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# Pringing a New Perspective with Drones NEARTHLAB



### **NEARTH**LAB

A Leading Global Provider of Autonomous Flight Drone Solutions

### 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 cuttingedge innovations.

Powered by our proprietary Al flight technology, we deliver tailored solutions across diverse industries.



Expertise

Over 60% of Workforce Specializes in R & D



Beyond Level 4 Vision Al Autonomous Flight



Global Commercialization

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



Defense

Domestic and International Defense & Enterprise Sectors



Inspection

Autonomous Inspection for Critical Facilities

#### **Achievements**

2025 Edison Awards 2025

iR52 Jang Young-Sil Science and Technology Award 2025

CES 2025 Best of Innovation Award

iF DESIGN AWARD 2025

Winner of the Robotics and Aerial Integration for Defense Challenge, hosted by Korea's Ministry of Defense 2024

World Economic Forum 2024 Technology Pioneer Red Dot Design Award 2024

Fast Company's Most Innovative Companies in Robotics













Secured three projects from the Defense Acquisition Program Administration (DAPA) 2023

Forbes Asia 100 To Watch 2023 Microsoft Growth X Accelerator

2022 Gold Medal in the International AI Competition (Google's Kaggle)

CES 2022 Innovation Award

Recipient of the Minister's Award for Leadership in Drone Industry Innovation from Korea's Ministry of Land, Infrastructure and Transport (MLIT)



**Forbes** 







#### **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.























# **AIDEN**

Autonomous Drone for Surveillance & Security



Weight



1 610(L)×490(W)×195(H) mm Dimensions





[+] BOSON 640×512 IR Video/Image





5 ~ 2,000 m









AiDEN is an autonomous surveillance and security drone with a lightweight design under 2 kg and a compact form, ensuring high portability and rapid onsite 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.

# AIDEN STATION

Unmanned Drone Station











(2) ~4 min.



Electronics IP









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,

STATION can be seamlessly integrated into various industries. Its scalable deployment extends operational coverage, ensuring sustained and uninterrupted missions.



# **KAIDEN**

Autonomous Hard-Kill Drone



1 455(L)×455(W)×400(H) mm Dimensions



Max Speed



Operational Range



☐ 1 kg Payload Capability









KAiDEN is an autonomous hard-kill drone that intercepts and neutralizes airborne threats with ultra-high-speed flight (250 km/h+). Powered by vision Al, KAiDEN is capable of real-time target detection and precise strikes for rapid and accurate mission execution. It operates in both air and ground domains with advanced swarm technology, ensuring combat effectiveness. A military-proven solution, KAiDEN enables stable integration into defense networks, enhancing operational efficiency.

# KAIDEN LAUNCHER

Remote Launcher for Hard-Kill Drone













 $\label{eq:continuous} \ensuremath{\mbox{\begin{tikzpicture} \line 1.5cm} \line \line 2.0(L) \times 620(W) \times 908(H) \ mm \end{tikzpicture}}$ Dimensions













(2) In seconds Launch Readiness

Flectronics IP









KAIDEN LAUNCHER supports remote and autonomous deployment of KAIDEN drones, ensuring secure storage and rapid launch in military and defense operations. Designed for strategic wide-area deployment, KAIDEN LAUNCHER enables swarm operations and enhances operational sustainability in combat

(Specs refer to one LAUNCHER only; the system supports multi-unit configuration for expanded operation.)



# **NEARTHWIND Pro**

Autonomous Wind Turbine Inspection Drone







[+] 61 MP

1 kg
Payload Capability









NearthWIND Pro is an autonomous wind turbine inspection drone powered by vision AI, designed to capture high-resolution data along blade edges for precise and efficient safety inspections with minimal manpower. By enhancing safety while reducing inspection downtime, NearthWIND Pro improves workplace safety and operational efficiency. Its customizable configuration enables optimal inspections across diverse industries.

# NEARTHWIND Mobile

Subscription-based Wind Turbine Inspection Mobile App







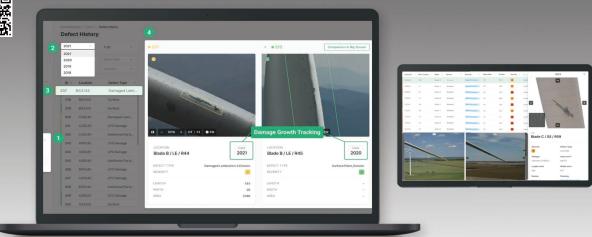




NearthWIND Mobile is a subscription-based app that transforms commercial drones into automated facility inspection tools, powered by deep learning Al and autonomous flight. It is a highly scalable solution that can be integrated with off-the-shelf commercial drones. By reducing reliance on costly specialized equipment, it lowers operational costs and features an intuitive interface for seamless operation.

# Al Data Management Solution





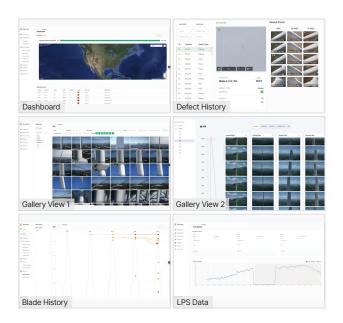




# zoomable™

Al Data Management & Analysis Platform













Zoomable is a data management platform that automates data analysis with AI, maximizing inspection accuracy and efficiency. It supports data management for wind turbines, energy facilities, and industrial infrastructure, enabling comprehensive oversight from individual assets to large-scale sites. AI 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.

### Smart Capture, Intelligent Analysis, Rapid Reporting







10<sup>+</sup> min.

Autonomous Inspections Effortless Data Integration within 15 Minutes with Zoomable

**10** da

Full Report Generation within 10 Days

### 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 Al dependency and offer modular payload options for flexible mission adaptability.

### P-Zero



Application	Light Cargo Transportation Surveillance & Reconnaissance
Size	1,285(L)×1,235(W)×600(H) mm
Weight	14.9 kg
Payload Capacity	10 kg
Operating Time	40 min.
Operational Range	10 km
Max Speed	70 km/h
Cruising Speed	40 km/h

### P-Seven



610(L)×700(W)×330(H) mm
6 kg
500 g
30 min.
1,000 m (150 m)
60 km/h
40 km/h

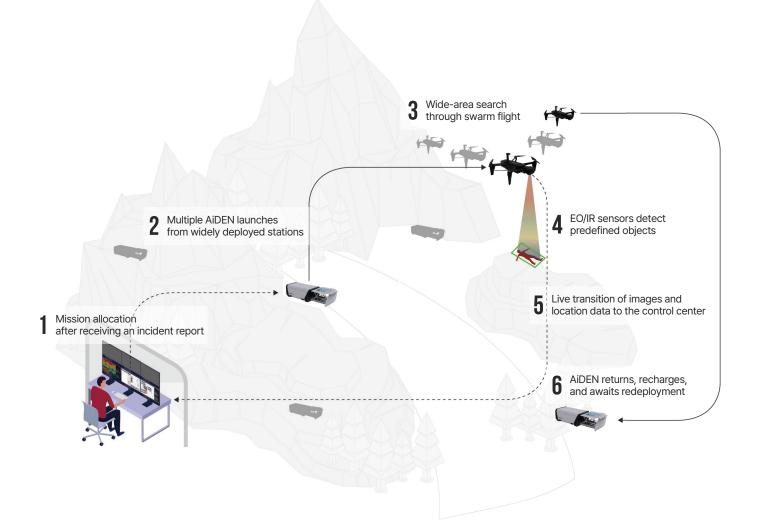
\*8x~10x Optical Zoom for Day & Night Operations



#### 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.





Integrated Real-Time Monitoring



Rapid Deployment



Multi-Drone Swarm Operation



IR-Enhanced Object Detection

### Surveillance & First Responder Drone Solution

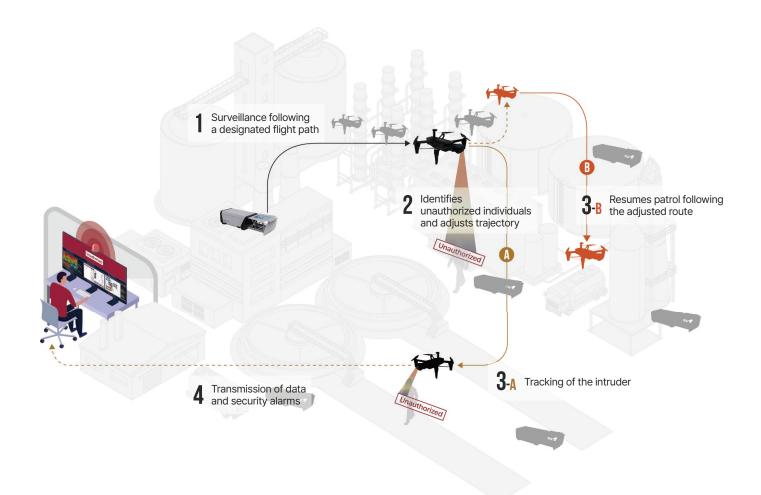
for Facility Safety



# From Unmanned Drone Reconnaissance to Facility Protection:

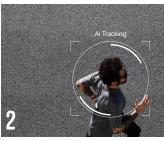
### **Next-Generation Security**

AiDEN autonomously patrols and secures critical infrastructure, detecting intrusions, fires, and security threats with Vision Al-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** 



Unauthorized Intruder Detection & Tracking



Dynamic Path Reallocation

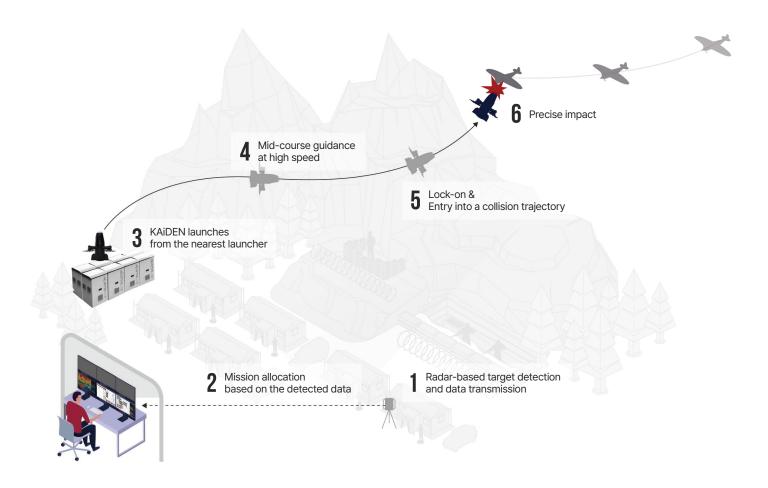


Real-Time Data Transmission & Alert System



# Autonomous Hard-Kill Counter-Drone Defense Solution

KAiDEN integrates with existing detection systems to identify and neutralize aerial threats. Utilizing vision Al, it undergoes 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 impact, ensuring effective threat neutralization.





Detection System & Integrated Response Solution



Immediate Launch



High-Speed Target Tracking



Precision Drone Interception System