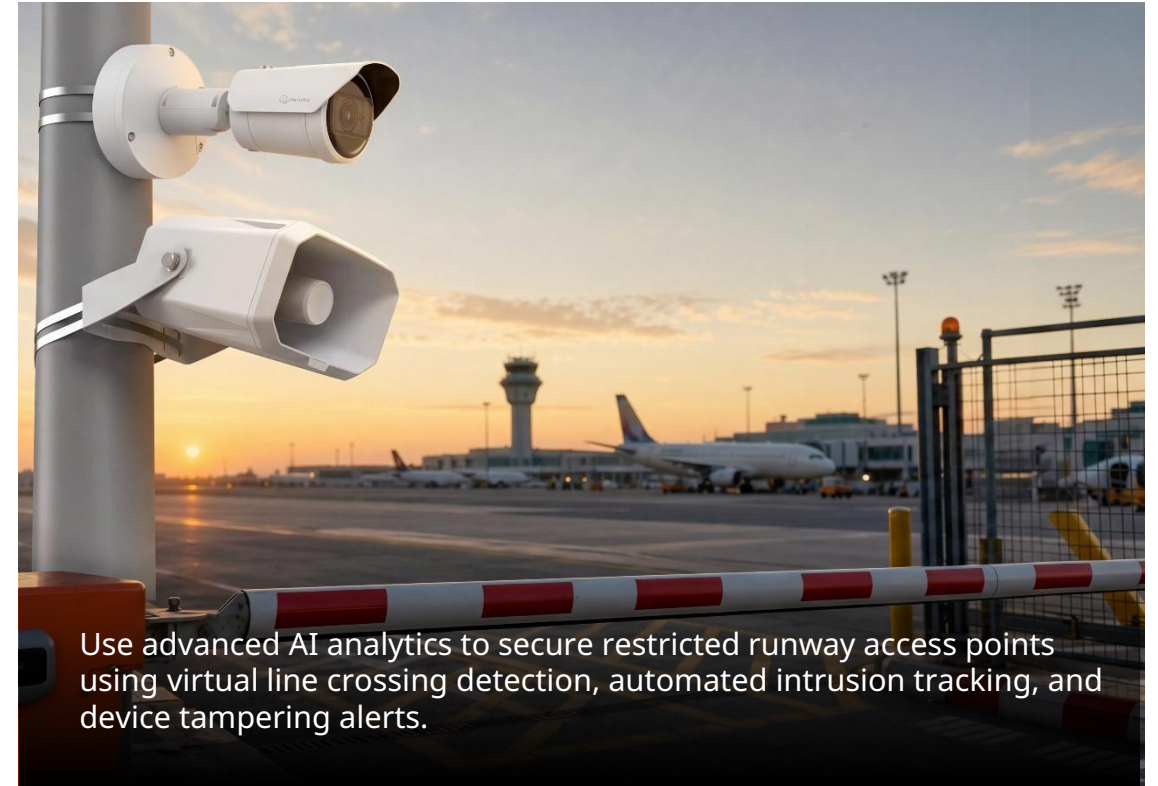
PROVEN SOLUTIONS FOR AVIATION

Perimeter Hardening & Airside Access Control

Unified Perimeter Surveillance



Restricted Zone Enforcement



PROVEN SOLUTIONS FOR AVIATION

Environment Optimization: Creating Better & More Convenient Passenger Experience

01 Frictionless Bottleneck Prevention

Continuously monitors queue lengths across critical passenger touchpoints, including:



01
Check-in counters &
ticketing



02
Customs & TSA
checkpoints



03
Boarding gates



04
Baggage claim



05
Retail areas

02 Heatmaps & Occupancy Insights

Analyzes passenger density and terminal flow to generate data-driven staffing insights and optimize lane management before congestion escalates.

03 Smart Airport Technology Integration

Sync audio and video intelligence with digital airport initiatives, including automated biometric boarding corridors and baggage handling systems.

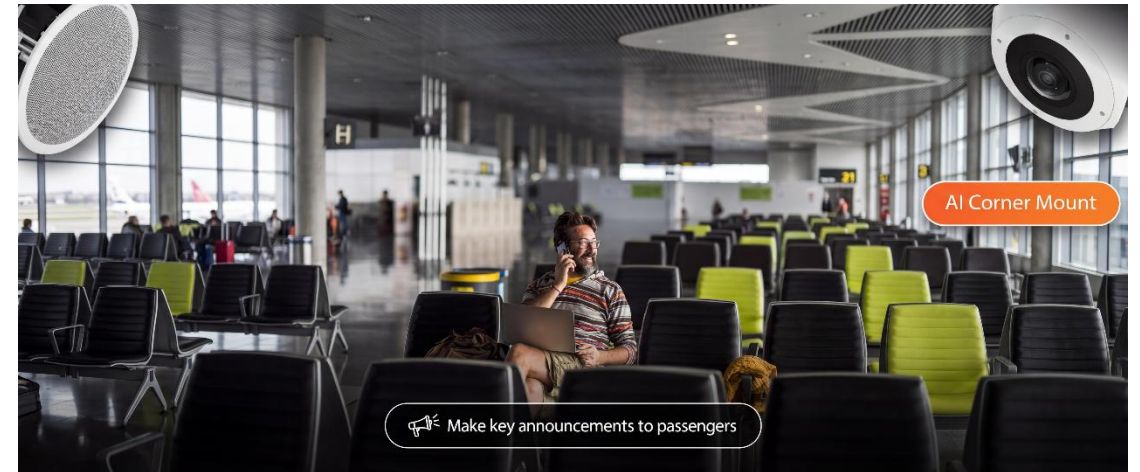
PROVEN SOLUTIONS FOR AVIATION

Comprehensive Audio Solutions

Hanwha Vision offers a range of standard and intelligent, AI-powered audio solutions that help keep passengers, staff, and visitors safe while streamlining communication.

From ambient messaging to real-time alerts for emergencies, the right audio solutions can give airports a powerful layer of control, efficiency, and engagement, fully unified within one platform.

[Learn about Hanwha Vision Audio Beacon](#)



01

Automated announcements triggered by events or schedules, powered by video analytics for proactive safety.



02

Text-to-speech and pre-recorded messages for consistent, multilingual communication across airport locations to keep passengers informed.



03

Scalable IP architecture supports up to **512 devices**, easily integrating with existing surveillance systems.

PROVEN SOLUTIONS FOR AVIATION

Supporting Improved Airside Maintenance Operations: Six Key Ways



Enhancing Situational Awareness

Utilize AI-powered multi-sensor cameras for 24-7, real-time monitoring of hangars, terminals, and maintenance areas. Leverage AI-powered camera insights to ensure appropriate team staffing and workflows.



Predictive Maintenance Thermal Monitoring

Use thermal imaging cameras to monitor machinery heat signatures, identifying potential failures at the earliest warning signs. Use data to optimize equipment maintenance cycles.



Loss Prevention & FOD Mitigation

Use AI-based object detection via rugged bullet cameras to help automatically track tools, parts, and ground support assets.



Safer Night Shifts with 24/7 Low-Light Security

Implement low-light dome cameras to make night shifts safer and protect against unauthorized access attempts.



Adverse Weather Apron Coverage

Employ advanced thermal cameras like the for visibility in poor weather conditions, helping to maintain visibility of taxiing aircraft, ground support vehicles, and airfield personnel.



Automated Safety Monitoring

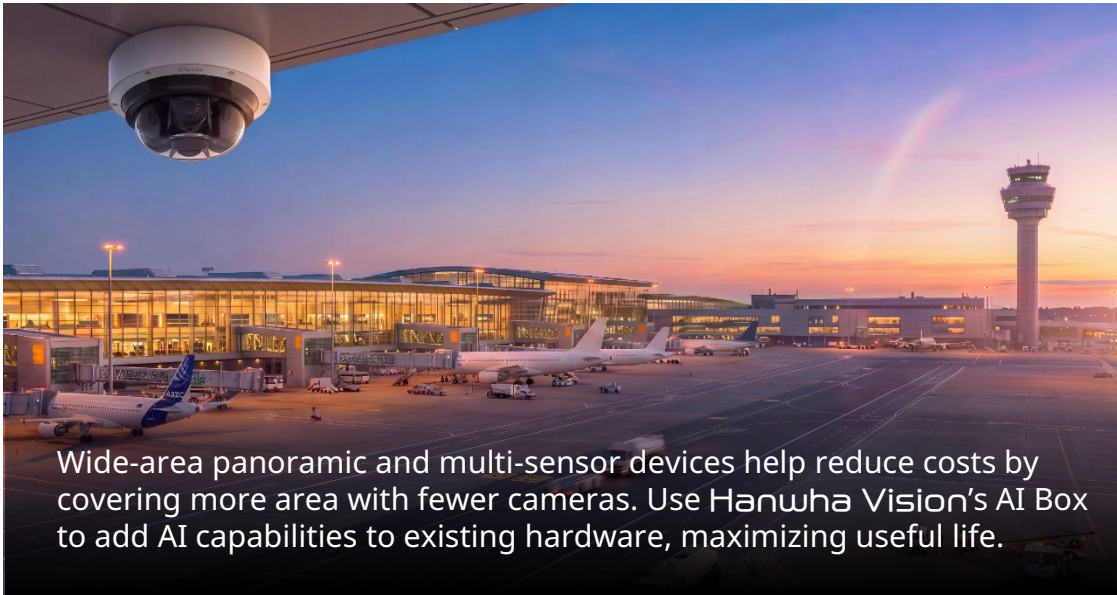
Identify visual data to verify that all airside technicians are following proper safety protocols and correctly utilizing Personal Protective Equipment (PPE).

PROVEN SOLUTIONS FOR AVIATION

Long-Term Flexibility & ROI

By integrating flexible, open-architecture compatibility with advanced data compression and AI analytics, Hanwha Vision helps airports lower total cost of ownership (TCO), extend infrastructure life, and modernize at their own pace without costly rip-and-replace upgrades or proprietary technology constraints.

Lower Total Cost of Ownership (TCO)



Open Architecture Flexibility



Cybersecurity **Commitment**

As rising cyberattacks target K-12 districts and universities, video surveillance systems must be as secure as they are reliable.

Hanwha Vision leads the surveillance industry with a security first approach that protects both **physical and digital environments**. Our cameras and recorders include **secure boot, signed firmware, encrypted data transmission, and device level hardening**.

This commitment helps institutions **safeguard sensitive video data and maintain compliance with internal and regulatory security standards**.



NDA A compliance

All Hanwha Vision cameras, components, and systems are fully NDA A-compliant. Hanwha Vision manufactures its products in **Vietnam and South Korea**, qualifying certain products for sale under the **TAA and GSA guidelines**.



Continuous firmware support

Hanwha Vision delivers ongoing firmware updates to help airports maintain secure, reliable surveillance systems across every location. Devices receive **continuous vulnerability remediation, OS hardening, and protocol-layer updates** validated against threat models, third-party testing, and UL CAP requirements. Strict **cryptographic signing and regression validation** ensure performance across airside and landside networks. Hanwha Vision devices and solutions meet the standards of FCC white list status.

[See Hanwha Vision's long-term firmware support policy →](#)



Security



Data Protection



Secured Hardware



Integrity

[Learn more about Hanwha Vision Cybersecurity →](#)

The Benefits of a **Unified Approach** to Airport Safety & Technology Management

Airports rely on **tight coordination between IT departments and physical security teams.**

Hanwha Vision helps bridge these two critical disciplines by delivering solutions that satisfy **the technical, cybersecurity, and operational needs of IT leaders,** while equipping **security teams with reliable and effective tools that strengthen safety and reduce complexity.**

Alignment between IT and physical security enables unified airport safety strategies, with scalable, future-ready technologies advancing the mission to:

- 01** Protect passengers, staff, and assets
- 02** Ensure system reliability and cybersecurity
- 03** Support compliance with district, state, and federal regulations
- 04** Cultivate scalable, adaptable safety ecosystems
- 05** Maintain long-term control over technology decisions

Global Networks

Hanwha Vision America
Hanwha Vision Europe
Hanwha Vision MEA FZE
Hanwha Vision APAC
Hanwha Vision Mexico
Hanwha Vision Oceania Branch
Hanwha Vision Vietnam (Hanoi Office, Ho Chi Minh Office)

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Seongnam-si, Gyeonggi-do, 13488, Korea

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