Bringing a New Perspective with Drones



NEARTHLAB



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# 

a leading global provider of autonomous flight drone solutions, headquartered in Korea.

#### Approach

Nearthlab is a leading company that has successfully commercialized drone solutions, leveraging proprietary technology developed in Korea. We set new benchmarks in the drone industry by seamlessly integrating cutting-edge innovations. Powered by our proprietary AI flight technology, we deliver tailored solutions across diverse industries.



Technology Expertise

Over 60% of our workforce specializes in R&D AI Autonomous Flight

Beyond Level 4 Vision Al Autonomous Flight



80% of total revenue occurs overseas

#### Industry

Nearthlab redefines industry standards in public safety, defense, inspections, and infrastructure management through proprietary drone engineering, advanced flight algorithms, and a robust data platform. Beyond technology, we drive efficiency, safety, and sustainability with impactful solutions.







Security
Public Safety &

Defense

Physical Security

Domestic and International Defense & Enterprise Sectors Inspection Autonomous Inspection for Critical Facilities

Infrastructure

#### Achievements

- 2025. Edison Award 2025 iR52 Jang Young-Sil Science and Technology Award 2025 CES 2025 Best of Innovation Award iF DESIGN AWARD 2025
- 2024. Secured 1<sup>st</sup> place in the Attack Category at the Dronebot Challenge Selected as a WEF 2024 Technology Pioneer Red Dot Design Award 2024 iF DESIGN AWARD 2024
- 2023. Acquired three projects from the Defense Acquisition Program Administration (DAPA) Forbes Asia's Top 100 Promising Companies Microsoft Growth X Accelerator
- 2022. Gold Medal in the International AI Competition (Kaggle) CES 2022 Innovation Award Award for Outstanding Contribution to the Development of the Drone Industry (Minister of Land, Infrastructure and Transport, Korea)

#### **Key Partners**

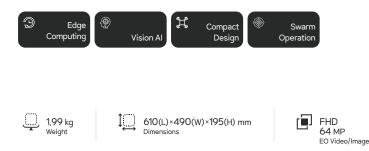
Nearthlab expands its presence with long-term partnerships to drive innovation. We continuously enhance technology and create industry-wide value by collaborating with leading corporations and institutions.

대한민국 국방부 Ministry of National Defense	EDGE	ΗΥΠΟΑΙ	<b>O</b> NAES	SoftBank	RWE	Vestas	INNERGEX	
	Deutsche Windtechnik	LIG Nex1	Rattern		ONORTHLAND	∂Eurus Energy		😡 Hanwha Systems



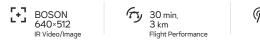
# Aiden

Autonomous Drone for Surveillance & Security



AiDEN is an autonomous surveillance and security drone with a lightweight design under 2 kg and a compact form, ensuring high portability and rapid on-site deployment. Powered by edge computing and Al autonomous flight control, AiDEN operates reliably in complex environments. Its swarm drone technology enables simultaneous multi-drone operations, enhancing mission efficiency.

Integration with AiDEN STATION offers scalable operations and expanded mission capabilities, making it ideal for surveillance, security, and first responder missions.



5 2,000 m
 LRF

# **AIDEN STATION**

Unmanned Drone Station



AiDEN STATION is more than just a charging system — it is a fully automated solution equipped with autonomous and precise takeoff & landing and battery swapping capabilities for continuous operation.

Designed to support rapid deployment and swarm missions, it enhances efficiency in dynamic environments. Serving as a deployable control center, AiDEN STATION can be seamlessly integrated into various industries. Its scalable deployment extends operational coverage, ensuring sustained and uninterrupted missions,

IP66

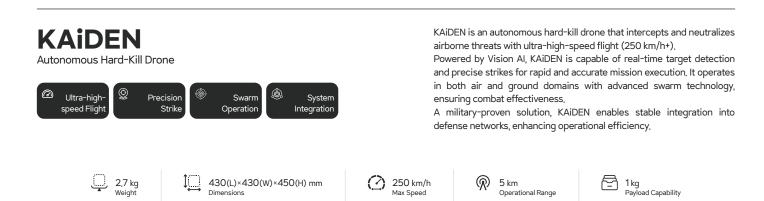
Electronics IP



5 Batteries Battery Compartment

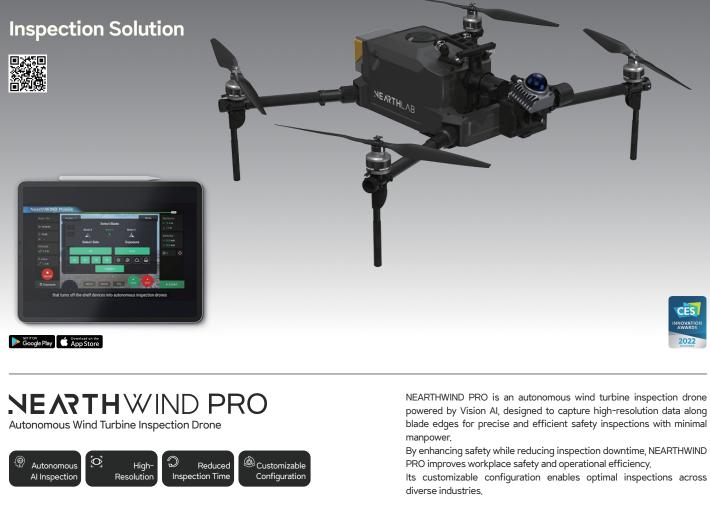






#### **KAIDEN LAUNCHER** KAIDEN LAUNCHER supports remote and autonomous deployment of KAiDEN drones, ensuring secure storage and rapid launch in military and Remote Launcher for Hard-Kill Drone defense operations. Designed for strategic wide-area deployment, KAiDEN LAUNCHER enables swarm operations and enhances operational sustainability in Ð ٦ ₽ 0 All-Weather Secure Rapid Remote combat zones. Storage Deployment Response Operation 100 kg 5000(L)×1000(W)×700(H) mm 20 ea IP66 ര Remote In seconds ~} Launch Readiness Weiaht Dimensions Storage Capacity Electronics IP Control & Operation





20 WTGs+

Daily Inspection Capacity

NEARTHWIND MOBILE

15 min.

Inspection Time per Turbine

Subscription-Based Wind Turbine Inspection Mobile App



NEARTHWIND MOBILE is a subscription-based app that transforms commercial drones into automated facility inspection tools, powered by deep learning AI and autonomous flight,

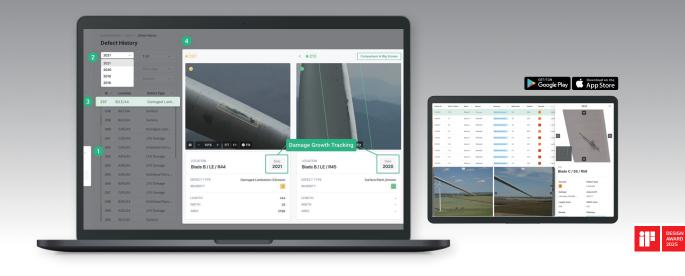
Below 1 mm

Defect Detection Capability

It is a highly scalable solution that can be integrated with off-the-shelf commercial drones. By reducing reliance on costly specialized equipment, it lowers operational costs and features an intuitive interface for seamless operation.

## AI Data Management Solution





# zoomable<sup>™</sup>

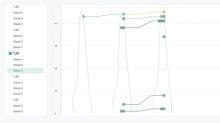
Al Data Management & Analysis Platform



Zoomable is a data management platform that automates data analysis with AI, maximizing inspection accuracy and efficiency.

It suptports data management for wind turbines, energy facilities, and industrial infrastructure, enabling comprehensive oversight from individual assets to large-scale sites. Al processes millimeter-level defect detection and automated image alignment.

Zoomable also assesses risk severity, prioritizes maintenance tasks, and generates reports, creating a systematic maintenance workflow.



**Customized Project Management** 

- Prediction of Turbine Lifecycle
- Sustainable Operations
   Through Time Serious Tracking



Risk Severity Classification in 5 levels





Data Processing in 3 steps

- Data Collection
- 2 Al Analysis (Automated Stitching & Defect Detection)
- 3 Data Integration & Report Generation



Rapid Implementation

# Surveillance & Reconnaissance Solution

Nearthlab provides combat-proven surveillance and reconnaissance drones, designed for defense and public sector operations,

Equipped with high-magnification zoom and collision avoidance, our drones ensure stable surveillance in harsh conditions, including night operations and long-range monitoring.

Built for quick setup and user-friendly operation, they support immediate deployment without AI dependency and offer modular payload options for flexible mission adaptability.

### P-Zero

Application	Light Cargo Tramsportation	
	Surveillance & Reconnaissance	
Size	1285(L)×1235(W)×600(H) mm	
Weight	14.9 kg	
Payload Capacity	10 kg	
Operating Time	40 min.	
Operational Range	e 10 km	
Max Speed	70 km/h	
Crusing Speed	40 km/h	



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#### P-Seven

Application	Surveillance & Reconnaissance*	
Size	610(L)×700(W)×330(H) mm	
Weight	6 kg	
Payload Capacity	500 g	
Operating Time	30 min.	
Operational Rang (Altitude)	ge 1,000 m (150m)	A March
Max Speed	60 km/h	
Crusing Speed	40 km/h	

\*8x-10x Optical Zoom for Day & Night Operations

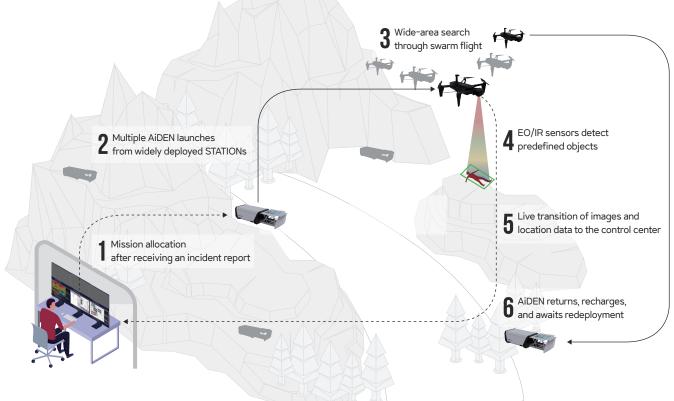
AIDEN + STATION + System Integration

From Search to Rescue:

#### Autonomous Reconnaissance Drones Securing the Golden Hour

When an emergency arises, AiDEN rapidly deploys from the closest available station. Utilizing Vision Al-powered object detection, AiDEN searches for targets and transmits real-time data and location updates to the control center.

After completing its mission, AiDEN returns to the station for automated battery swapping, then either stands ready for the next mission or resumes pre-programmed patrols.





Surveillance & First Responder

**Drone Solution** 

for Public Safety

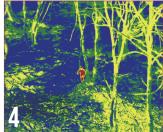
Public Safety (Fire & Police Department)

Integrated Real-Time Monitoring

Rapid Deployment

ne Station





Multi-Drone Swarm Operation IF

IR-Enhanced Object Detection

AIDEN + STATION + System Integration

#### Surveillance & First Responder Drone Solution

for Facility Safety



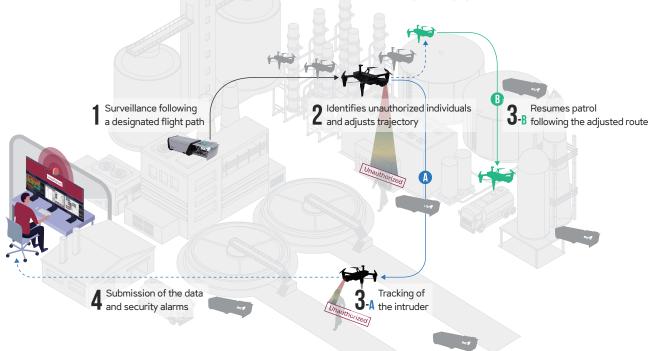
#### From Unmanned Drone Reconnaissance to Facility Protection:

#### Next-Generation Security

AiDEN autonomously patrols and secures critical infrastructure, detecting intrusions, fires, and security threats with Vision AI-powered real-time alerts,

By eliminating blind spots in traditional surveillance, AiDEN enables proactive threat detection and rapid response. When anomalies arise, AiDEN immediately moves to the target location to investigate, supporting fast decision-making at the control center.

After completing its mission, AiDEN automatically returns to the nearest station, ready for redeployment,





Unmanned Patrol Operation

Al Tracking

Unauthorized Intruder Detection & Tracking





Dynamic Path Reallocation

Real-Time Data Transmission & Alert System

KAIDEN + LAUNCHER + System Integration

# Counter UAS **Defense Solution** Autonomous Hard-Kill Counter-Drone Defense Solution 4 KAiDEN integrates with existing detection systems to identify and neutralize aerial threats. Utilizing Vision AI, it undergoes high-speed mid-course guidance before engaging in target detection and lock-on. Once locked on, KAiDEN optimizes its trajectory and distance, then executes a precise, high-speed terminal Defense impact, ensuring effective threat neutralization. Precise impact Mid-course Guidance 4 at High Speed **5** Lock-On & Entry into a Collision Trajectory KAiDEN launches from the nearest LAUNCHER Mission allocation RADAR target detection based on the detected data and transmission of the data

Detection System & Integrated Response Solution





High-Speed Target Tracking

Precision Drone Interception System

#### **Tactical Bombing Swarm Solution**



# XAIDEN

Swarm Autonomous flight Attack Drone

Time



4 kg L510×W460×H210 mm 10 min.+ 1 Operating

120 km/h Maximum Speed 10 km

Operational

Range

2 kg Payload Capability



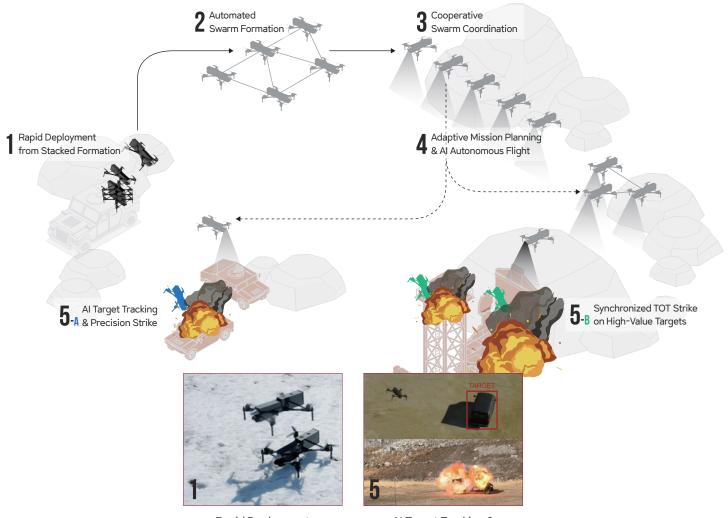
\*Electronic Warfare

XAiDEN is an autonomous swarm attack drone designed for high-speed, precision warfare. Equipped with an advanced AI-driven control system, it enables cooperative reconnaissance, autonomous target tracking, and dynamic mission execution, Rapidly deployable from stacked formations, XAiDEN is resistant to electronic warfare, including GPS and communication jamming. Leveraging AI-powered swarm intelligence, it identifies, pursues, and engages high-value targets in real time. Adaptable to evolving battlefield conditions, XAiDEN maximizes strike efficiency by coordinating multi-target engagements or executing concentrated precision strikes with mortars.

Multi-XAiDENS

#### From swarm combat to EW countermeasure: Tactical Bombing Swarm Soultion

XAiDEN rapidly launches, forms formations, and navigates mission areas while maintaining stability in electronic warfare environments. Its onboard AI tracking system enables precision strikes on fixed and moving targets. For high-value targets, it executes synchronized Time-on-Target (TOT) strikes, minimizing enemy response time and maximizing impact. XAiDEN dynamically adapts to battlefield conditions, ensuring tactical efficiency.



Rapid Deployment from Stack Al Target Tracking & Precision Strike

Counter UAS Defense Solution

4

Defense



