

HOLLYWAY

Boundless Space · Infinite Possibilities

www.hollywaytec.com



HOLLYWAY



Pioneering Next-Generation Drone Autonomy

About HOLLYWAY

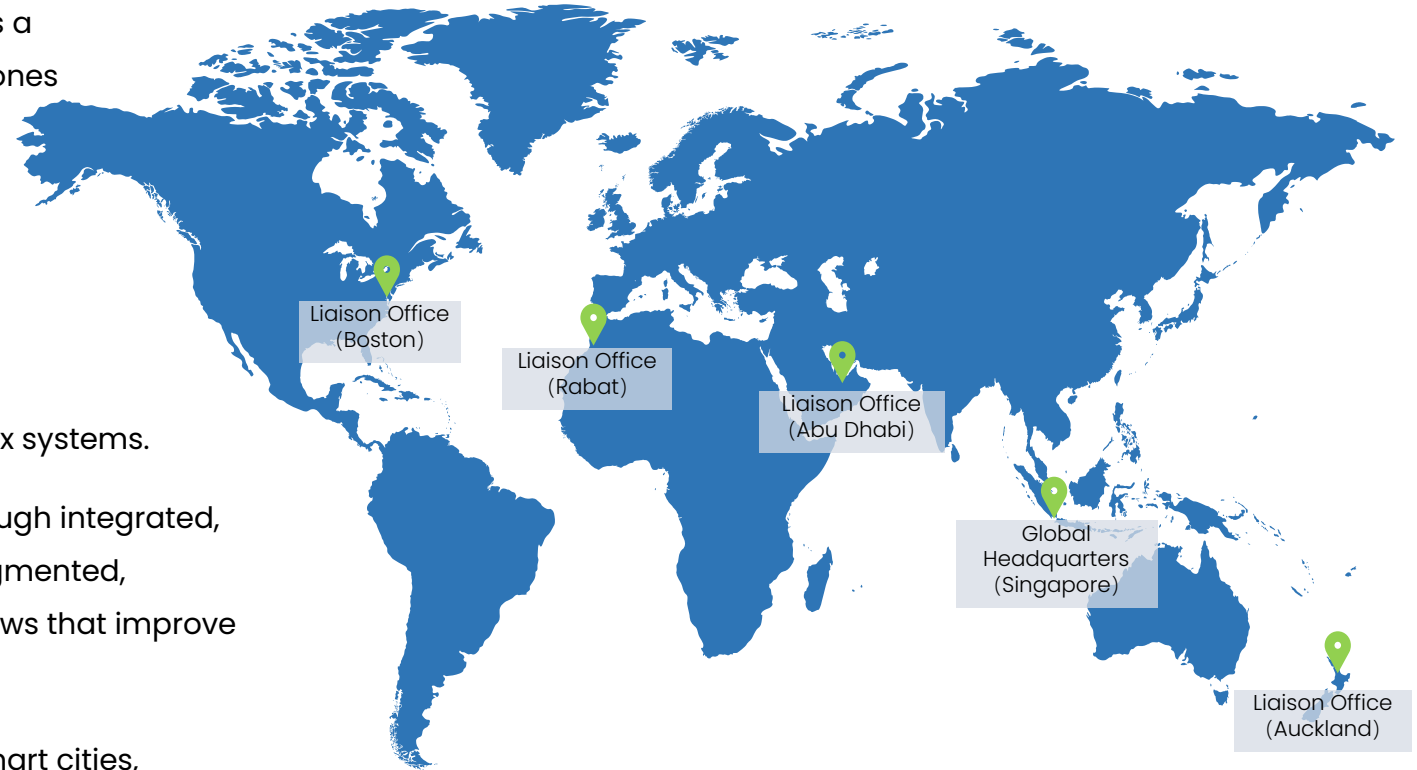
Hollyway is a Singapore-based technology innovator focused on AI-driven autonomous drone solutions for industrial applications. As a pioneer in drone and AI field, we push the boundaries of what drones can achieve.

Backed by an experienced R&D team and advanced production capacity, Hollyway's self-developed drone-in-a-box systems integrate holographic real-time mapping, industrial intelligent drones, fully autonomous docks, and IoT cloud platforms.

However, Hollyway offers more than autonomous drone-in-a-box systems.

We enable industrial organizations to modernize operations through integrated, AI-driven automation platforms. We help customers replace fragmented, inefficient legacy processes with end-to-end automated workflows that improve safety, efficiency, and decision-making.

Hollyway's solutions tackle complex operational challenges in smart cities, energy infrastructure, critical asset monitoring, emergency response, and large-area surveillance—from dense urban centers to remote regions. With proven deployments across Asia and the MENA region, Hollyway is a trusted partner in large-scale digital transformation and operational automation.



WHY

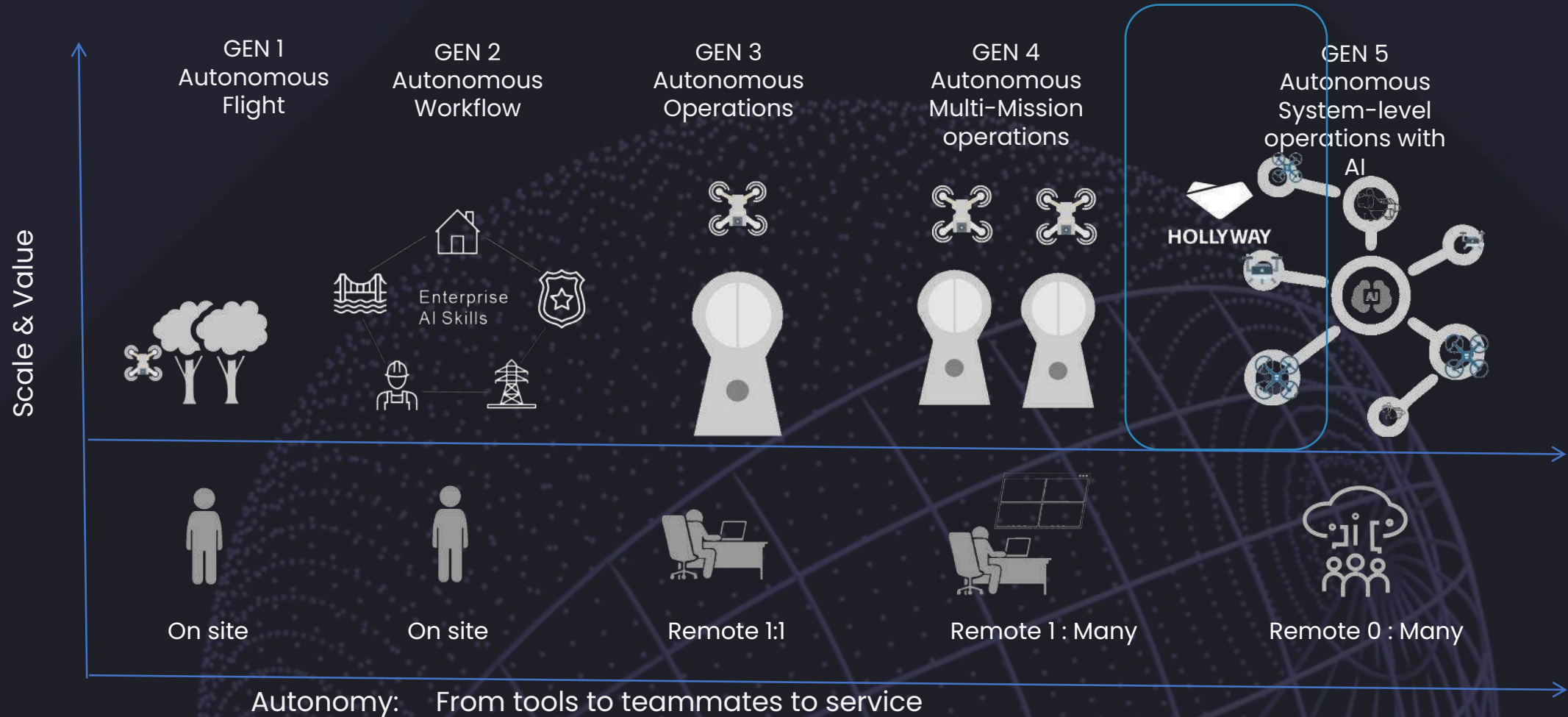
Why Hollyway demands your attention:
It's the game-changer that empowers
you to shape what's next.



 **HOLLYWAY**

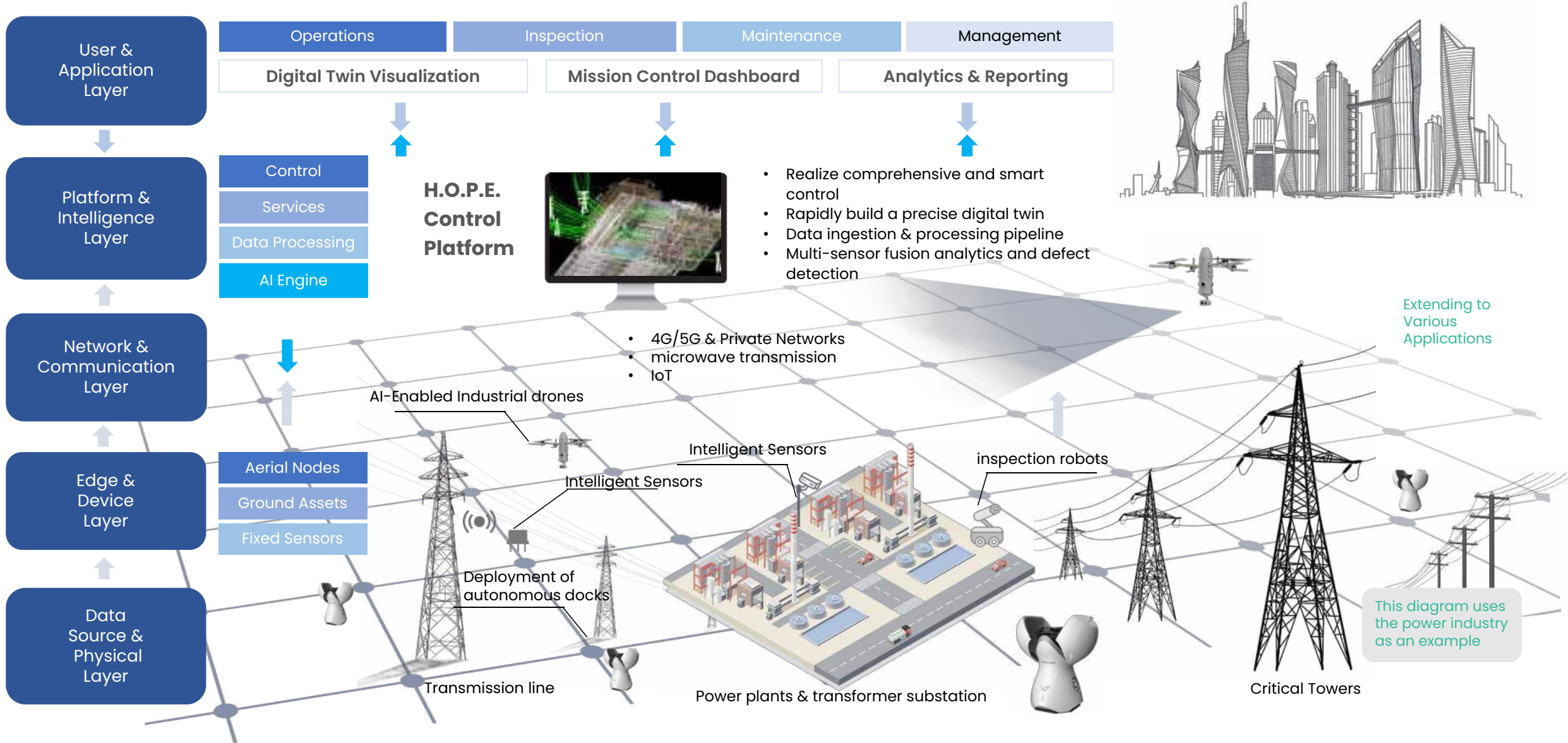
Hollyway's technology already stands as the latest generation in the industry

Hollyway's products and technologies have surpassed the fourth-generation drone technology (Drone-in-a-Box/DIB) and has entered the era of the fifth generation: intelligent and fully autonomous drone systems (DIB Autonomy).



Technical Architecture

By enabling intelligent machines and AI to address and eliminate challenging and hazardous environments, the Hollway technical architecture unleashes human creativity and AI capabilities while enhancing the technological competitiveness of businesses for their users. Moreover, innovative technologies are leveraged across every dimension, such as fully automated design, modular payloads, and multi-sensor fusion (incorporating visual, thermal, gas sensors, and more).



Delivers Value to Industrial Clients and Reshapes the Industry

Hollyway drives industry impact by engineering solutions that solve critical friction points. These **key benefits** serve as catalysts for a revolutionary industrial-wide transformation.



Boosting Operational Efficiency



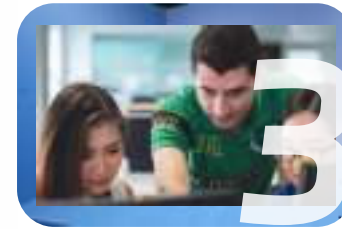
Future-Proof Your Edge



Reducing Costs



Providing Stable Turnkey Autonomy



Tailoring to Your Needs



Ensuring Safety & Assurance



HOW

How does Hollyway achieve unparalleled autonomy through transformative technology?

 **HOLLYWAY**

Making Technology Work



**Integrated
Technology
Deployment**



**Precise Scanning
and mapping**

activate digital synergy,
master the landscape



**Advanced
Perception**

integrating drone perception
with AI cognition for
autonomous operations

Hollyway System Overview

The Hollyway DIB autonomy system enables fully automated take-off, inspection, charging, and data upload, allowing 24/7 operations without on-site human intervention.

All core hardware is developed and manufactured in-house to power targeted solutions.



Hollyway DIB Hardware Device
Iron Series

- Automated charging dock with <50 s drone battery-swap capability
- Dock supports automated swap of 2 sensor types
- Industrial-grade durability
- Proven long-term reliability
- Extreme environment performance



Hollyway DIB Hardware Device
Hive Series

- Support multiple drones and fast charging
- When Iron and Hive work in synergy, they deliver targeted efficiency gains for specific scenarios
- Scheduled to be launched soon

Hollyway System Overview Industrial Intelligent Drones

Hardware Iron Drone



More compact, greater endurance

- maximum battery life 52 minutes

Multi-sensor, mission-customizable



Visible light and infrared pod

- 48 million visible light pixels
- 640x512 infrared resolution
- the sensors power photogrammetry and 3D reconstruction



Visible light pod

- 1 inch CMOS
- 20 million visible light pixels
- the sensors power photogrammetry and precise 3D reconstruction

More multi-purpose pods



Loudspeaker pod

- maximum volume 120 dB at 1m
- max. range: 150m (70 dBm Tx power)
- real-time call and text-to-speech playback
- multiple recording modes

Uncompromising performance

- omnidirectional visual perception and obstacle avoidance
- support multi-drone collaboration

All-weather, rugged & reliable

- IP55 protection, resistant to rain, dust, and force 7 wind
- operational temperature -35~60°C

Powerful onboard AI analytics

- equipped with world-class intelligent chips
- onboard AI with computing power up to 100 Tops

Reliable connectivity in all environments

- 4G/5G + microwave dual-link with seamless switching
- multi-GNSS compatibility (GPS, Galileo, GLONASS, BeiDou)



Advanced Features Intelligent drones in transformer substation applications



Anti interference

- the inspection drone maintains stable flight purely through its visual technology, even in the harsh, strong electromagnetic environment of a ± 800 kV converter station – as shown above, it maneuvers with ease and total control while flying past a dry-type reactor.



Unbound Aerial Operation

- leveraging visual positioning and RTK-fusion localization, Hollyway's inspection drone flies autonomously as low as one metre above the ground across the entire site, immune to signal interference from overhead obstacles, and delivers instant, precise identification and analysis.

Hollyway System Overview Fully Autonomous Docks

Hardware **Iron** Dock



close



open

All-weather, rugged & reliable

- deployable on demand(230kg)
- an IP55 protection rating for dust and water resistance
- core dock components IP65
- operational temperature -35~60°C

Precise positioning

- automated self-construction of RTK base stations
- enhance the positioning accuracy of drones to centimeter-level precision

Automated battery & sensor swap in seconds

- integrates four hot-swappable battery packs and two interchangeable sensor pods
- zero-human, automated drone battery & sensor pod swap in 50 seconds



Multi-dock system enables continuous operations

- a single dock provides a coverage area of up to 100 km²
- leapfrog operation via synchronized docks network

Proprietary innovation

- precision engineered, fully self-developed
- continuously obtaining US patents for IP rights



Award-winning unique design



Advanced Features Fully Autonomous Docks



- Iron Series Docks can be deployed almost anywhere with virtually no geographic restrictions. Proven for ruggedness and reliability, they require minimal maintenance, all without compromising a design that blends advanced technology with aesthetic harmony in any environment.

Hollyway System Overview H.O.P.E. (Hollyway Operation Platform Ecosystem)

We excel at integrated hardware–software solutions.

Through the H.O.P.E., you gain powerful tools in one integrated platform: a library of pre-built algorithms tailored to your sector, and the capability to rapidly develop custom AI models—allowing quick and easy switching to your dedicated industry sub-platform.

With a single click, one operator at a desk can now complete most inspections and generate reports, eliminating the need for extensive on-site labor and specialized drone pilots.

Software Platform H.O.P.E.



Remote Control Simplicity

- H.O.P.E. runs on desktops, laptops, and iPads
- flight paths are automatically generated

Core Flexibility

- modular and scalable solution
- turnkey delivery

Deep Integration

- integrating management and control



Maximum Security

- on-premise deployment support
- advanced data encryption

Minimal Cost

- making high-precision digital twins affordable
- minimizing training costs

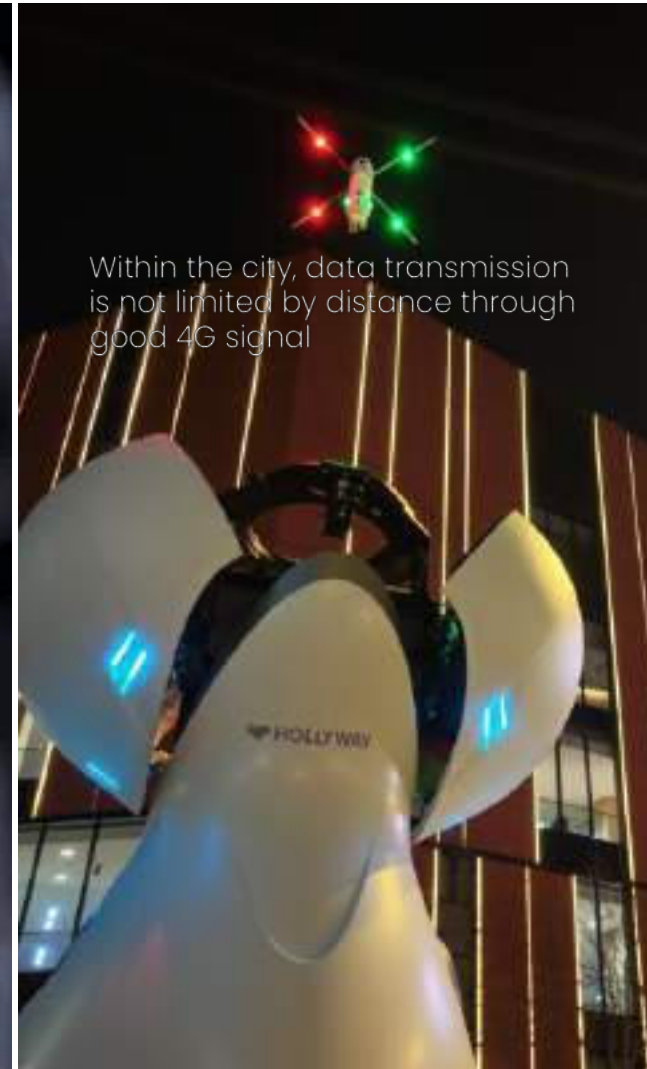
Proven Industry Expertise

- industry-specific algorithm database covering most sectors
- decades of development experience in the energy and security sectors

Powering the age of fully autonomous drone-in-a-box technology



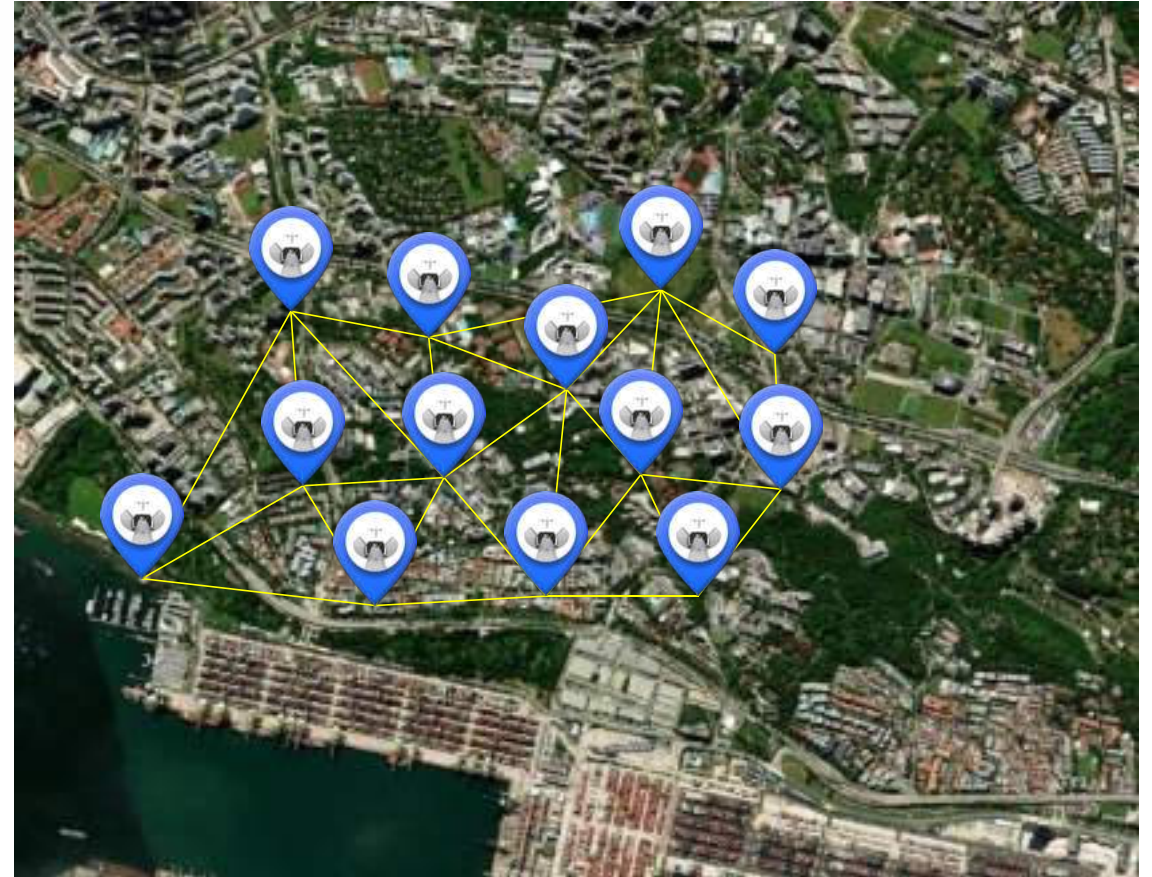
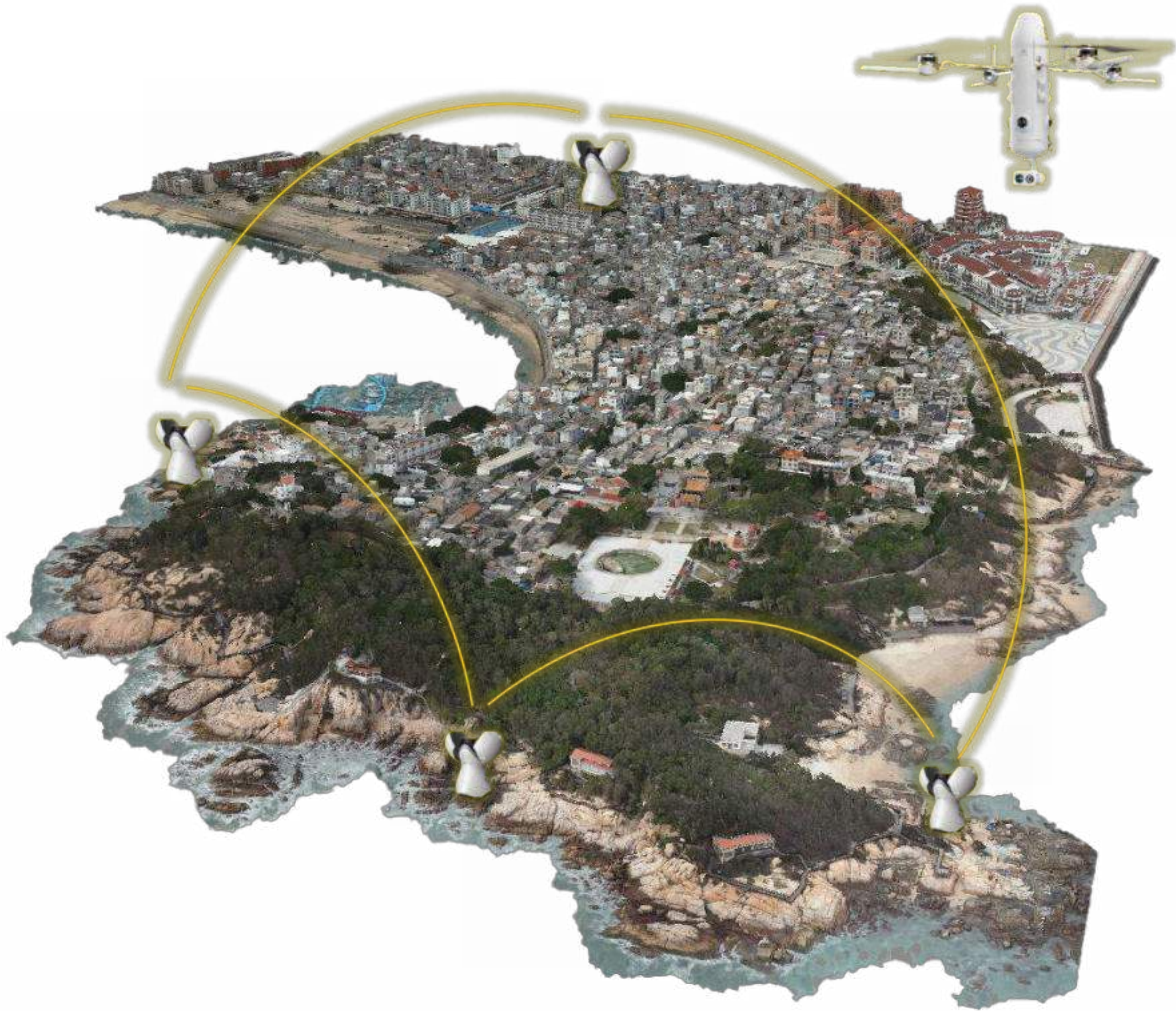
- 24/7 full automated inspection



- mobile networks (4G/5G) and microwave communication seamless switching



Grid Cluster Leapfrog : 24/7 continuous, uninterrupted inspection



A network of automated docks enables drones to self-deploy, swap batteries, and leapfrog to extend seamless coverage. The ability to perform instant battery and payload swaps eliminates downtime, enabling genuine 24/7 non-stop flight operations.

Design in a class of its own

Hollyway's design has not only won the golden award at the London Design Awards, but it has also garnered continued recognition from various international awards.



Silver Winner
International Design Awards

London Design Awards **Golden Winner**

The Hollyway Autonomous Drone inspection System



Silver Winner

New York Product Design Awards

French Design Awards **Golden Winner**

The Hollyway Autonomous Drone inspection System



Making Technology Work



**Integrated
Technology
Deployment**



**Precise Scanning
and mapping**

activate digital synergy,
master the landscape

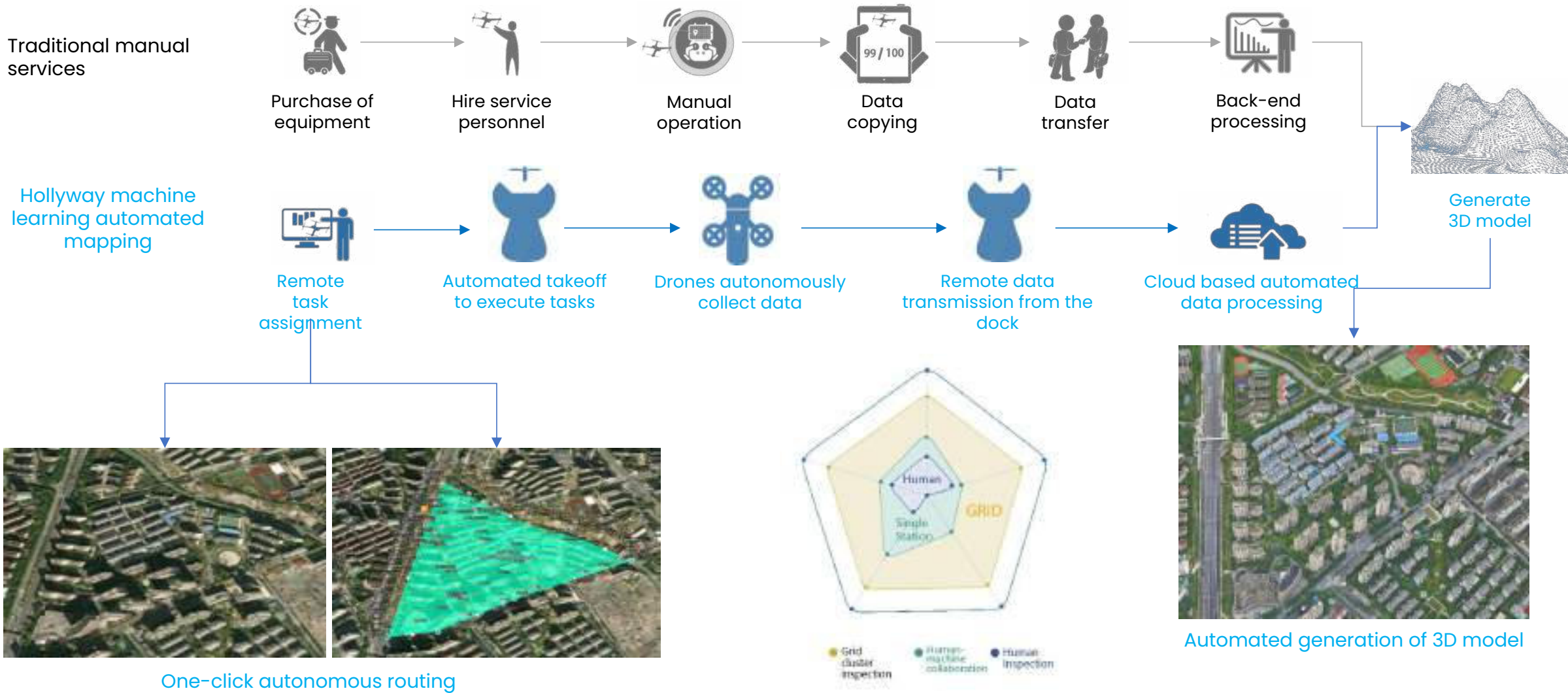


**Advanced
Perception**

integrating drone perception
with AI cognition for
autonomous operations

Machine mapping assists in digital management in the industry

Hollyway has better understanding of how to optimize the workflow through 3D digital models.



Integrating 3D scan and 3D Gaussian technology to meet the needs of modeling



High-precision modeling of critical infrastructure and treasured landmarks (3D Scan)



Rapid 3D reconstruction of specific sites such as designated scenic areas or fire-impacted conditions (3D Gaussian)

Comparative analysis of two phases of image data

Any-time access to an operation site is already game-changing; But we've gone further by pairing it with powerful algorithms that automate precise, comparative inspections.

- Automated comparison of data from different time periods at the same location enables the detection of areas with significant deformation, providing effective and timely warnings for issues such as lost goods or damaged facilities, thereby mitigating potential risks
- At the same time, the platform supports IoT access function, and the overall system supports multiple information access to achieve data warning and detection



Making Technology Work



**Integrated
Technology
Deployment**



**Precise Scanning
and mapping**

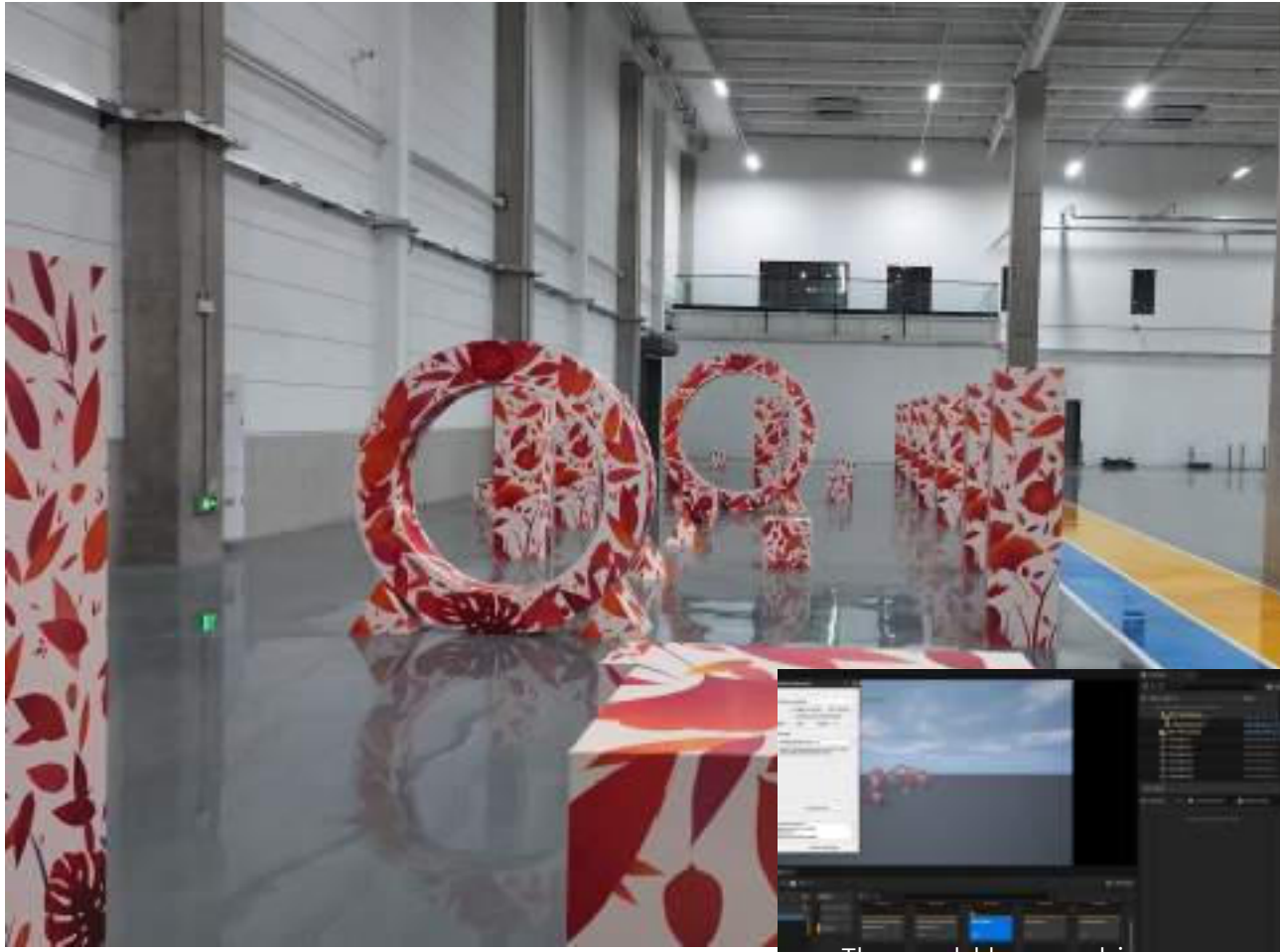
activate digital synergy,
master the landscape



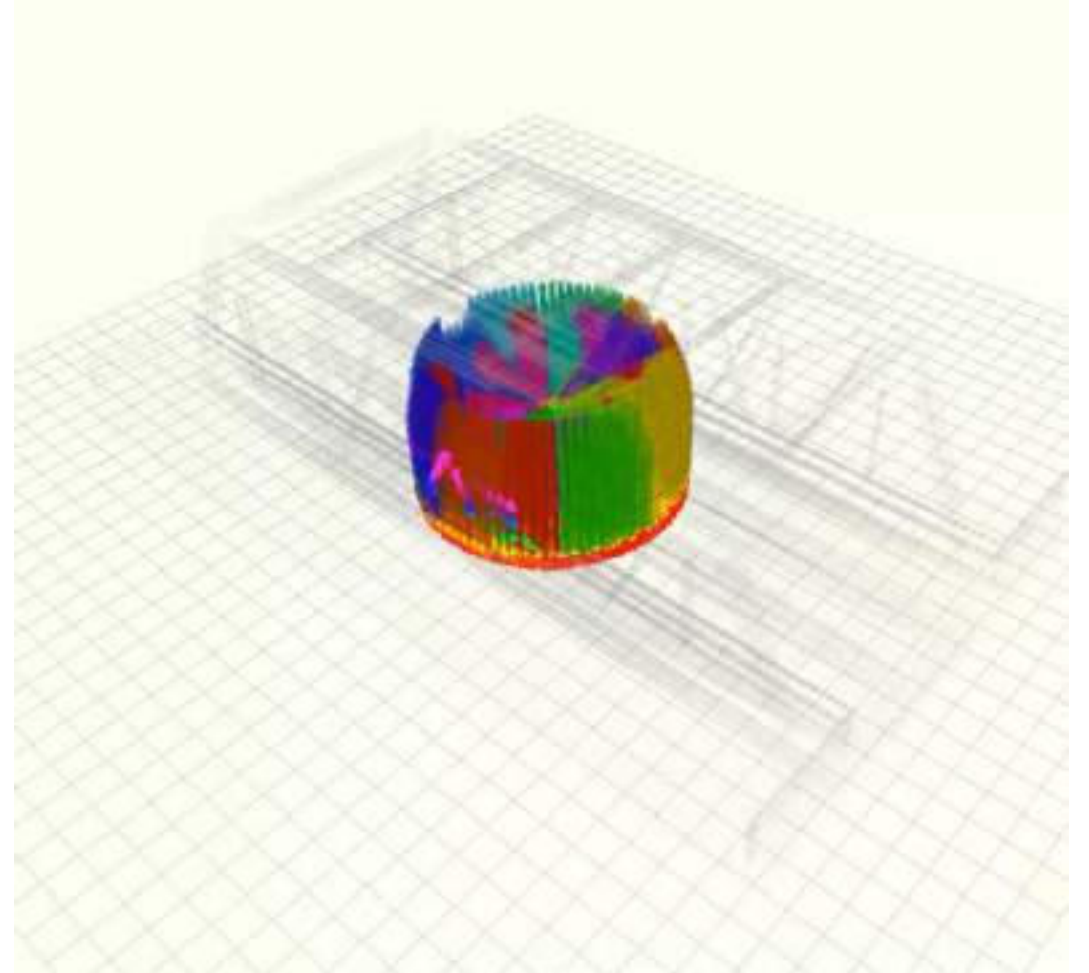
**Advanced
Perception**

integrating drone perception
with AI cognition for
autonomous operations

Explore the unknown world anytime, anywhere

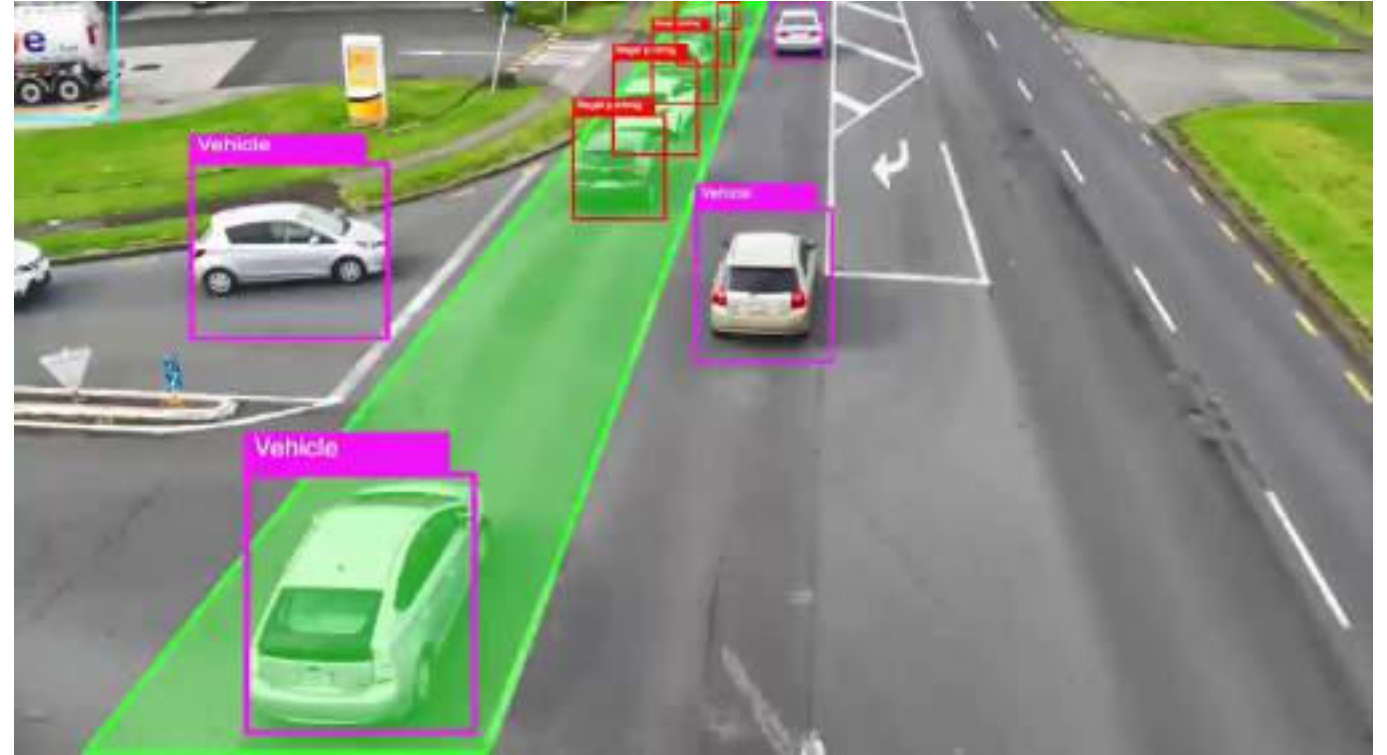


Centimeter accurate visual positioning for drones in indoor test environments



Real-time 360° omnidirectional obstacle sensing via 3D modeling

Perfect fusion of AI algorithms and intelligent hardware




AI-driven contextual semantic intelligence for traffic environments

- Using urban traffic as a use case, our system establishes geo-fences around restricted road areas within the city model, delivering scenario-based services with semantic understanding for assigned missions.
- In collaboration with traffic surveillance networks, smart inspection drones are autonomously deployed to dynamically track specific vehicles once identified. With a maximum airborne speed of 15 m/s, their operational efficiency and accuracy far surpass that of traffic officers using traditional methods.
- Furthermore, the loudspeaker pod proves invaluable at incident sites. It projects the operator's real-time commands from altitude, significantly multiplying the efficiency of on-site management and resolution.



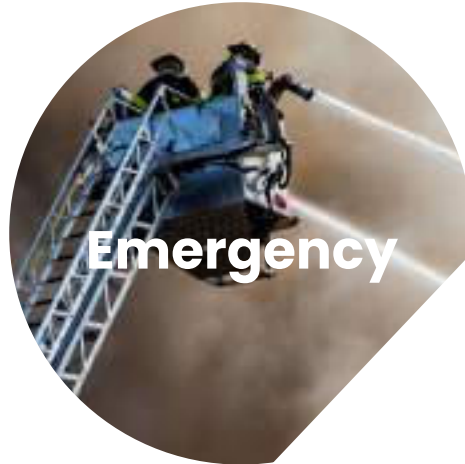
WHAT

Hollyway plays a vital role in the daily operations of diverse industries

 HOLLYWAY

 **HOLLYWAY**

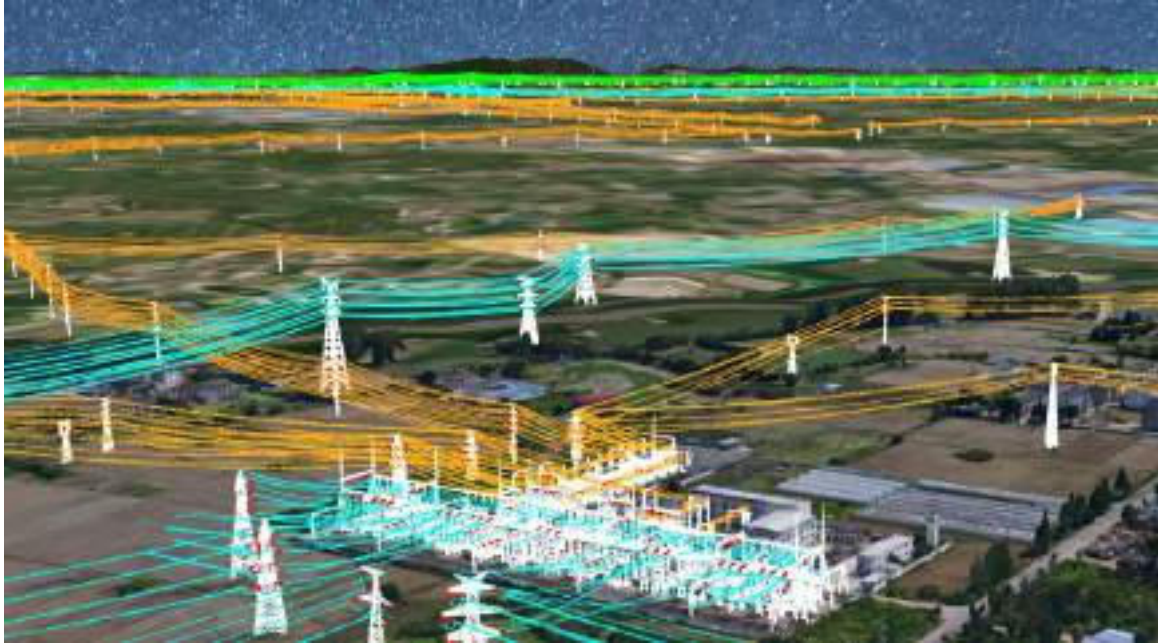
With deep algorithmic know-how, robust software development skills, and proven hardware deployment experience, Hollyway serves a broad spectrum of industries



These examples represent key sectors we serve.

By integrating sensors, cloud, and AI, our drone-and-software solution is adaptable to inspection needs across industries — highly scalable and future-proof.

Power grid solutions



Centimeter level 3D model construction of power grid, helping the power grid obtain digital twins



Through AI capabilities, drones can accurately locate defects in power line hardware during inspections



Intelligent temperature measurement at key positions of substation power equipment



Visual positioning and stable flight of drones in strong electromagnetic environments



AI intelligent reading of device meter pointers

Smart city solutions

We have extensive experience in assisting government agencies to enhance urban governance through digitalization and operational efficiency, particularly in transportation management, public safety, and emergency response.



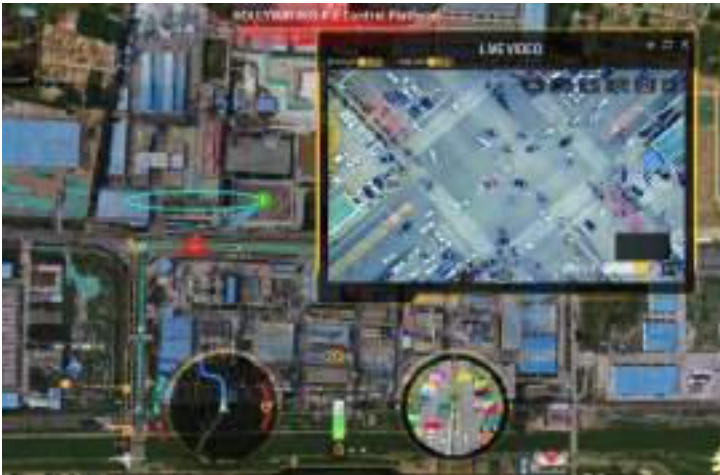
Municipal administration

- Infrastructure and road facility inspection
- Waste incineration
- Floating objects on the water surface
- Lakeside safety inspection
- Inspection of bare green belts and dead trees



Emergency flood control

- Location of mountain flood siltation and blockage points
- Assist on-site personnel evacuation and rescue
- Post disaster analysis



Smart transportation

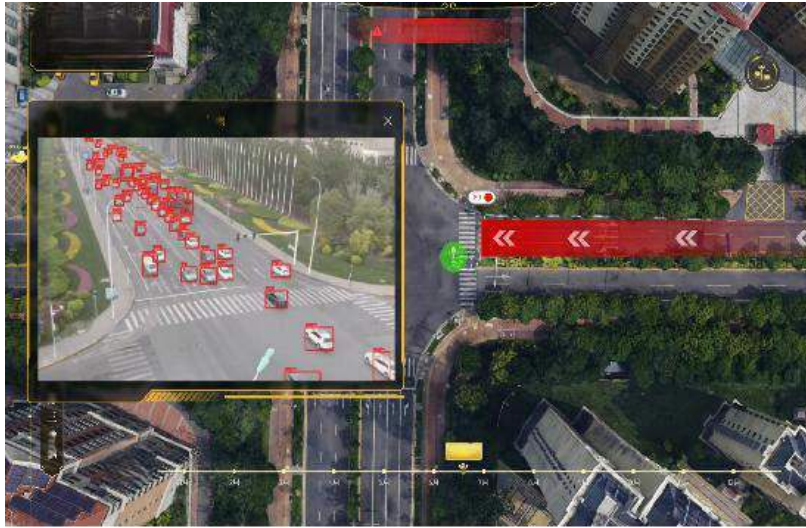
- Highway inspection
- Road pothole recognition
- Statistics of pedestrian and vehicular traffic flow
- Vehicle tracking



Urban management

- Comparison of illegal construction sites
- Illegal land use and illegal construction
- Supervision of mobile vendors
- Illegal parking of electric bikes

Smart city solutions



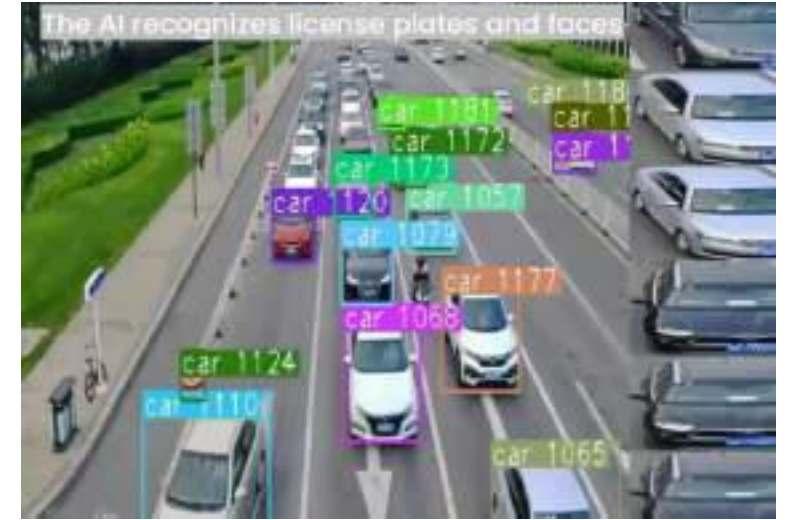
Traffic congestion monitoring and management

- When the drone detects more than 10 vehicles, indicating a potential traffic congestion, the platform will thus promptly notify relevant personnel.



Traffic Accident Evidence Collection

- The drone can respond to the accident immediately and quickly reach the site. The visible light pod transmits real-time footage and enables basic control through the equipped loudspeaker.

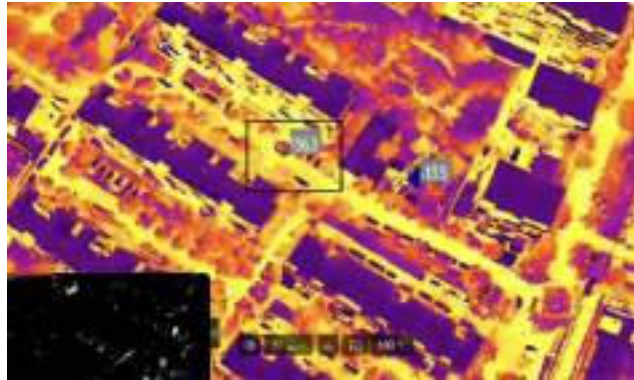


Intelligent Research and Judgment

- Leveraging high-definition real-time data, the AI system achieves enhanced license plate and facial recognition, significantly improving search and identification efficiency compared to manual methods.

Emergency solutions

In advance



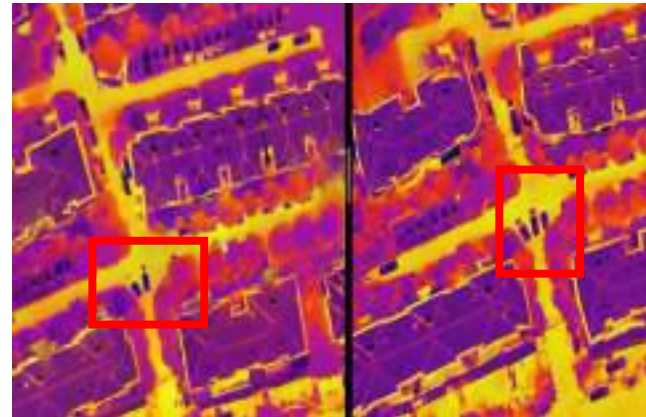
AI intelligent fire recognition, infrared high temperature warning



AI recognition determines illegal activities



AI identifies obstructions in fire lanes



Comparing two phases of imagery for the inspection of nighttime occupation in life passages.

In process



Linkage with the emergency response platform, access to water source information such as fire hydrants, real-time information exchange, and immediate response



Emergency mode
20s rapid takeoff



Real time on-site
display



Two phases of imaging
assist in post disaster
assessment

Oil and gas pipeline inspection solutions



Damage identification



Ground cracking identification



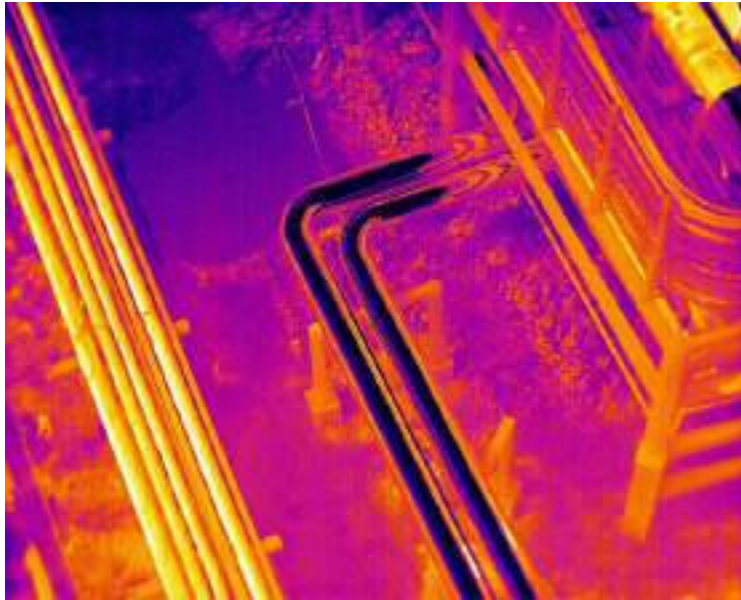
Identification and warning of vehicle intrusion around the site



Instrument fouling identification



Abnormal personnel intrusion

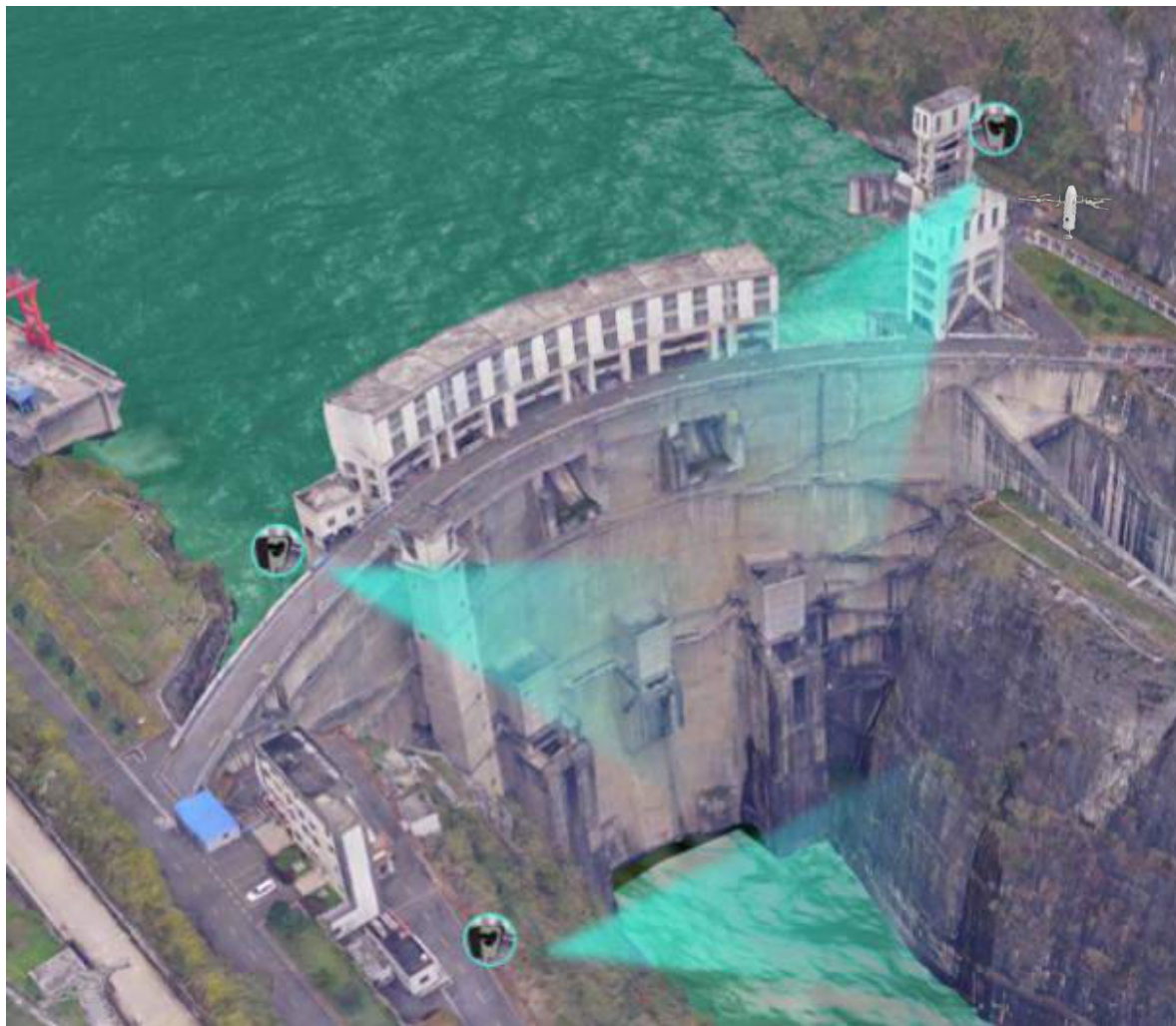


Real time temperature monitoring, timely warning upon discovering anomalies



Leakage alarm

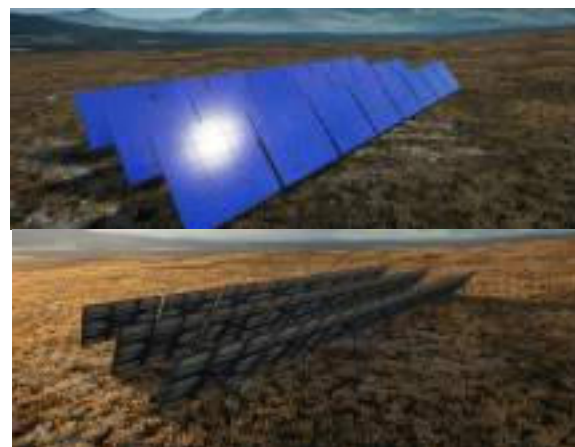
Renewable energy solutions



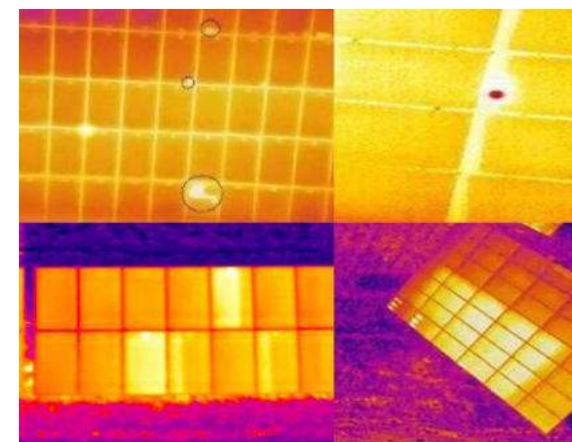
Implement a system to facilitate the linkage inspection between existing cameras and drones within the power station.



Wind inspection AI automatically recognizes the orientation of the wind turbine, and multiple captured images can be automatically spliced into complete wind turbine blades. The platform AI intelligently analyzes various types of defects in the wind turbine



Simulate lighting and photovoltaic panel rotation to predict power generation

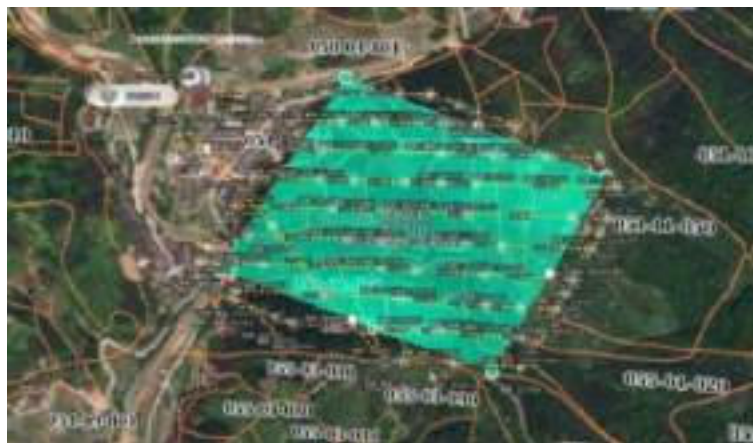


Accurate infrared detection of photovoltaic hot spot defects

Forestry patrol solutions



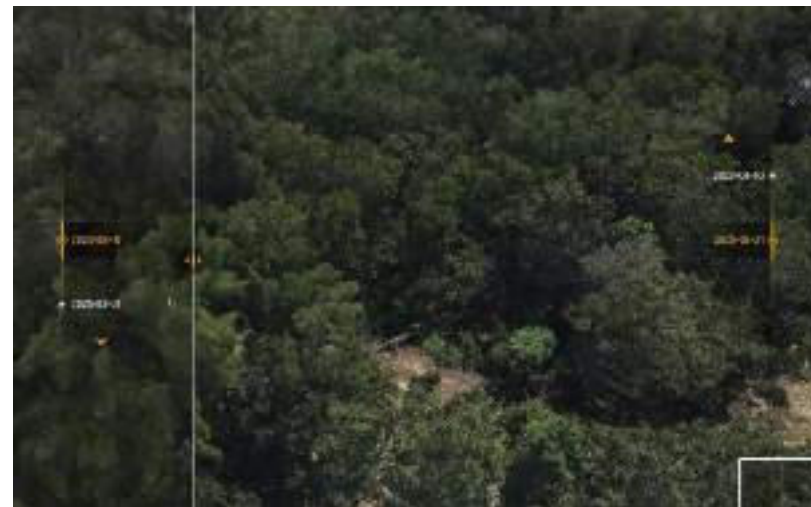
- Autonomous petal-shaped fire prevention patrol:
- one-click generation of optimized dock-centric flight routes
 - automatically detect and geotag fire hotspots, smoke, and diseased vegetation in real time



One-click generation of surface patterns to verify flight routes



The H.O.P.E. platform is equipped with a forestry AI model that enables intelligent recognition of the certain anomalies. It automatically generates alerts and pushes detailed reports to users. It provides timely statistics and management of various events, which can be easily viewed by simply clicking on the event icon on the 3D map.



The differential comparison of two phases of images involves quickly comparing the same area to identify changes in image spots. This method is particularly useful for determining issues related to illegal logging, theft, and destruction.

Smart water management solutions



With the assistance of our model, various IoT sensors can be integrated to achieve digital twin management and control, enabling self-perception, self-diagnosis, self-protection, and the prevention of major accidents.

Through fully autonomous drone modeling, the physical world can be accurately replicated on a 1:1 scale, and a 3D digital map can be constructed.

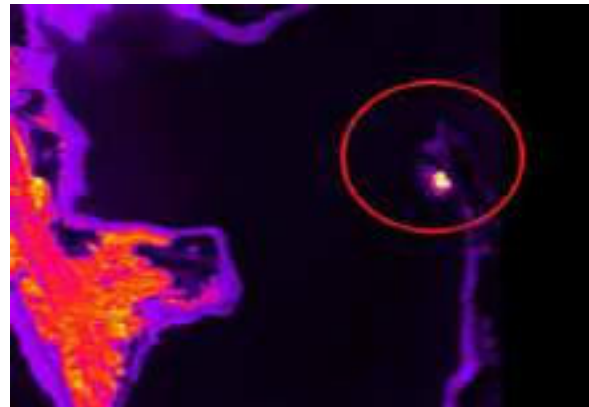
Construct a 3D model of the water management scene and integrate a variety of IoT devices for unified control



Leapfrog inspection quickly patrol long-distance rivers



Ship hull waterline inspection



Monitoring illegal pollution discharge through infrared at night



Serve as first responders in person-overboard incidents—reaching the scene instantly, assessing via imagery and issuing loudspeaker guidance to support rescue



Thanks for Watching

Unmanned. Uninterrupted. Unparalleled.

Boundless Space · Infinite Possibilities

 **HOLLYWAY**

www.hollywaytec.com
info@hollywaytec.com