Bringing a New Perspective with Drones

NEARTHLAB

NEARTHLAB is

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 AI 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

Public Safety & Physical Security

Defense

Domestic and International Defense & Enterprise Sectors

Infrastructure Inspection

Autonomous Inspection for Critical Facilities

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 1st 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.

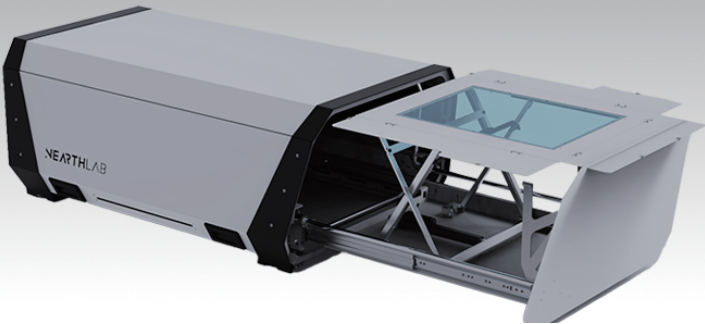대한민국 국방부 Ministry of National Defense | EDGE | HYUNDAI | NAES | SoftBank | RWE | Vestas | INNERGEX | SIEMENS Gamesa

KEPCO | Deutsche Windtechnik | LIG Nex1 | Pattern | NORDEX We've got the power | NORTHLAND POWER | Eurus Energy | ONYX Insight | Hanwha Systems

Surveillance & First Responder Drone Solution

Guaranteed
NEARTHLAB
Delivered to Military
Quality

CES Innovation Awards 2025 Best of Innovation | iF DESIGN AWARD 2024 | reddot winner 2024

AiDEN
Autonomous Drone for Surveillance & Security

- Edge Computing
- Vision AI
- Compact Design
- Swarm Operation

AiDEN is an autonomous surveillance and security drone with a light-weight design under 2 kg and a compact form, ensuring high portability and rapid on-site deployment. Powered by edge computing and AI 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.

1.99 kg Weight	**610(L)×490(W)×195(H) mm** Dimensions	**FHD 64 MP** EO Video/Image	**BOSON 640×512** IR Video/Image	**30 min. 3 km** Flight Performance	**5 - 2,000 m** LRF

AiDEN STATION
Unmanned Drone Station

- Precision Landing
- Automated Battery Swapping
- Deployable Control Center
- Unmanned Operation

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.
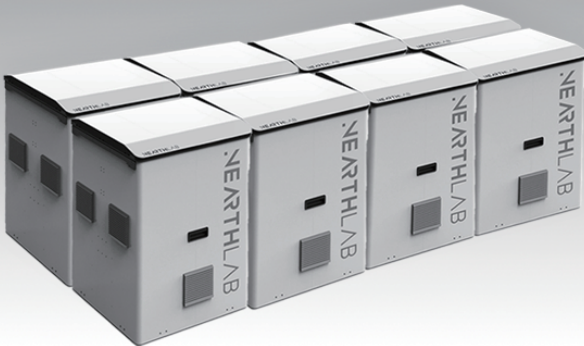
95 kg Weight	**1470(L)×910(W)×540(H) mm** Dimensions	**5 Batteries** Battery Compartment	**~4 min.** Battery Swapping	**IP66** Electronics IP

NEARTHLAB

Counter UAS Defense Solution

Guaranteed NEARTHLAB Delivered to Military Quality

EDISON AWARDS 2025

KAiDEN
Autonomous Hard-Kill Drone

| Ultra-high-speed Flight | Precision Strike | Swarm Operation | System Integration |

KAiDEN is an autonomous hard-kill drone that intercepts and neutralizes airborne threats with ultra-high-speed flight (250 km/h+).

Powered by Vision AI, 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.

| 2.7 kg Weight | 430(L)×430(W)×450(H) mm Dimensions | 250 km/h Max Speed | 5 km Operational Range | 1 kg Payload Capability |

KAiDEN LAUNCHER
Remote Launcher for Hard-Kill Drone

| Secure Storage | All-Weather Deployment | Rapid Response | Remote Operation |

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 zones.

| 100 kg Weight | 5000(L)×1000(W)×700(H) mm Dimensions | 20 ea Storage Capacity | IP66 Electronics IP | Remote Control & Operation | In seconds Launch Readiness |

Inspection Solution

that turns off-the-shelf devices into autonomous inspection drones

CES INNOVATION AWARDS 2022 HONOREE

NEARTHWIND PRO
Autonomous Wind Turbine Inspection Drone

- Autonomous AI Inspection
- High-Resolution
- Reduced Inspection Time
- Customizable Configuration

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.
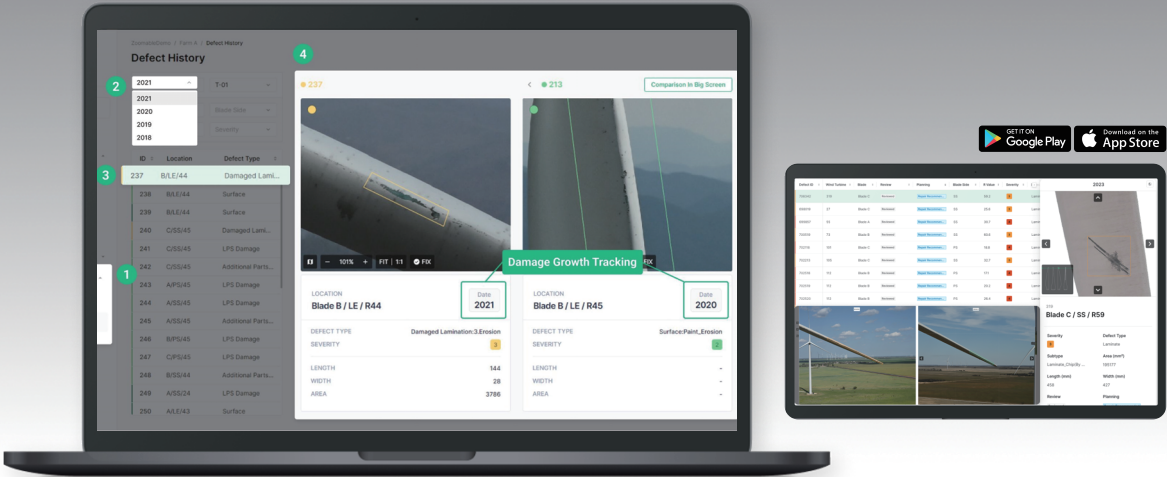
15 min.	20 WTGs+	Below 1 mm
Inspection Time per Turbine	Daily Inspection Capacity	Defect Detection Capability

---

NEARTHWIND MOBILE
Subscription-Based Wind Turbine Inspection Mobile App

- Compatibility
- User Convenience
- Scalability
- Cost Efficiency

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

NEARTHLAB

AI Data Management Solution

GET IT ON Google Play

Download on the App Store

iF DESIGN AWARD 2025

zoomable™
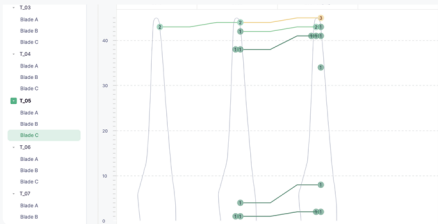## AI Data Management & Analysis Platform

- Automated Image Alignment
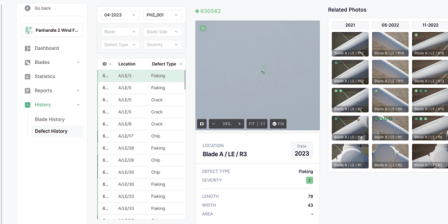- AI Data Analysis
- Report Generation
- Flexible Expansion

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.

Customized Project Management

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

Risk Severity Classification in 5 levels

Low ◄─────────────► High Severity

Data Processing in 3 steps

❶ Data Collection
❷ AI Analysis (Automated Stitching & Defect Detection)
❸ 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	10 km
Max Speed	70 km/h
Crusing Speed	40 km/h

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 Range (Altitude)	1,000 m (150m)
Max Speed	60 km/h
Crusing Speed	40 km/h

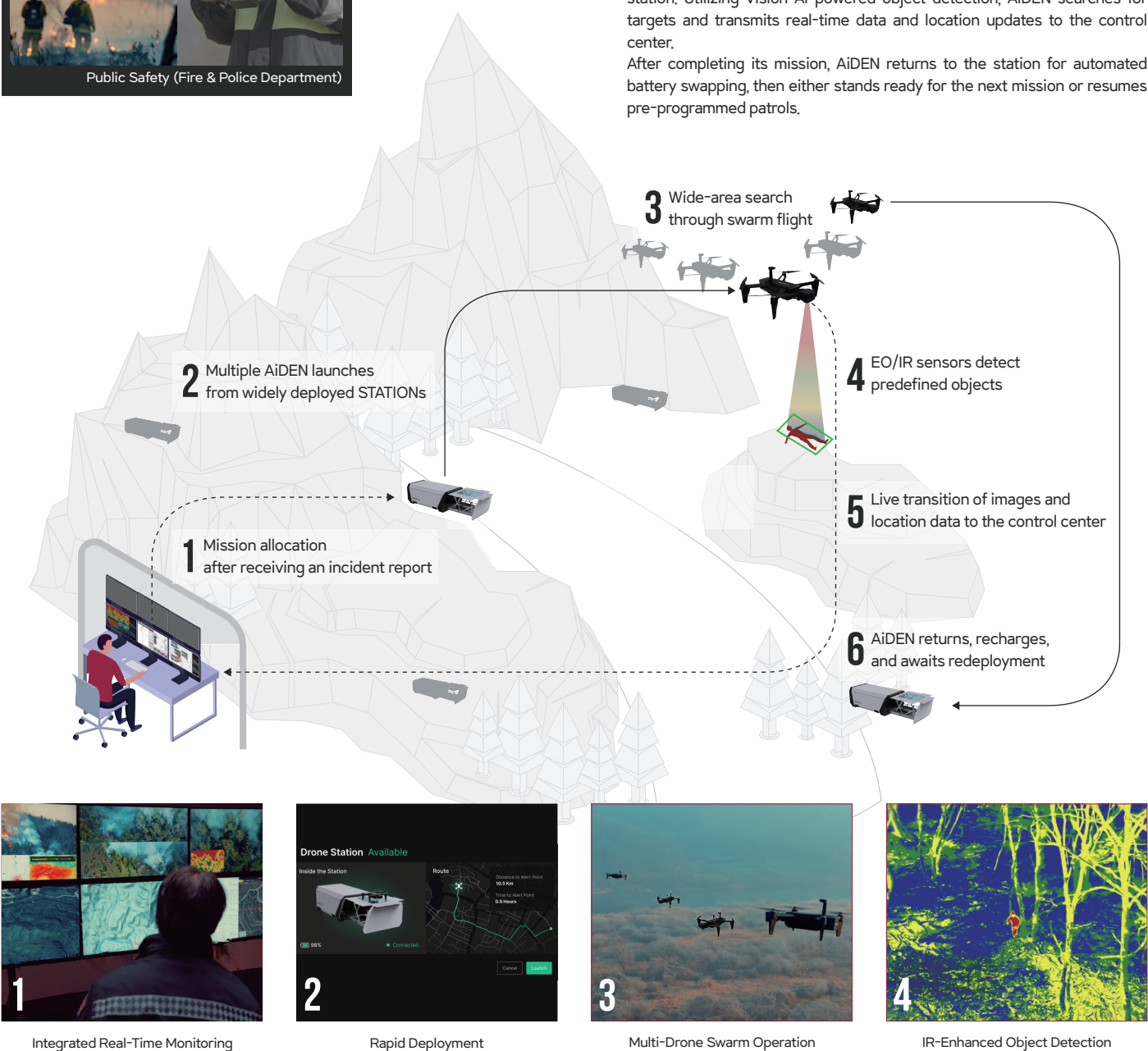*8x-10x Optical Zoom for Day & Night Operations

NEARTHLAB

Bringing a New Perspective with Drones

Surveillance & First Responder Drone Solution

for Public Safety

Public Safety (Fire & Police Department)

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 AI-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.

3 Wide-area search through swarm flight

2 Multiple AiDEN launches from widely deployed STATIONs

4 EO/IR sensors detect predefined objects

5 Live transition of images and location data to the control center

1 Mission allocation after receiving an incident report

6 AiDEN returns, recharges, and awaits redeployment

1 Integrated Real-Time Monitoring

2 Rapid Deployment

Drone Station Available

Inside the Station | Route

Distance to Alert Point
10.5 Km

Time to Alert Point
0.5 Hours

98% • Connected

Cancel Launch

3 Multi-Drone Swarm Operation

4 IR-Enhanced Object Detection

Surveillance & First Responder Drone Solution

for Facility Safety

Physical Security (Factory, Plants)

From Unmanned Drone Reconnaissance to Facility Protection:
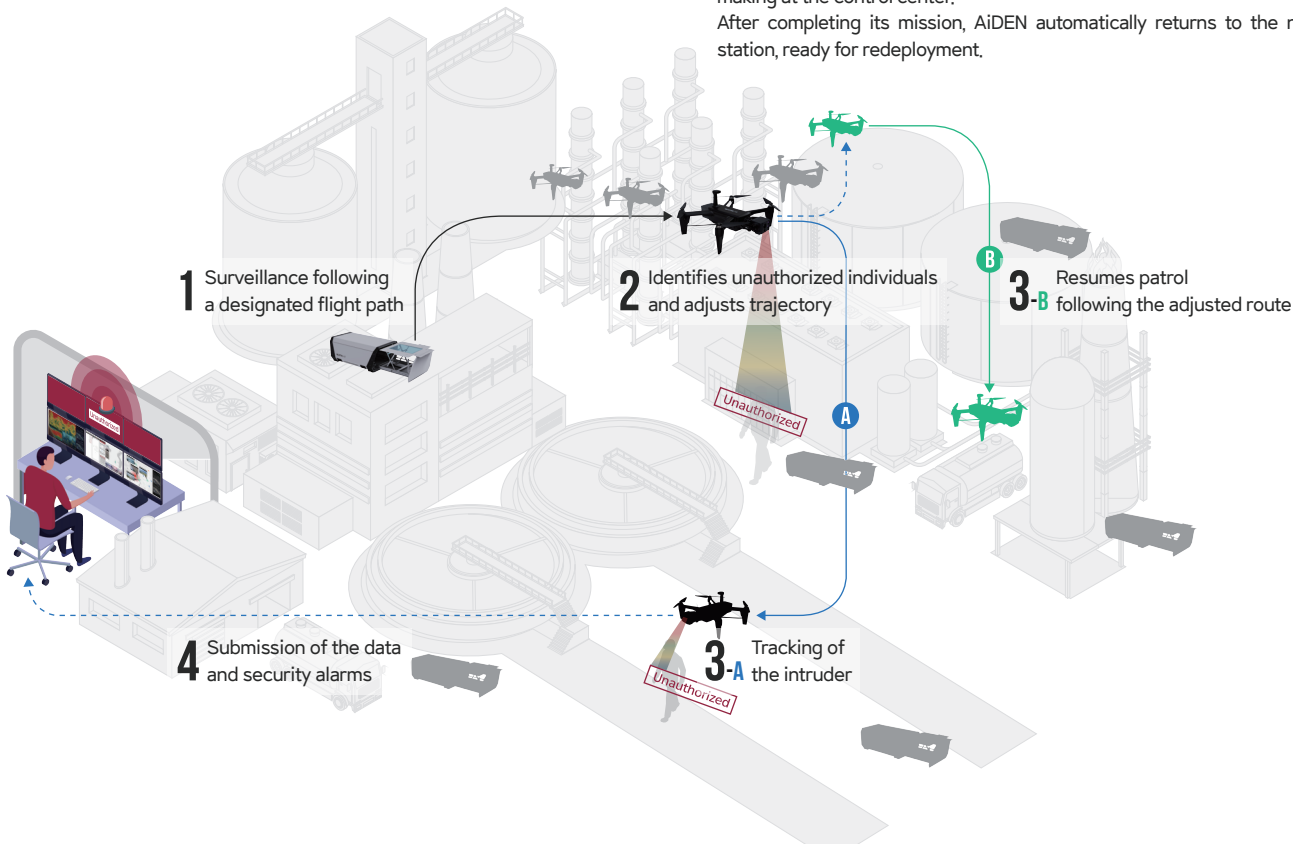
Next-Generation Security

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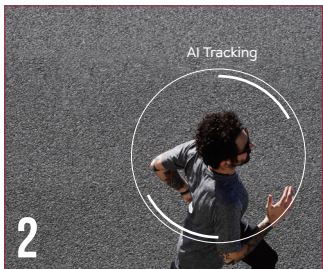
After completing its mission, AiDEN automatically returns to the nearest station, ready for redeployment.

1 Surveillance following a designated flight path

2 Identifies unauthorized individuals and adjusts trajectory

Unauthorized

B

3-B Resumes patrol following the adjusted route

A

4 Submission of the data and security alarms

3-A Tracking of the intruder

Unauthorized

1 Unmanned Patrol Operation

2 AI Tracking
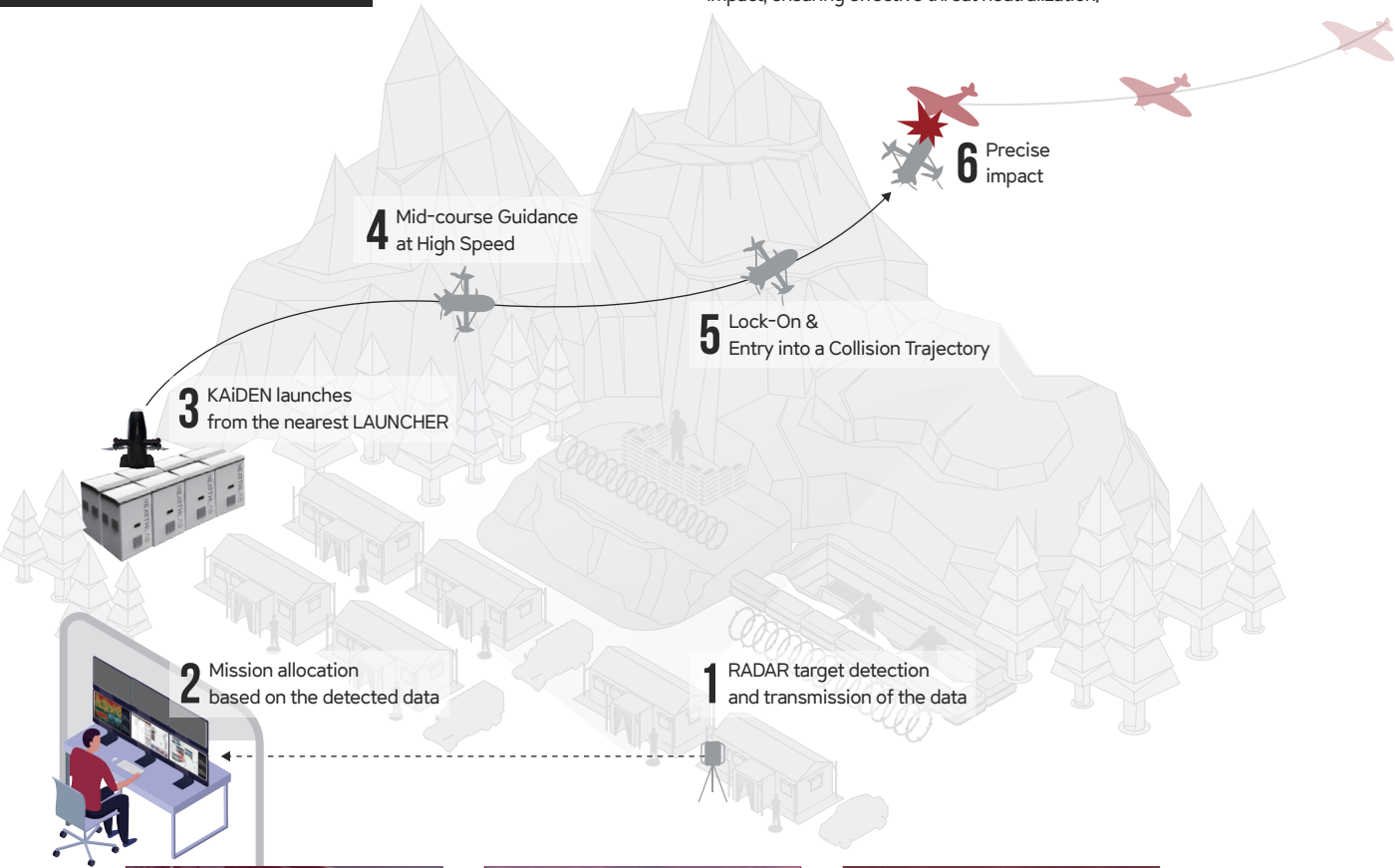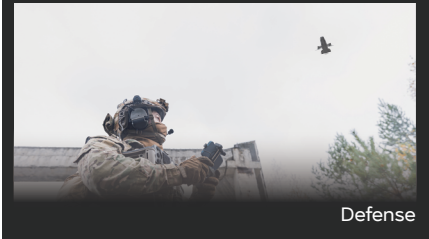Unauthorized Intruder Detection & Tracking

3 Dynamic Path Reallocation

4 Real-Time Data Transmission & Alert System

Defense

Autonomous Hard-Kill
Counter-Drone Defense Solution

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 impact, ensuring effective threat neutralization.

6 Precise impact

4 Mid-course Guidance at High Speed

5 Lock-On & Entry into a Collision Trajectory

3 KAiDEN launches from the nearest LAUNCHER

2 Mission allocation based on the detected data

1 RADAR target detection and transmission of the data

1·2·3

Detection System & Integrated Response Solution

4

High-Speed Target Tracking

5

Precision Drone Interception System