# DJI Matrice 400

Engineered for Excellence, Designed for Versatility





## 01 Overview

- Product Recap
- M400 Intro
- Highlights

## 02 Features

- Robust Performance
- Safe and Reliable
- Enhanced Transmission
- Intelligent Features

## 03 Hardware

- Remote Controller
- Battery
- Battery Station
- Manifold 3

## 04 Ecosystem

- MSDK
- PSDK
- CloudAPI
- Ecosystem Solutions

## 05 Others

- In the Box
- Accessory
- Software
- Data Security

## 06 Comparison

- Hardware Performance
- Software Functions

## 07 Use Cases

- Public Safety
- Emergency Response
- Transportation Patrol
- Power
- Geospatial

## 08 After Sales

- FAQ
- Service Policy

# M300 / M350 Flagship Platform Review

### A New Industry Standard in 2020 and 2023

## Product Performance

- 55-Min Max Flight Time (No Payload)
- 20km Video Transmission
- 6-Directional Sensing
- Multi-Payload Support
- DJI O3 Enterprise Transmission
- IP55
- 400 Battery Cycles
- Power Line Follow



**Matrice 350 RTK**

## Product Benefits

- Extended Flight Time
- Reliable Transmission
- Adaptability to Conditions
- Heavy Payload Capacity
- High Performance Zoom Camera
- High-Precision Mapping LiDAR
- Software Development Kits
- Third-party payloads and applications

# Matrice 400

## Long-Endurance Drone Platform With Power-Line-Level Obstacle Sensing

## Product

**Enterprise Flagship Drone Platform**

## Purpose

**Matrice 400 excels in emergency response, inspections, and AEC.**

## DJI Payload Compatibility

- **Zenmuse H30 Series** - Advanced perception and imaging
- **Zenmuse P1** - High-precision photogrammetry
- **Zenmuse L2** - LiDAR for point cloud acquisition
- **Zenmuse S1** - Spotlight for night operations
- **Zenmuse V1** - Loudspeaker for broadcast
- **Manifold 3** - High-performance onboard computing



# Matrice 400 Highlights

## Endurance, High-Speed

- **59 mins** of flight time with a payload
- Maximum flight speed of **25 m/s**
- Maximum route speed of **25 m/s**

## Payload Flexibility

- **6 kg** payload capacity
- **4 × E-Port V2** interfaces
- **7 payloads** at the same time

## Safe & Reliable

- **Power-line-level** obstacle sensing
- Video transmission range
  FCC: **40 km** | CE/SRRC/MIC: 20 km
- **Airborne relay** video transmission
- **Full-color vision** for safer flights
- **IP55** protection rating

## Smart & Efficient

- Smart detection
- **AR projection** line, map, route
- **Real-time terrain follow**
- Intelligent flight modes
  Cruise, FlyTo, Smart Track, POI
- **Ship-based takeoff/landing**

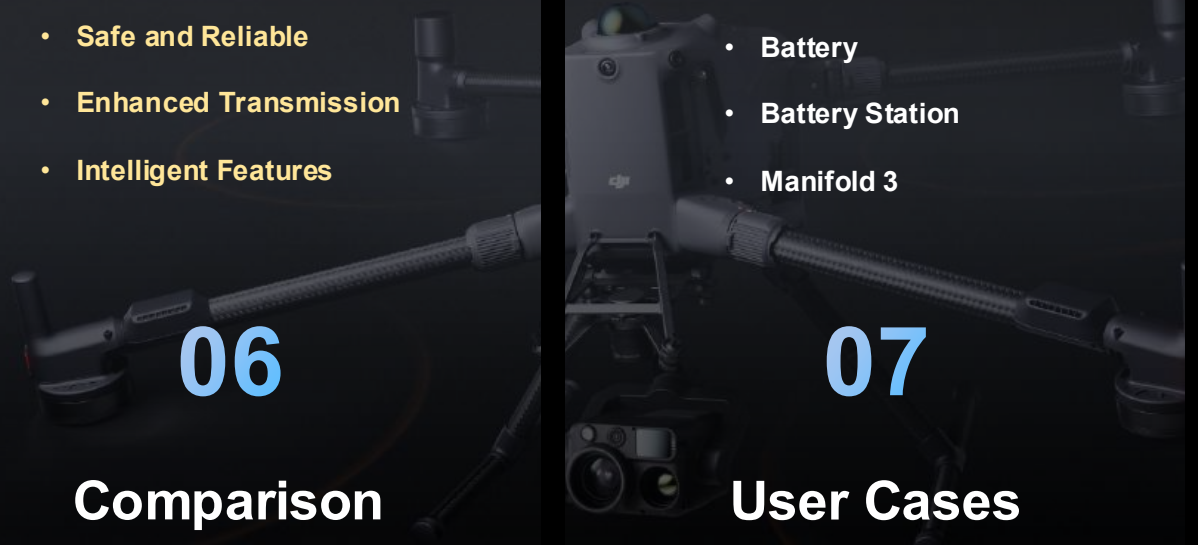
## Automated Operations

- Power line follow
- Slope & geometric route

## Accessory Upgrades

- Brand new smart battery station
- **Manifold 3** onboard computer with **100 TOPS** of processing power





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# Robust Performance

## Flight Time and Speed

### 59 Mins of Flight Time

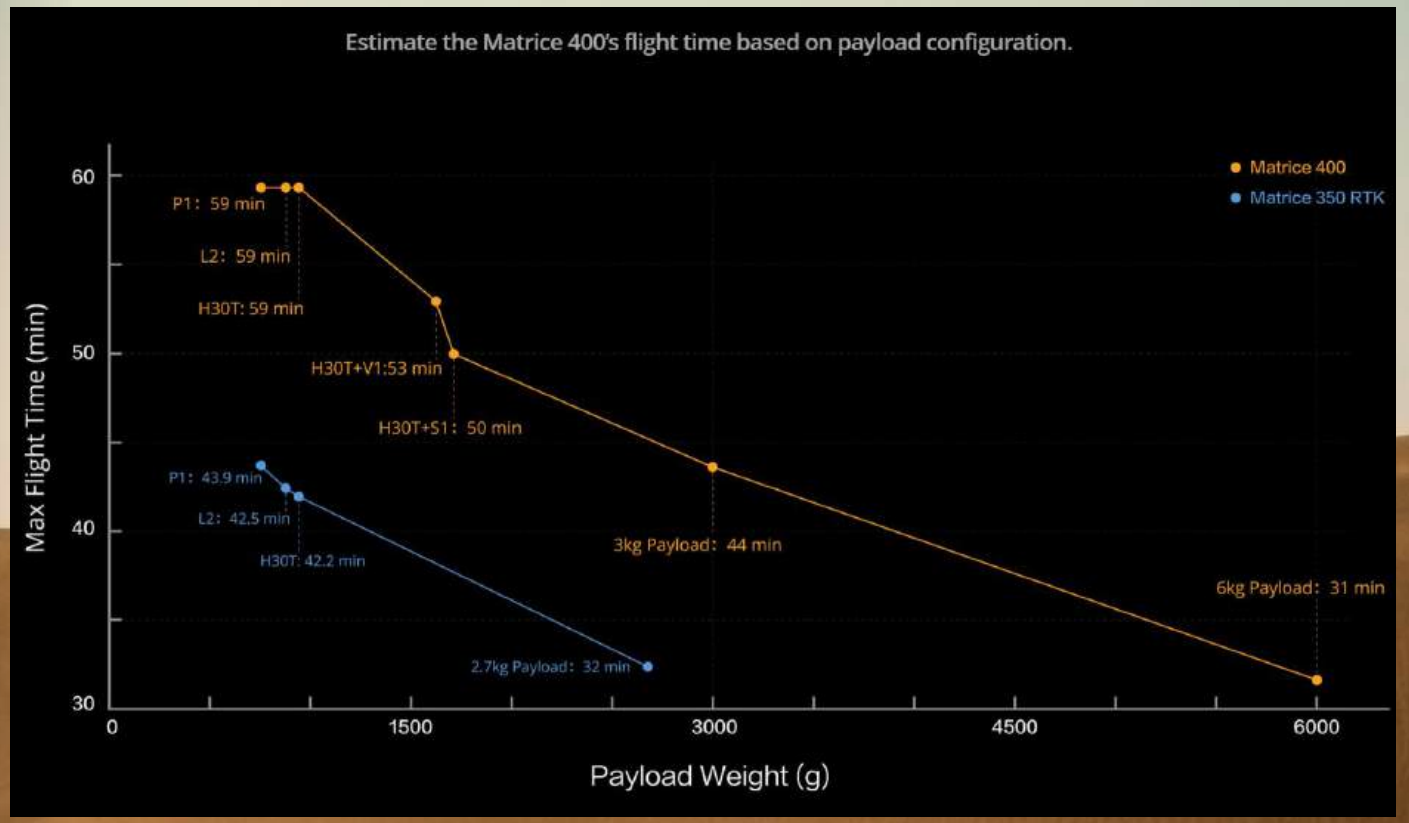
- **59 minutes** of forward flight time with H30T;
- **53 minutes** of hovering duration with H30T;
- Compared to the M350 with a single payload, effective operation time is increased by **50%**, enabling higher efficiency in long-duration missions

### 25 m/s Maximum Forward Flight Speed

- **25 m/s flight speed**, with the ability to avoid large obstacles
- **25 m/s route speed**, a **60% increase** vs M350

### Vertical Flight Speeds

- Maximum ascent speed: 10 m/s
- Maximum descent speed: 8 m/s



# Robust Performance

## Payload Capability

### Single/Dual/Third Downward Gimbal

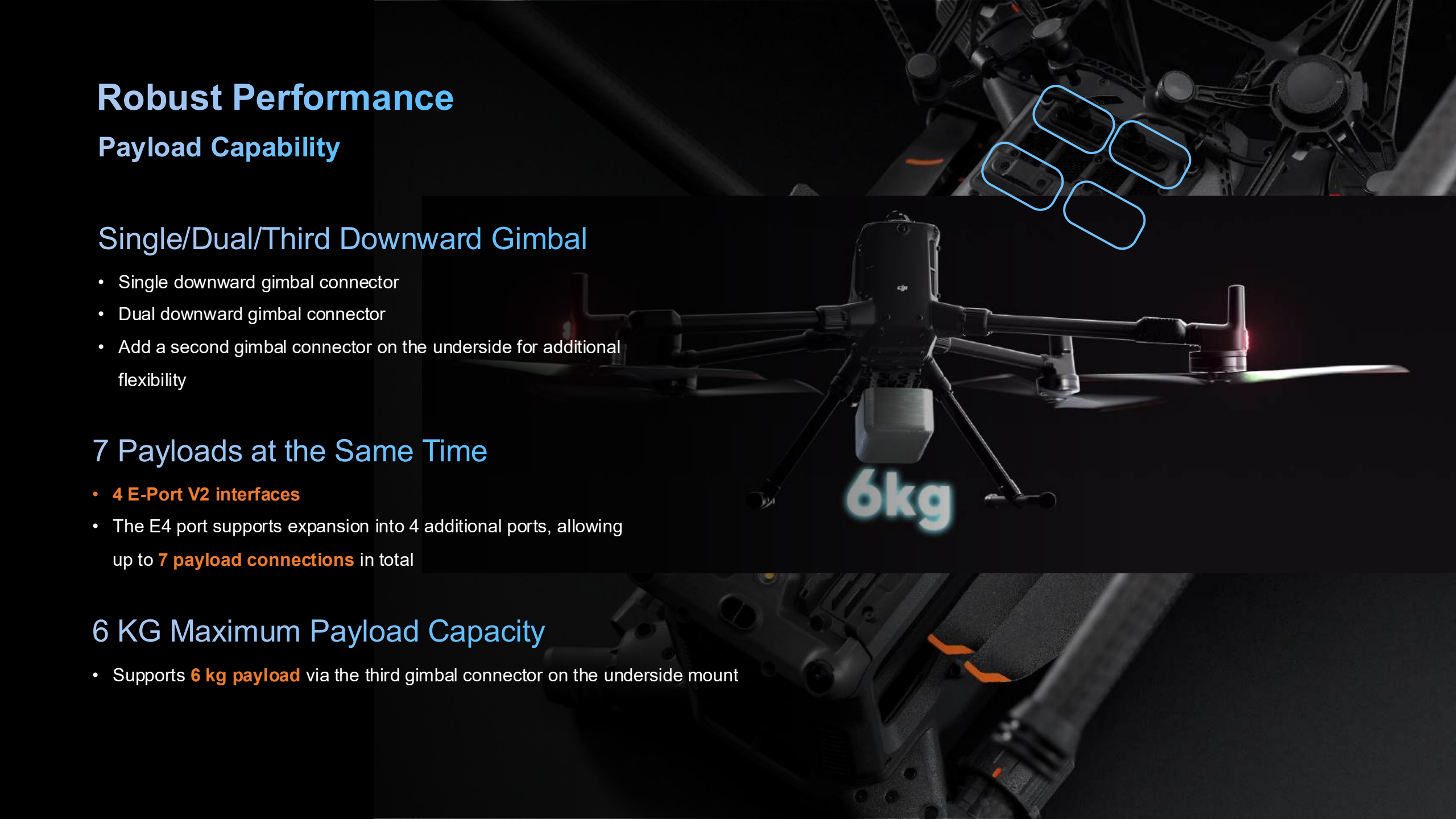
- Single downward gimbal connector
- Dual downward gimbal connector
- Add a second gimbal connector on the underside for additional flexibility

### 7 Payloads at the Same Time

- **4 E-Port V2 interfaces**
- The E4 port supports expansion into 4 additional ports, allowing up to **7 payload connections** in total

### 6 KG Maximum Payload Capacity

- Supports **6 kg payload** via the third gimbal connector on the underside mount



# Robust Performance

## Built for All Conditions

### IP55 Protection Rating

- **Reliable flight in harsh environments**, including heavy rain, dust, and fog
- **Enhanced operational reliability**, enabling faster information collection during emergency response

### -20°C to 50°C Operating Temperature

- **Operates reliably in extreme temperatures**, from -20°C to 50°C, without performance degradation



# Safe and Reliable

## Perception Across Conditions, Power-Line-Level Obstacle Sensing



### Sensing System

- **Horizontal Rotating LiDAR**
- **Six-Directional mmWave Radar**
- **Full-Color Fisheye** Vision System
- Upper LiDAR
- Downward 3D Infrared Sensing System

### Sensing System Functions

- Significantly enhance **obstacle sensing capability**
- Detects not only large obstacles but also **thin/small ones**, such as power lines—even in **low-light** or night time conditions
- Sensing system maintains stable performance **in all conditions** **even rain and fog**, ensuring environmental awareness and mission safety

# Safe and Reliable

## Perception Across Conditions, Power-Line-Level Obstacle Sensing

## Horizontal Rotating LiDAR

- A perception sensor that detects small obstacles such as power lines, enabling the drone to brake or automatically reroute to a safe flight path
- **Standard Detection Range: 0.5m-100m** @10% reflectivity @100000lux (objects with 10% reflectivity)
- **Wire Detection Range: 35m** @30° @10000lux, 21.6mm steel core aluminum stranded wire inclined at 30° relative to the left and right direction of the body
- **FOV:** 360° (horizontal), 58° (vertical)
- **Point Frequency:** 520,000 points/second
- **Laser Wavelength:** 905nm
- **Eye Safety Level:** Class 1 (IEC60825-1:2014) (Eye Safety)

## Six-Directional mmWave Radar

## Full-Color Fisheye Vision System

# Safe and Reliable

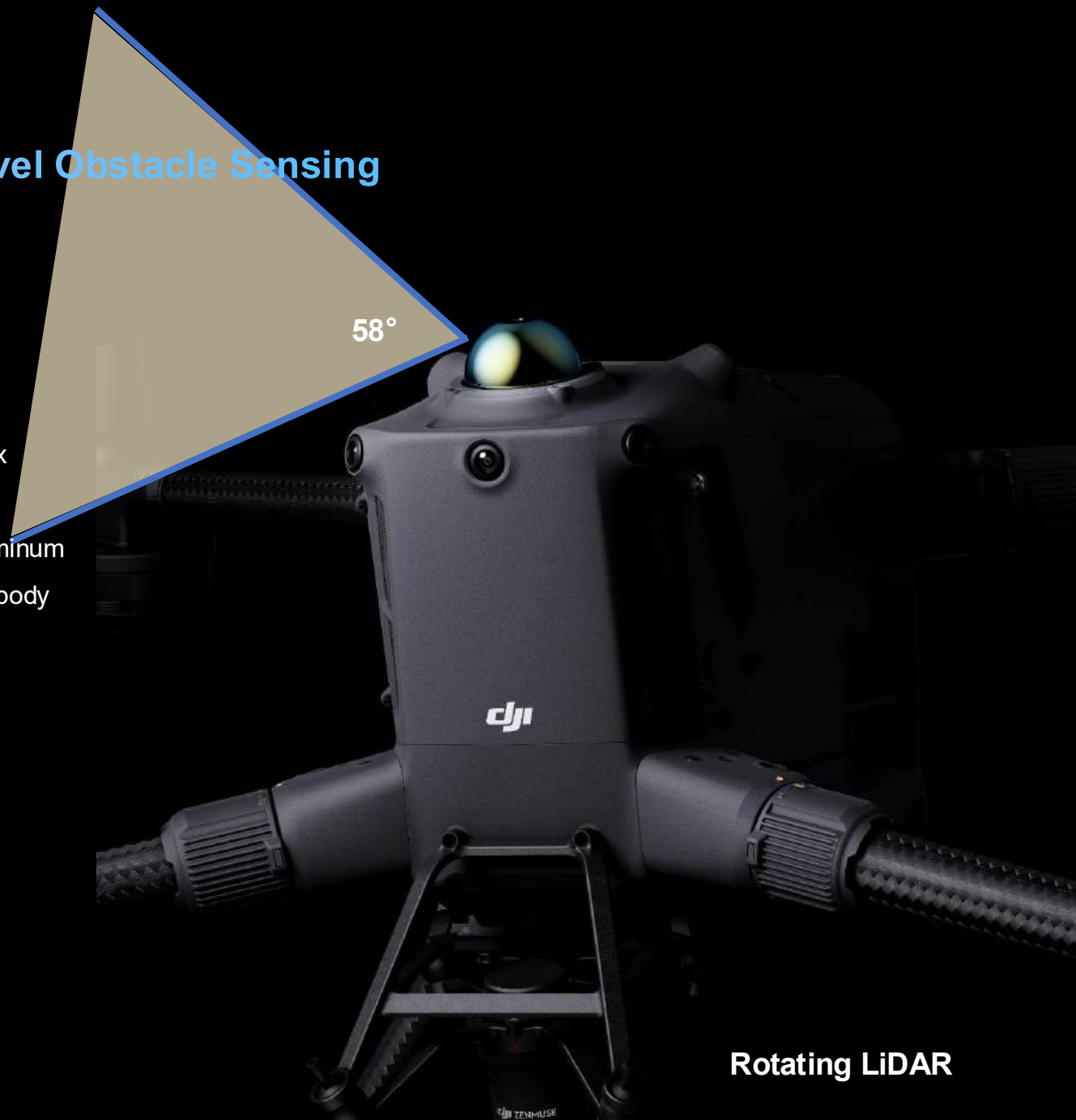
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## Six-Directional mmWave Radar

## Full-Color Fisheye Vision System




Rotating LiDAR

# Safe and Reliable

## Perception Across Conditions, Power-Line-Level Obstacle Sensing

### Horizontal Rotating LiDAR

### Six-Directional mmWave Radar

- mmWave Radar is embedded **in all six directions**;
- FOV: ±45° horizontal and vertical angles
- Effective Sensing Range:

1) **36 m: 12.5 mm** steel core aluminum stranded wire obstacle sensing
2) **50 m: 21.6 mm** steel core aluminum stranded wire obstacle sensing

### Full-Color Fisheye Vision System




**mmWave Radar**

# Safe and Reliable

## Perception Across Conditions, Power-Line-Level Obstacle Sensing

Horizontal Rotating LiDAR

Six-Directional mmWave Radar

## Full-Color Fisheye Vision System

- Four full-color low-light fish eye sensors provide **color-assisted flight visuals** for safe operation
- Compared to monochrome sensors, full-color vision sensors capture richer visual information, including color, shape, and texture, enabling better obstacle identification and more precise avoidance strategies.



Color Assisted Flight Visuals

# Safe and Reliable

## Sensor Capabilities Across Environment

### Horizontal Rotating LiDAR

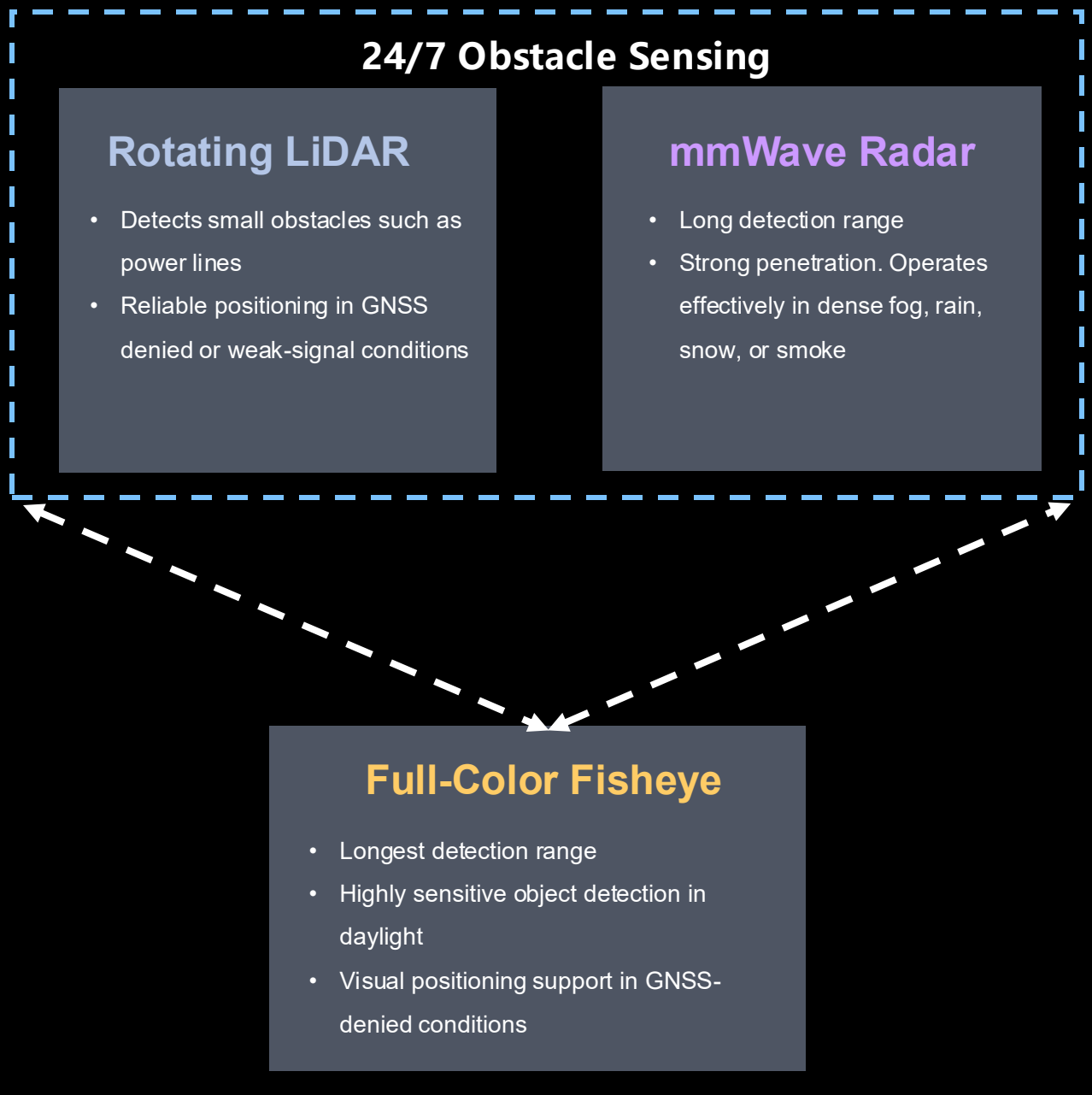
- **Delivers high-precision 3D depth data**, enabling accurate modeling
- **Excels at long-range detection**
- **Stable performance** under varying light conditions
- **May be affected by rain, fog, or snow**, which can degrade accuracy

### Six-Directional mmWave Radar

- **Penetrates fog, rain, and snow**, ideal for low-visibility operations
- **Provides real-time distance and velocity data** with fast response
- **Lower spatial resolution** compared to LiDAR

### Omnidirectional Binocular Vision System

- **Captures rich visual features** such as color, shape, and texture for enhanced object recognition
- **Performs best under adequate lighting**; performance may drop in low-light conditions
- Does not provide precise depth or distance measurements



# Safe and Reliable

## Obstacle Sensing Performance

### Obstacle Avoidance Modes

- Brake and Avoid

### Obstacle Avoidance Effective Speed

- At **25 m/s**, the drone can detect and avoid **primary power lines** (21.6 mm steel-core aluminum stranded wires) when flying directly toward them
- At **17 m/s**, the drone can detect and avoid both primary lines (21.6 mm) and **secondary lines** (12 mm)

### Common Avoidance Scenarios

- **Low-light night conditions**
- **Strong backlight during daytime**
- **In rain, fog, and low-visibility weather**




**25 m/s Flying Directly Toward Lines**




**17 m/s Brake at Night**

# Safe and Reliable

## Additional Safety Features

### Arm Lock Detection

If the arm sleeves are not properly locked, there will be a notification on the Pilot 2 App and the aircraft will not take off

### Battery Lock Sensor

If the flight battery is not properly installed, there will be a notification on the Pilot 2 App and the aircraft will not take off

### Anti-Collision Beacon

Aircraft is equipped with 2 anti-collision beacons for improved visibility at night

### Three-Propeller Emergency Landing

If one of the motors fails, the aircraft can automatically enter three-propeller emergency landing mode. The aircraft will quickly spin and descend slowly.
Condition: Take-off weight ≤ 10.8kg, and flight height ≥ 80m

### AirSense ADS-B Receiver

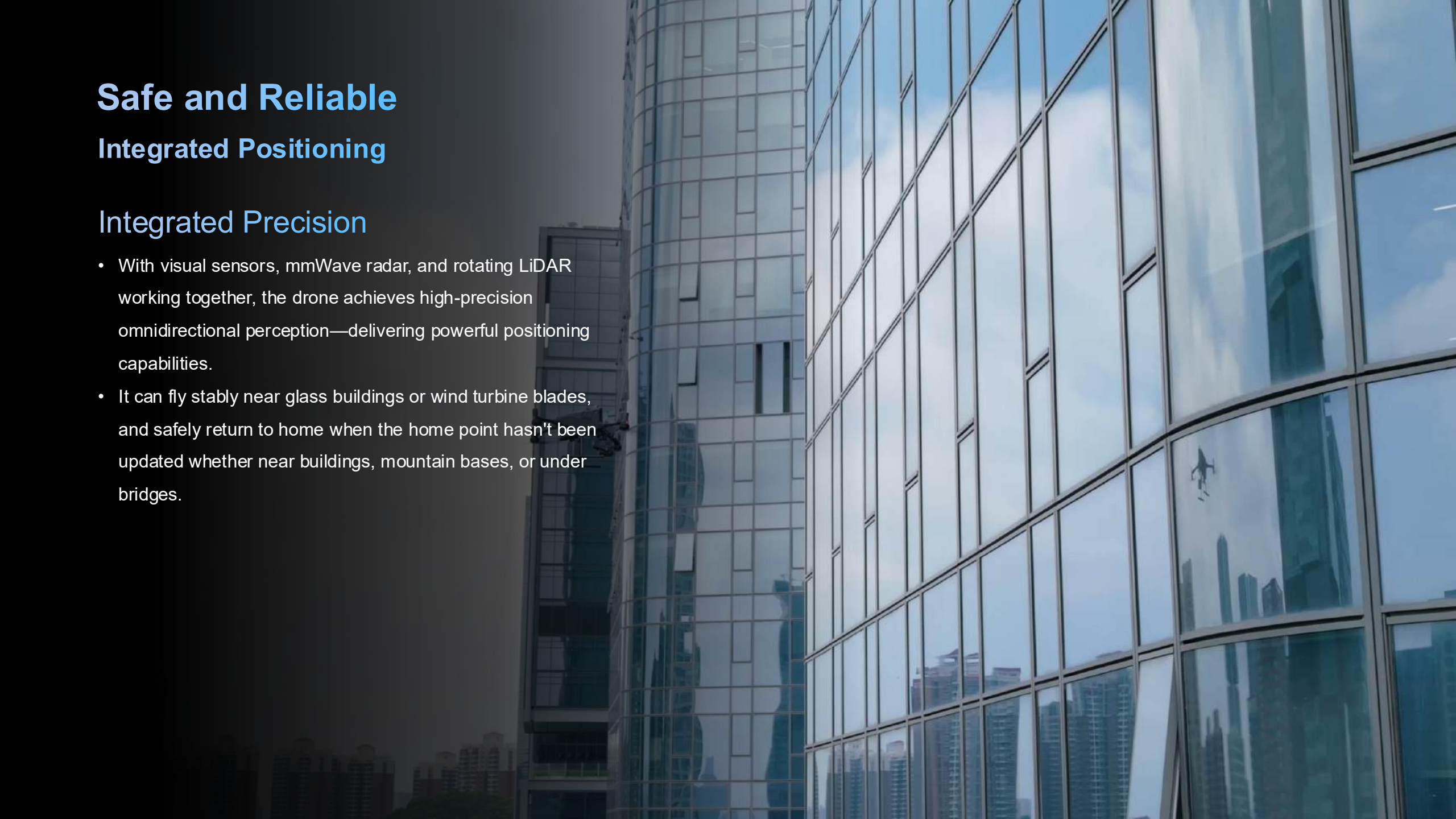
This feature gathers flight data sent automatically from nearby aircraft with ADS-B transmitters, analyzing it to detect potential collision risks and alert users well in advance through the Pilot 2 App

# Safe and Reliable

## Integrated Positioning

### Integrated Precision

- With visual sensors, mmWave radar, and rotating LiDAR working together, the drone achieves high-precision omnidirectional perception—delivering powerful positioning capabilities.
- It can fly stably near glass buildings or wind turbine blades, and safely return to home when the home point hasn't been updated whether near buildings, mountain bases, or under bridges.



# Enhanced Transmission

## O4 Enterprise Enhanced Transmission System

### 40 km Maximum Transmission Range

- The **O4 Enterprise Enhanced Transmission System** supports up to **40 km** video transmission under ideal conditions (FCC) (20 km video transmission under CE/SRRC/MIC)

### New Transmission Frequencies: sub-2G

- Ten-antenna system on the aircraft and a high-gain phased array antenna system on the remote controller
- Supports **sub-2G*** frequency band video transmission

### Dual 4G Enhanced Transmission Modules

- When equipped with two DJI Cellular Dongle 2, the M400 can automatically switch to the best available network, providing a more stable signal even in urban interference environments or remote regions



*sub2G band may vary by region. 1.4 GHz: China; 900 MHz: United States, Canada, Australia, Japan, Brazil, Taiwan (China), Singapore, Malaysia

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# Enhanced Transmission

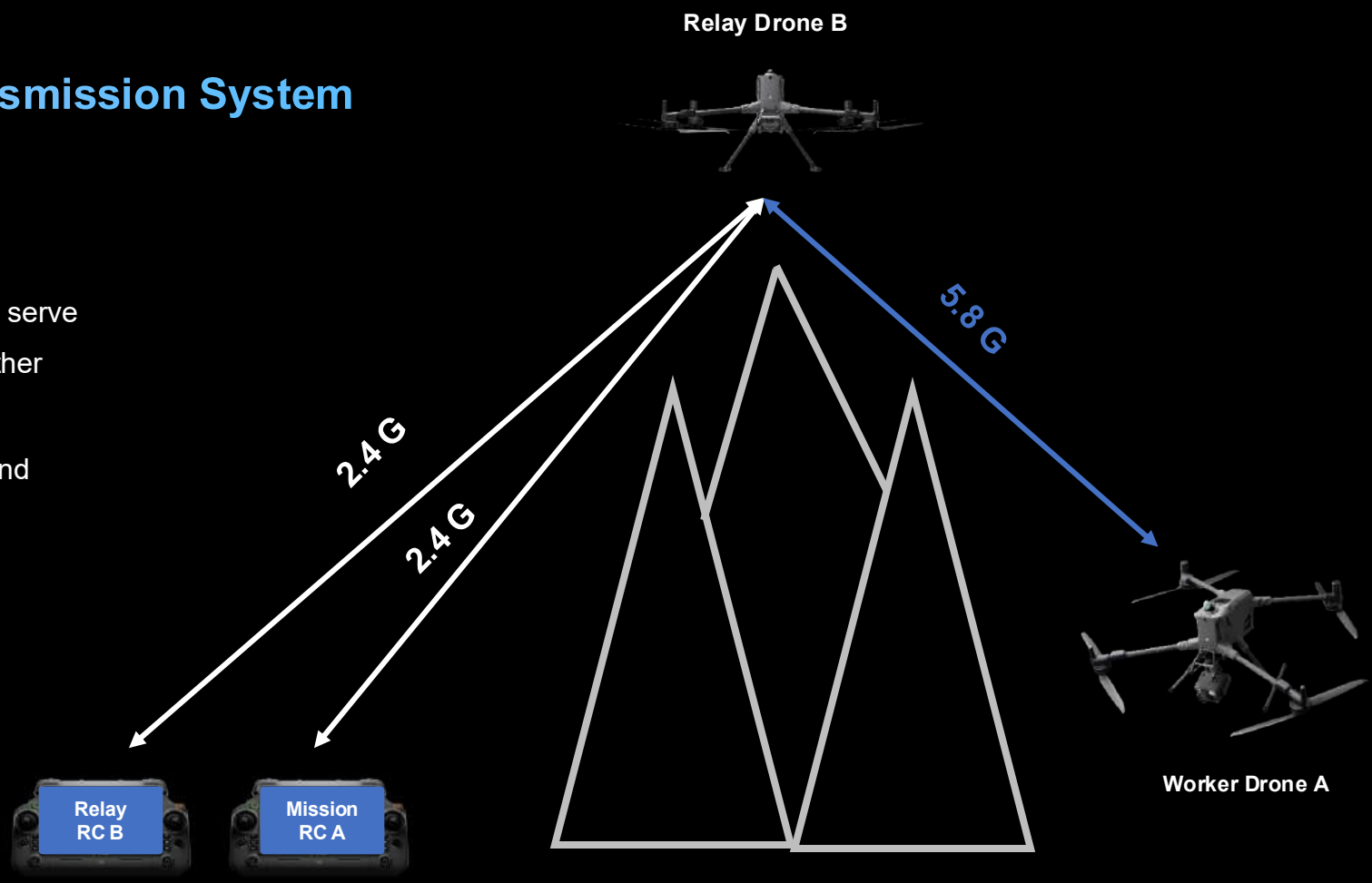
## O4 Enterprise Enhanced Industry Transmission System

### Airborne Relay Video Transmission

- **Built-in transmission relay module**. One Matrice 400 can serve as a relay drone, flying high to provide relay signals for another Matrice 400 operating at a greater distance
- Significantly **extends the transmission range** for search and rescue tasks as well as inspections in mountainous areas

### Relay Operation Procedure

- Complete the connection setup between the mission drone and the relay drone on the ground
- Worker Drone: Displays relay drone's battery level, RTH time, transmission signal, and relative position
- Relay Drone: Displays its real-time distance and direction relative to the mission drone



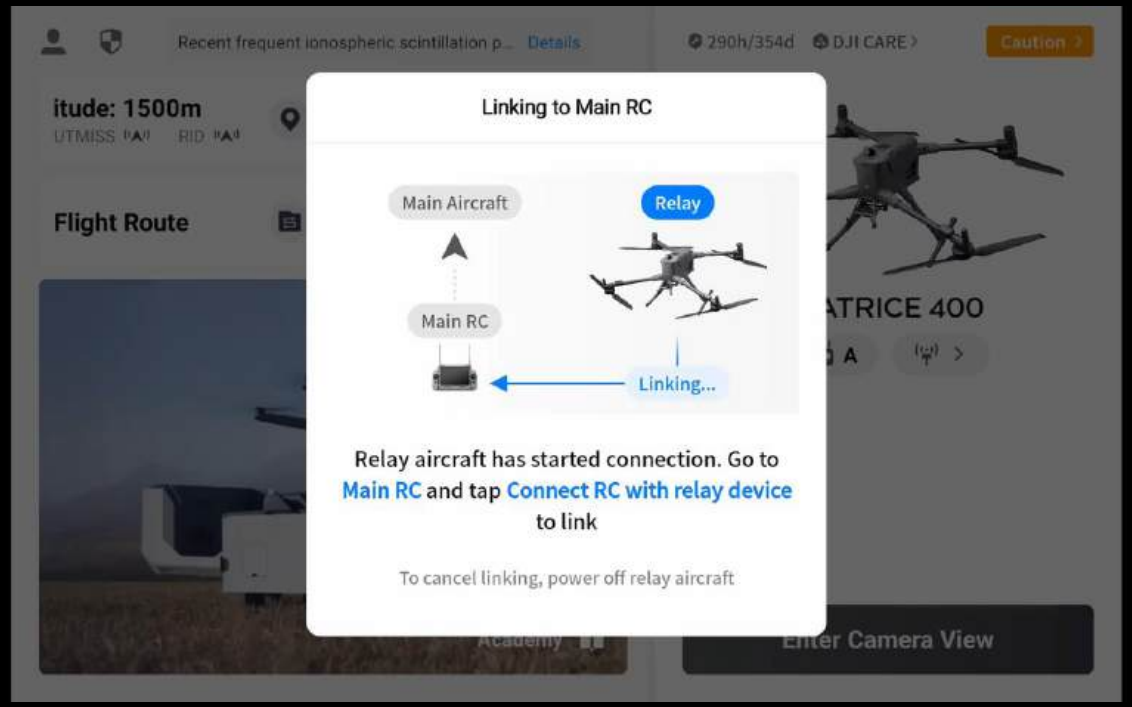

| | Worker Drone | | |
|---|---|---|---|
| Relay Drone | M400 | M4 | M4D |
| M400 | ✓ | ✓ | ✗ |
| M4D | Coming soon | ✓ | ✓ |

# New Transmission System

## O4 Enterprise Enhanced Industry Transmission System

### Airborne Relay Video Transmission

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# Intelligent Features

## Smart AR Projection

### AR Power Line

During tasks such as power grid inspection, the obstacle sensing system automatically detects frontal wire obstacles and displays easily recognizable AR lines on the remote controller’s screen

AR Map View

AR Flight Route

AR Landing Shadow

Live Annotations

RC Signal Direction Prompt



# Intelligent Features

## Smart AR Projection

AR Power Line

**AR Map View**

When operating in urban regions, the remote controller can display the names of buildings and landmarks in real-time, marking core roads with prominent lines

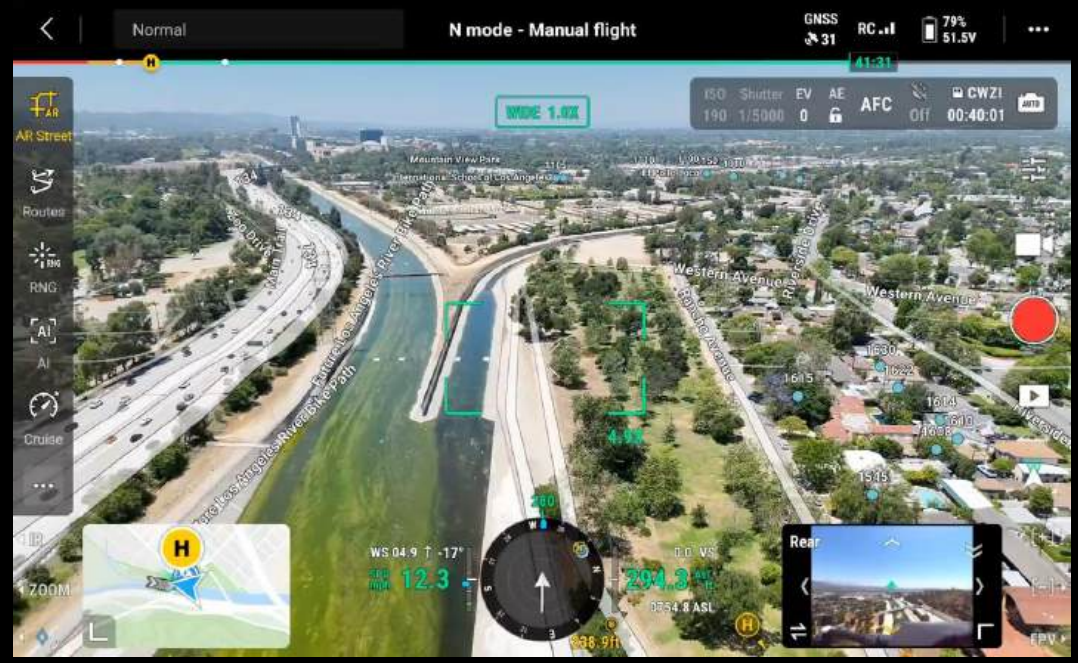
AR Flight Route

AR Landing Shadow

Live Annotations

RC Signal Direction Prompt



# Intelligent Features

## Smart AR Projection

AR Power Line

AR Map View

## AR Flight Route

Real-time route preview is available for the drone during RTH, obstacle sensing, and FlyTo operations.

AR Landing Shadow

Live Annotations

RC Signal Direction Prompt



# Intelligent Features

## Smart AR Projection

AR Power Line

AR Map View

AR Flight Route

### AR Landing Shadow

During landing, the AR aircraft shadow can be displayed to help operators confirm the landing location.

Live Annotations

RC Signal Direction Prompt



# Intelligent Features

## Smart AR Projection

AR Power Line

AR Map View

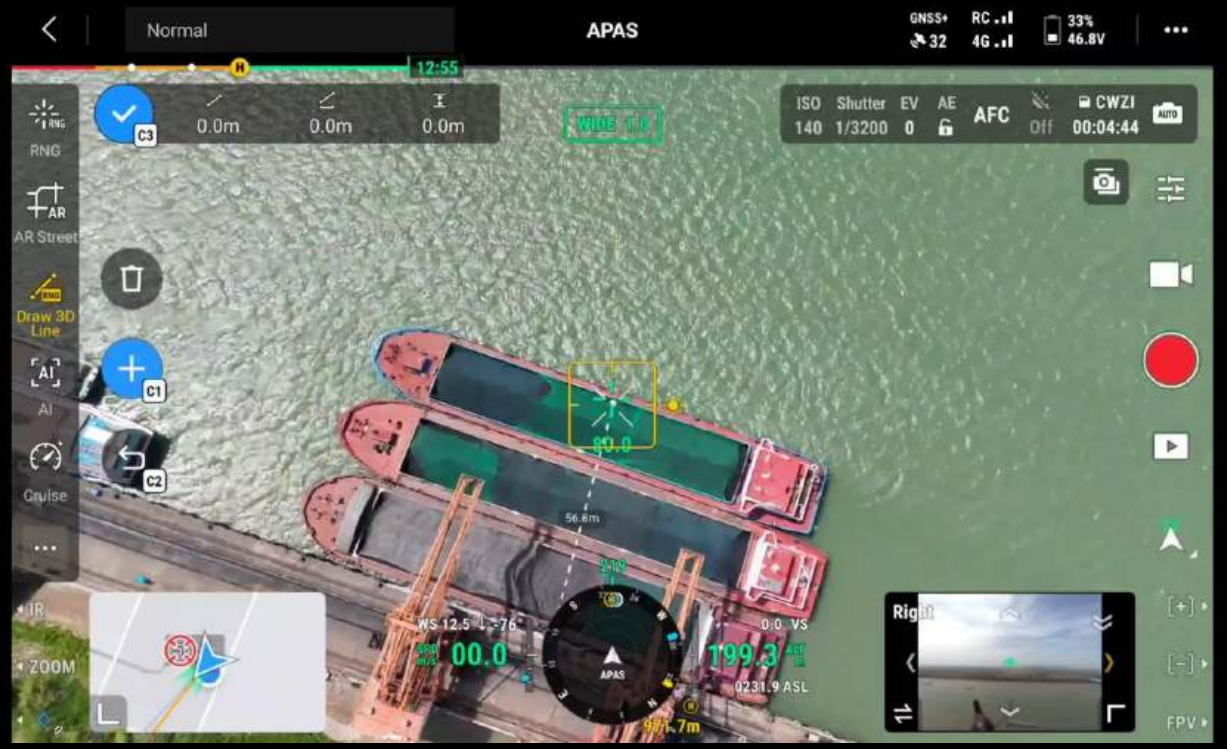
AR Flight Route

AR Landing Shadow

## Live Annotations

- Without modeling, you can mark points to obtain subject locations, draw lines to measure distances between multiple points, and outline areas to calculate their size
- Measurement results can be synced to DJI FlightHub 2

RC Signal Direction Prompt



# Intelligent Features

## Smart AR Projection

AR Power Line

AR Map View

AR Flight Route

AR Landing Shadow

Live Annnotations







## RC Signal Direction Prompt

When the connection between the aircraft and the remote controller is weak, a directional indicator appears on the compass at the bottom of the screen, showing the relative position of the aircraft and the remote controller

# Intelligent Features

## Intelligent Flight

## Cruise

Pilot the drone in a specific direction without constantly pressing the control sticks, making long-distance flights or linear inspections easier.

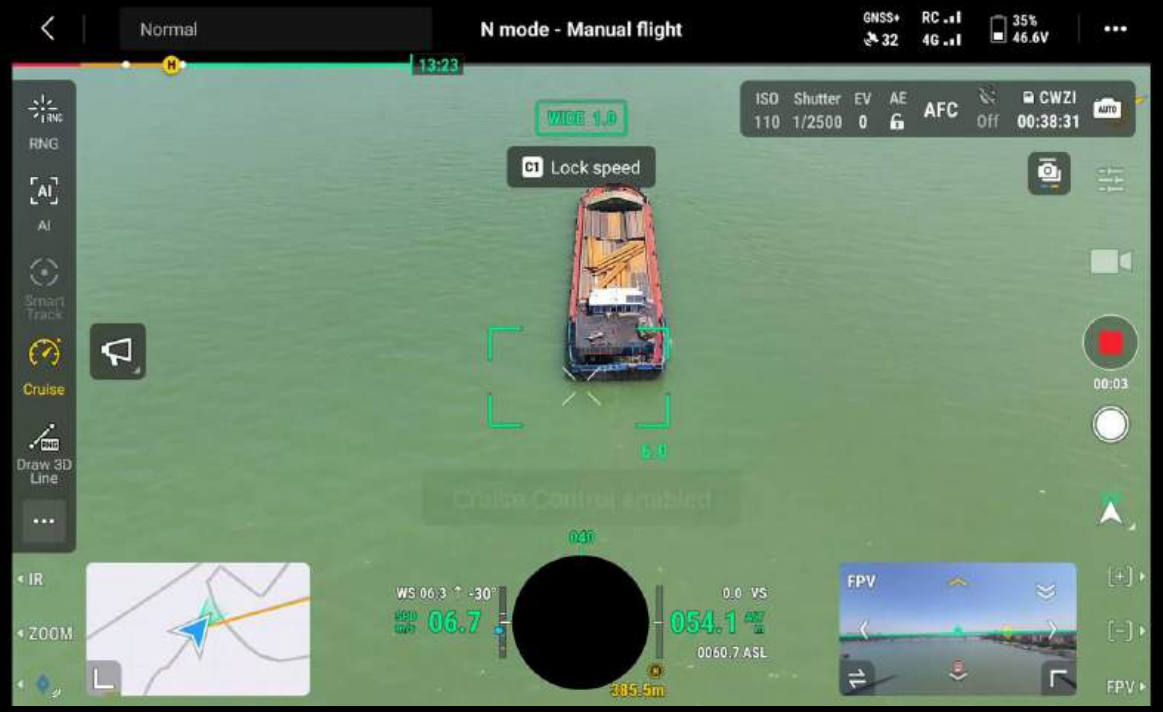
FlyTo

POI

Real-Time Terrain Follow

Observed View

Smart Track



# Intelligent Features

## Intelligent Flight

Cruise

**FlyTo**

The drone can automatically adjust its flight path and speed based on the surrounding environment, allowing it to reach a designated location without manual adjustments

POI

Real-Time Terrain Follow

Observed View

Smart Track



# Intelligent Features

## Intelligent Flight

Cruise

FlyTo

**POI**

Enables continuous observation and 3D modeling of buildings while orbiting a designated area, greatly enhancing the efficiency of fixed-point observation and modeling tasks

Real-Time Terrain Follow

Observed View

Smart Track



# Intelligent Features

## Intelligent Flight

Cruise

FlyTo

POI

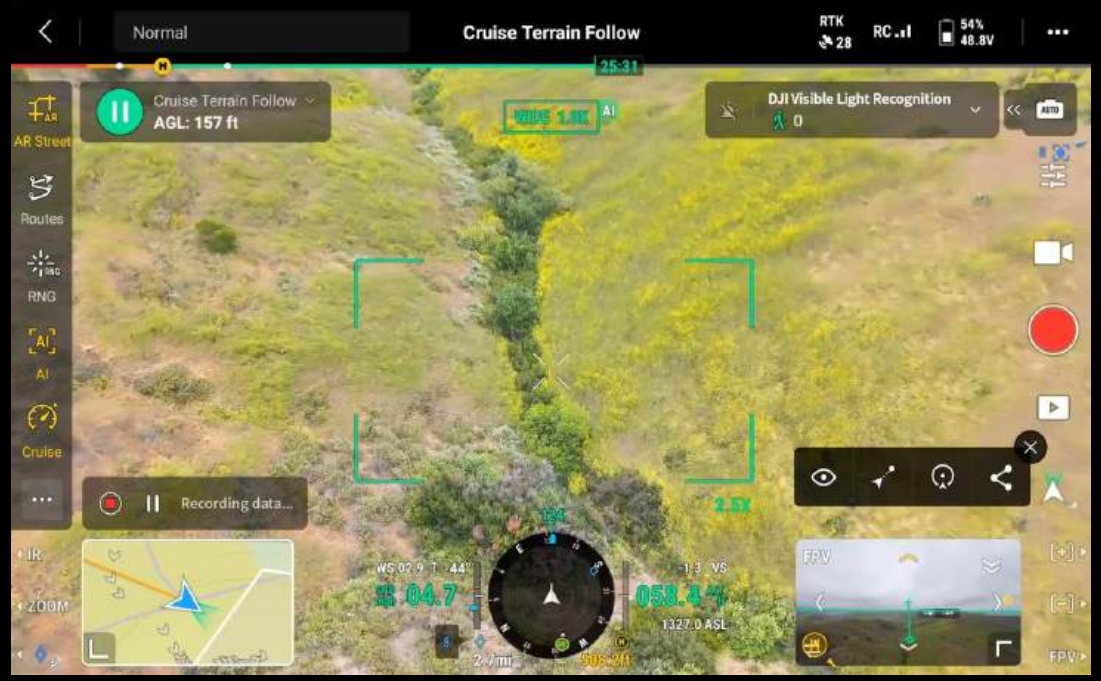
## Real-Time Terrain Follow

- This feature can be enabled during both manual flight and automated flight routes in any horizontal direction, ensuring stable relative height to ground
- During search and rescue operations, keep the size of ground subjects consistent on the screen, reducing the need for frequent zoom adjustments
- During mapping missions, a consistent GSD can be maintained

Observed View

Smart Track





# Intelligent Features

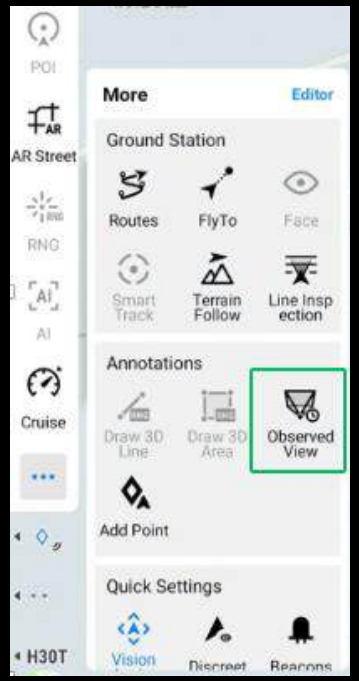
## Intelligent Flight

Cruise

FlyTo

POI

Real-Time Terrain Follow




## Observed View

- Record the ground area and the center position of the screen observed by the camera, and display the observed view area on the map.
- Combined with the cruise control function, the cognitive load of the search and rescue pilot can be greatly reduced.
- Note that the observation range needs to be deleted on the map interface.




Smart Track

# Intelligent Features

## Intelligent Flight

Cruise

FlyTo

POI

Real-Time Terrain Follow

Observed View

## Smart Track

- For precise subject positioning and automatic zoom adjustments
- Allows you to switch subjects easily. It can automatically reacquire a subject even if obscured briefly



# Flight Routes

## More Route Types, Greater Mission Efficiency

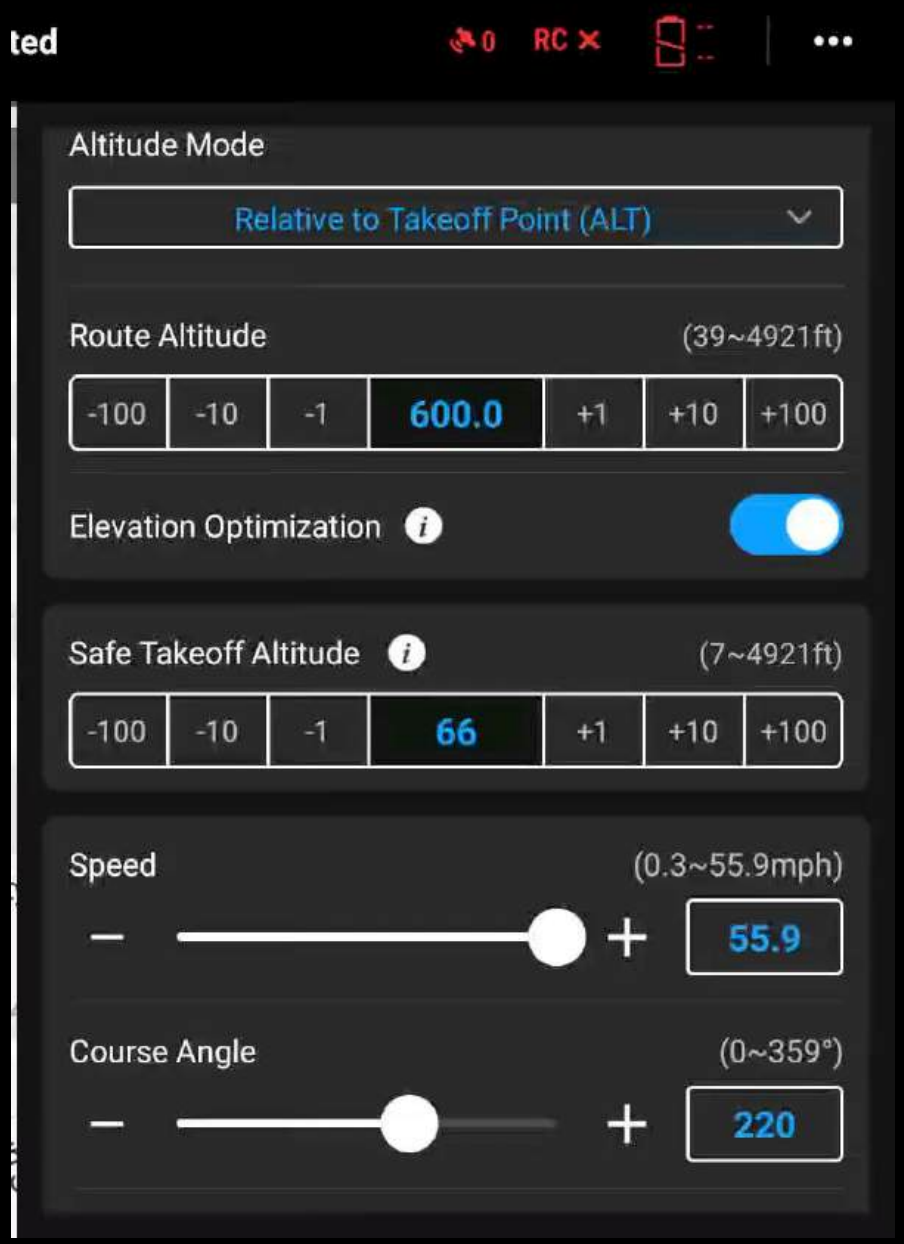
## Flight Speed

- Up to 25 m/s flight speed of ortho collection, improving 60% efficiency*

### Slope & Geometric Route

### Smart 3D Capture (P1)

*Actual flight speed depends on flight height / camera shutter speed.




**Max Flight Speed for 2D Ortho Map with P1 with default overlap**

# Flight Routes

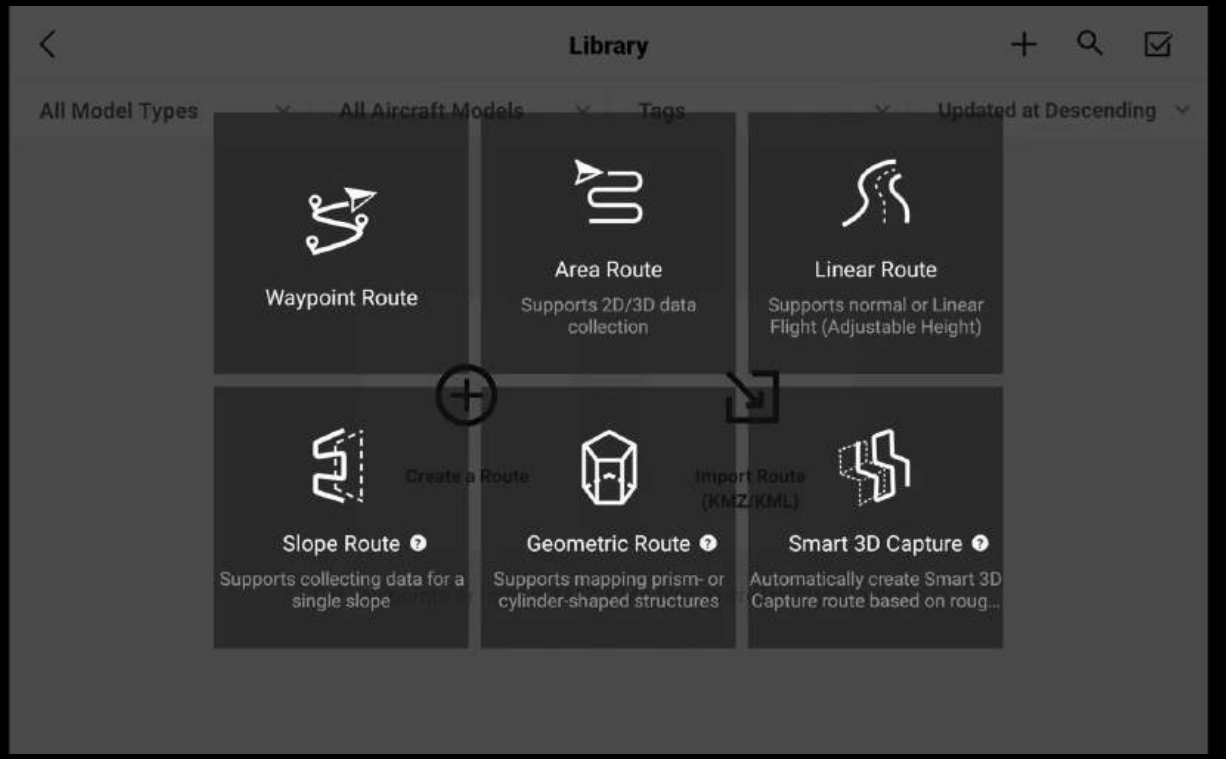
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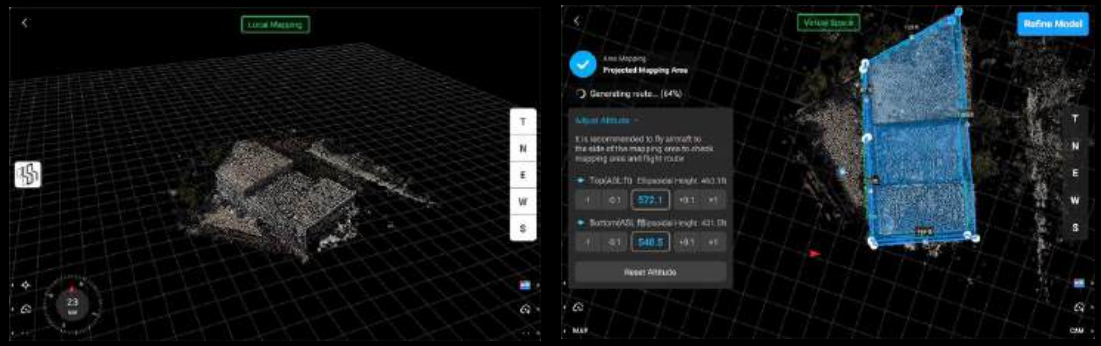
- Matrice 400 supports the planning and execution of slope and geometric routes via DJI Pilot 2 or DJI FlightHub 2. Whether conducting detailed aerial surveys of building facades, slopes, or other inclined surfaces, or collecting mapping data of individual buildings or structures, Matrice 400 can quickly plan slope or geometric routes to efficiently acquire high-precision data.

### Smart 3D Capture (P1)



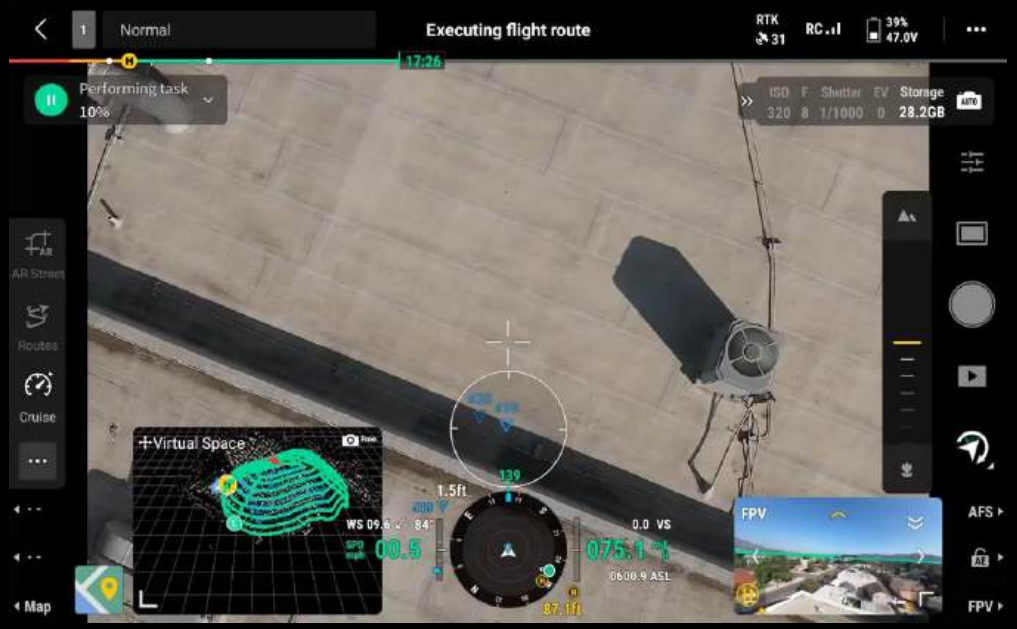
# Flight Routes

## More Route Types, Greater Mission Efficiency



Flight Speed

Slope & Geometric Route




## Smart 3D Capture (P1)

- A rough model is generated on the remote controller and used to create Smart 3D Capture routes
- Virtual flight paths are displayed to help evaluate the safety of capture routes

# Intelligent Features

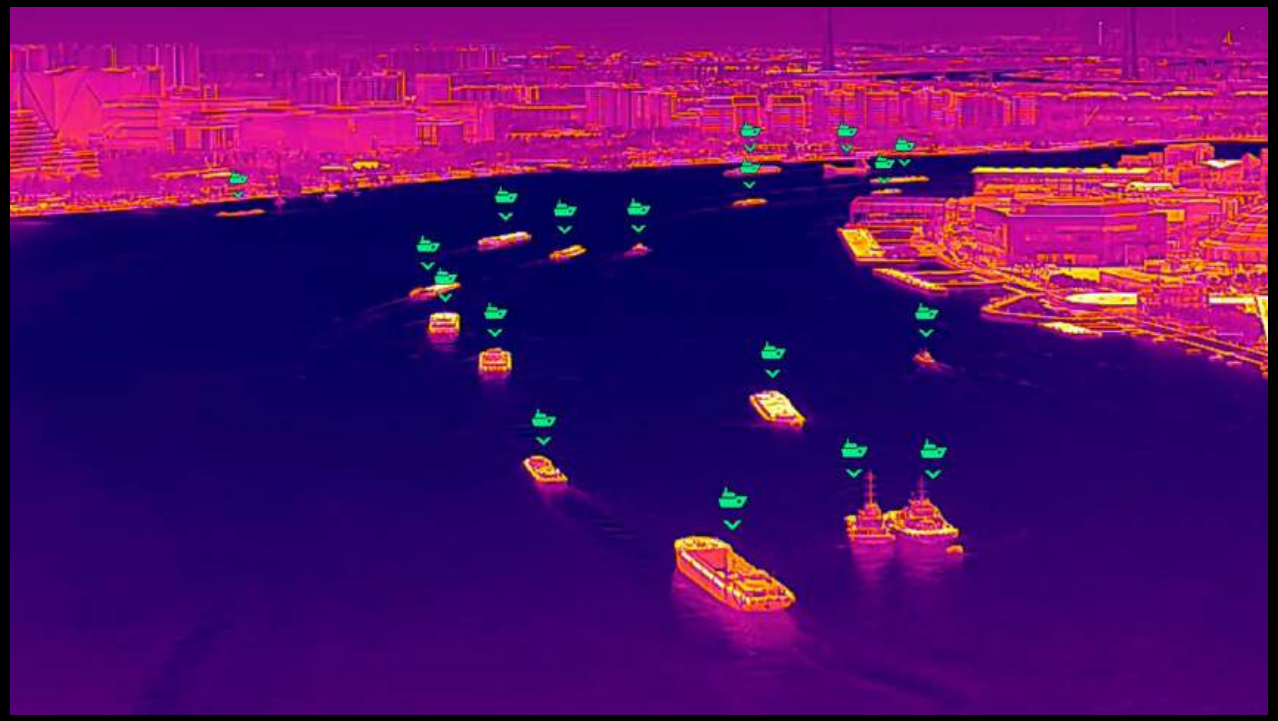
## AI Detection - Visible & Thermal

### Visible Detection (H30 Series)

- AI models for people, vehicles, boats
- Supports alarm and counting
- **Adjustable confidence level**
- Supports **3rd party models**

### Thermal Detection (H30T)

- AI models for people, vehicles, boats for thermal camera
- Supports moving people detection
- **Adjustable confidence level**



**Thermal Detection**

# Power Line Follow

## Power Line Follow With Zenmuse L2

### Power Line Follow

- **Wire Path Recognition**: With Zenmuse L2, the system automatically identifies power line corridors and branch routes; operators can select the flight path
- **Automatic Flight**: The drone follows the selected path automatically, flying according to preset parameters while collecting point cloud data
- **Real-Time Live View**: A live 3D point cloud model of the power line corridor is displayed on the remote controller screen

### Safe Operations at Line Crossings

- Advance Detection of Line Crossings
- **Automatic Bypass** for uninterrupted flight (new for M400)



**Power Line Follow Point Cloud Collection**




**Bypass Line Crossing**

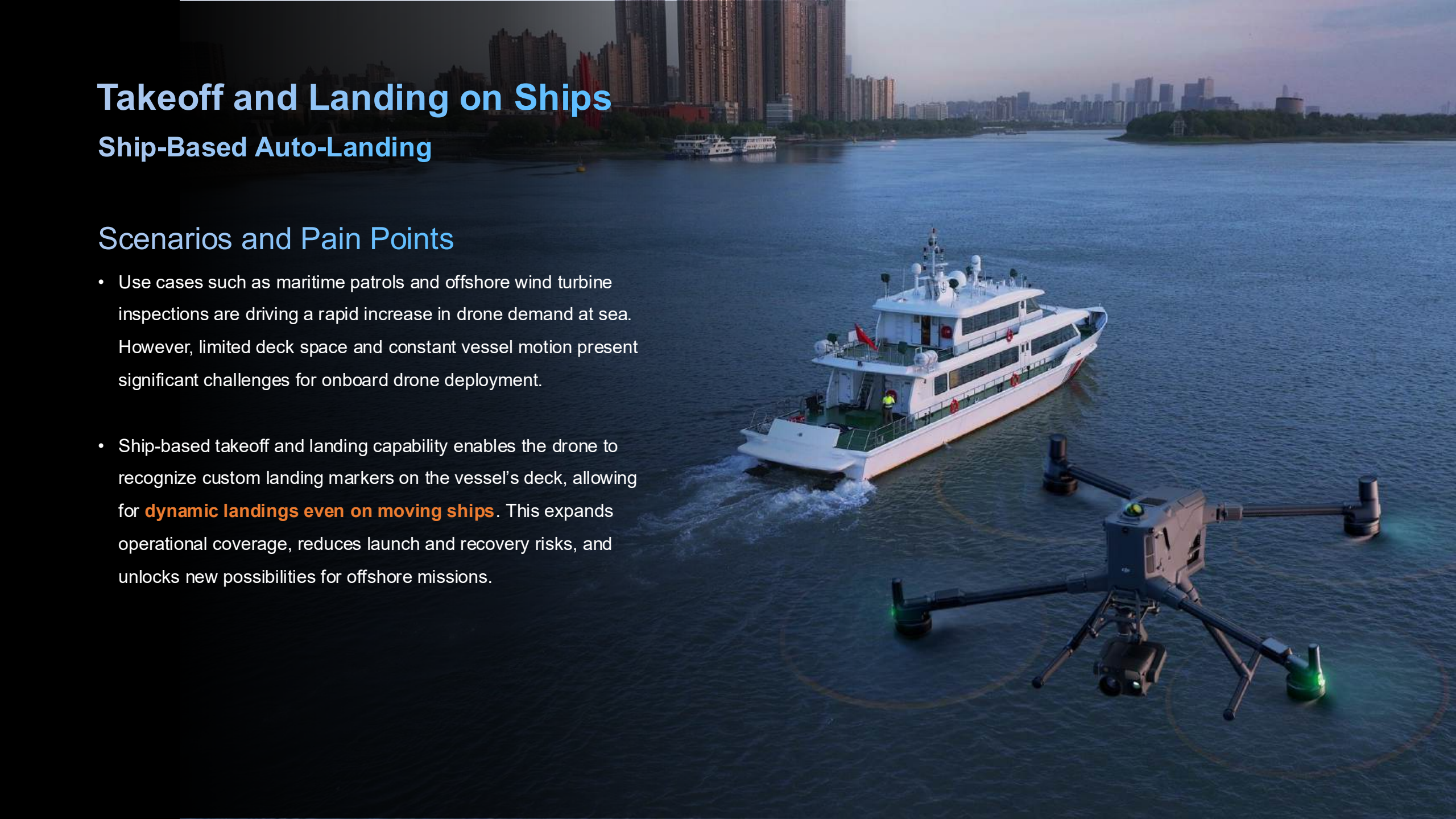
# Takeoff and Landing on Ships

## Ship-Based Auto-Landing

### Scenarios and Pain Points

- Use cases such as maritime patrols and offshore wind turbine inspections are driving a rapid increase in drone demand at sea. However, limited deck space and constant vessel motion present significant challenges for onboard drone deployment.

- Ship-based takeoff and landing capability enables the drone to recognize custom landing markers on the vessel’s deck, allowing for **dynamic landings even on moving ships**. This expands operational coverage, reduces launch and recovery risks, and unlocks new possibilities for offshore missions.



# Takeoff and Landing on Ships

## Ship-Based Auto-Landing

### Workflow and Performance

- Place the designated landing marker on the vessel's deck. The available deck space must be at least 3m × 3m
- Turn on the Boat Launch feature, and turn on dynamic home point update
- Manually takeoff and quickly ascend the aircraft to a 20 meter safe distance
- When the aircraft returns to home and approaches the vessel and detects the landing marker, cancel the RTH manually
- Enable Landing Marker Recognition and Auxiliary Vision, then manually pilot the aircraft above the landing marker and descend slowly
- Once the landing marker is recognized, press the C1 button on the remote controller. The aircraft will switch to auto landing mode and automatically adjust its position and altitude to land precisely on the marker.




**Auto-Landing**



# DJI FlightHub 2

## Comprehensive Air-to-Ground Coordination Capabilities

### Real-Time Transmission

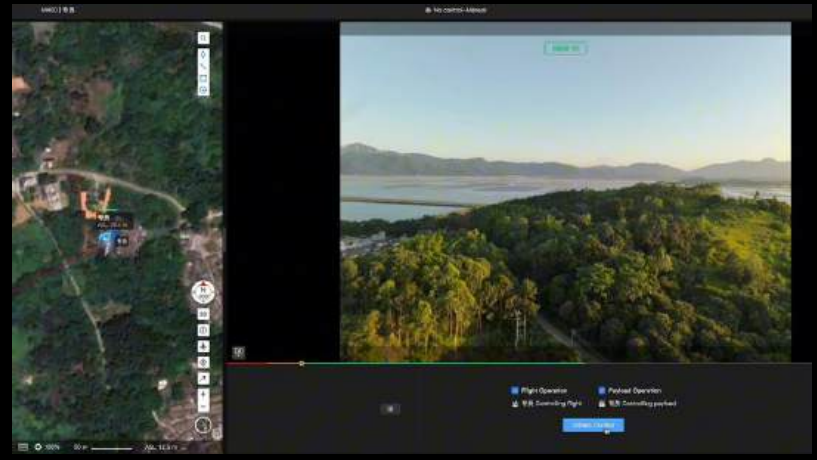
- Stream the drone's video feed and share it with stakeholders
- Sync the line and area drawing with FlightHub 2
- Sync the observed view record with FlightHub 2

### Virtual Cockpit & Remote Control (H30 Series)

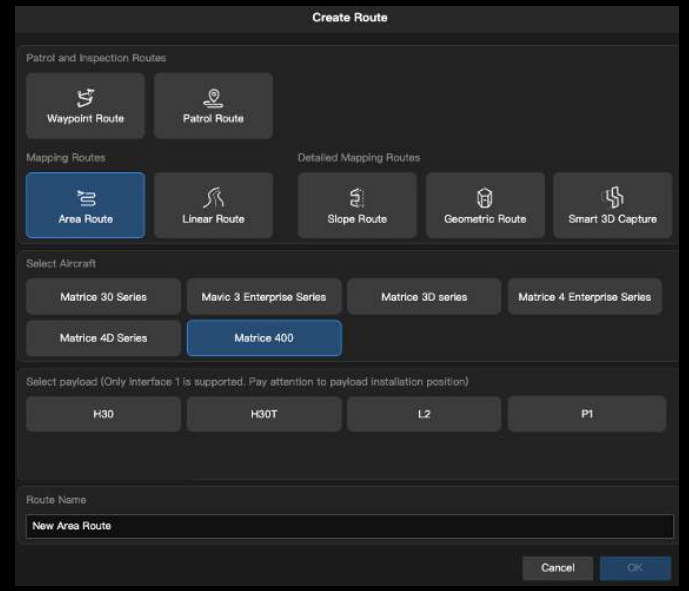
- Take off and obtain **flight control** remotely
- Control payloads like H30, spotlight and loudspeaker remotely
- **AI Detection and alert** remotely with H30
- Perform automated flight routes including waypoint mission, flyto and POI functions remotely

### Flight Route Library and Cloud Editing

- Edit waypoint, area, inclined, and geometric routes via the cloud route library
- Sync flight routes to the cloud and download them to devices when needed



**Remote Control and Route Editing**




**Flight Planning**

# Spotlight and Loudspeaker

## Zenmuse S1

### Auto-Aligned Beam Center

- When mounted together with the H30 series payload on the M400, the spotlight supports **synchronized zoom**
- The beam center is automatically calibrated in real time to **align** precisely with the camera's field of view, ensuring accurate illumination




### Higher Max Brightness, Longer Visibility

- Peak central brightness of **40 lux at 100 meters**
- Provides ample lighting in dark environments for clear target identification
- In high beam mode, power consumption remains low at just 24 W, reducing the load on the drone and helping preserve flight time

### Multiple Lighting Modes, Easier Operation

- All-new UI for intuitive operation
- Supports Low Beam, High Beam, Full-On, and Strobe modes

# Spotlight and Loudspeaker

## Zenmuse S1

### Grouped Control for Large-Area Illumination

In nighttime emergency response requiring wide-area lighting, the M400 can carry two Zenmuse S1 spotlights. Operators can **simultaneously control both spotlights**' power, brightness, and gimbal angle, illuminating large zones to enhance visibility.

### Air-to-Ground Collaborative Operations

When used with the M400 and H30 series payloads, the Zenmuse S1 supports remote control via DJI FlightHub 2

| Platform | Brightness (100m) | | Functions | | |
|---|---|---|---|---|---|
| | Low Beam | Full Beam | Auto Beam Alignment | Grouped Control | Remote Control |
| **M400** | **20 lux** | **40 lux** | ✓ | ✓ | ✓ |
| **M350/M300** | 13 lux | 35 lux | ✗ | ✗ | ✗ |

# Spotlight and Loudspeaker

## Zenmuse V1 Speaking Modes

### Broadcasting from Recorded Audio

- Use DJI Pilot to record audio and transmit it to the loudspeaker for playback
- Supports local preview and saving of recordings
- Recorded voice can be sent without complex operations



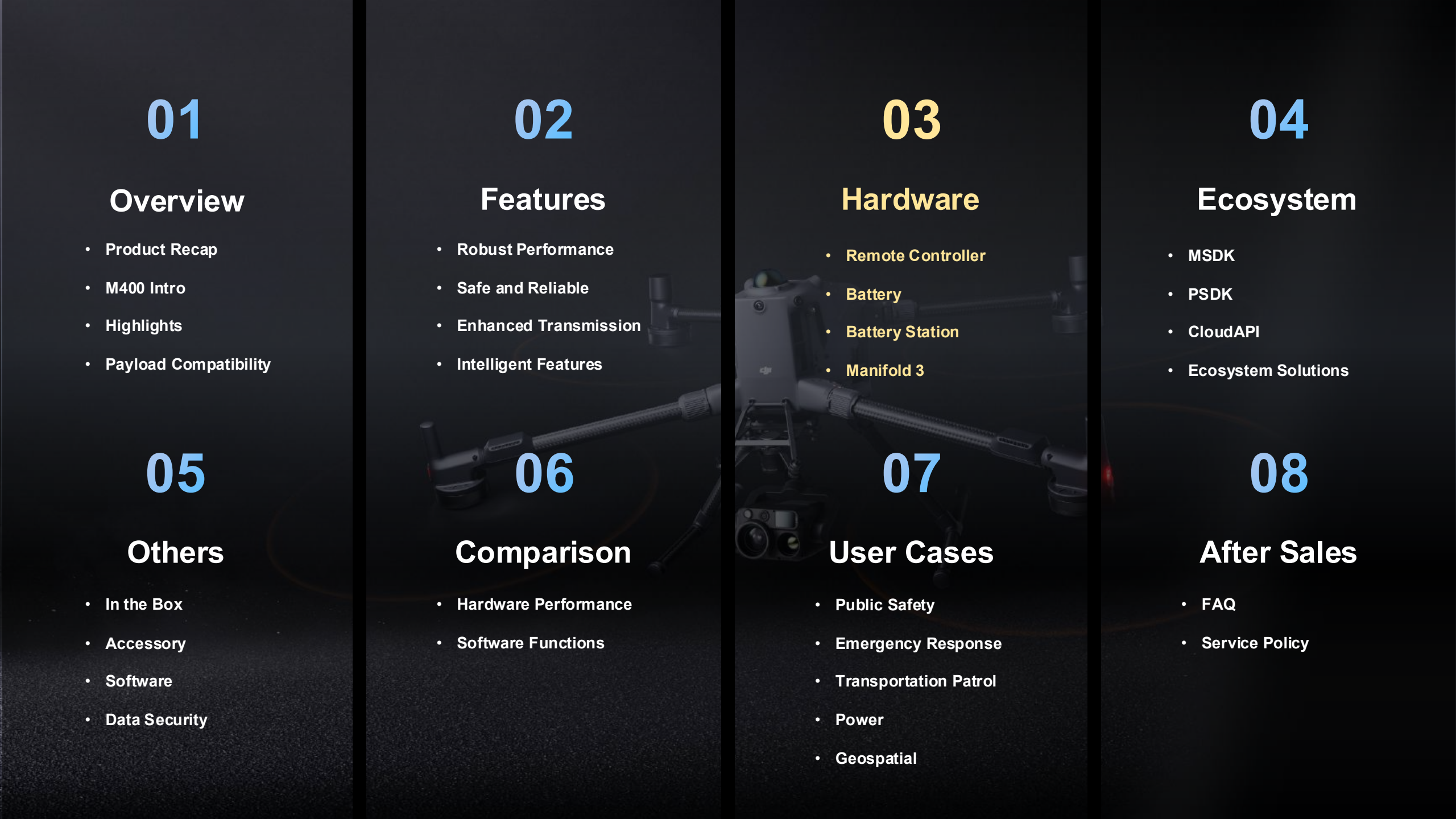

### Text-to-Speech (TTS)

- Supports TTS and sent to the loudspeaker
  Supports adjustments to voice tone and speed
- Supports multiple languages: Chinese, English, Spanish, Korean, Japanese, French




### Playback of Audio Files

- Local audio files can be imported via Pilot for broadcast (supports MP3, AAC, WAV formats)
- Files can be played while uploading



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- Enhanced Transmission
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- Remote Controller
- Battery
- Battery Station
- Manifold 3

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## Ecosystem

- MSDK
- PSDK
- CloudAPI
- Ecosystem Solutions

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- Accessory
- Software
- Data Security

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- Emergency Response
- Transportation Patrol
- Power
- Geospatial

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# DJI RC Plus 2 Enterprise Enhanced Version

## Latest Sub-2G Antenna with New Band

### Remote Controller Hardware

- 7.02-inch LCD touchscreen
- Max brightness: **1400 nits**
- High Gain Antenna Array
- IP 54 Protection Rating
- Supports **Button Backlight**




### Enhanced Transmission and Endurance

- **3.8 hours** Built-in battery life
- **7 hours** total operation time with WB37 external battery
- An optional 4G enhancement module can be mounted on the RC, providing stable transmission combined with the drone's dual 4G modules

### Rear-Mounted Sub-2G Antenna

- **Latest Sub-2G antenna** enables the **1.4 GHz and 900 MHz transmission band**
- **Antenna status indicator** shows real-time working state

# TB 100 Intelligent Flight Battery

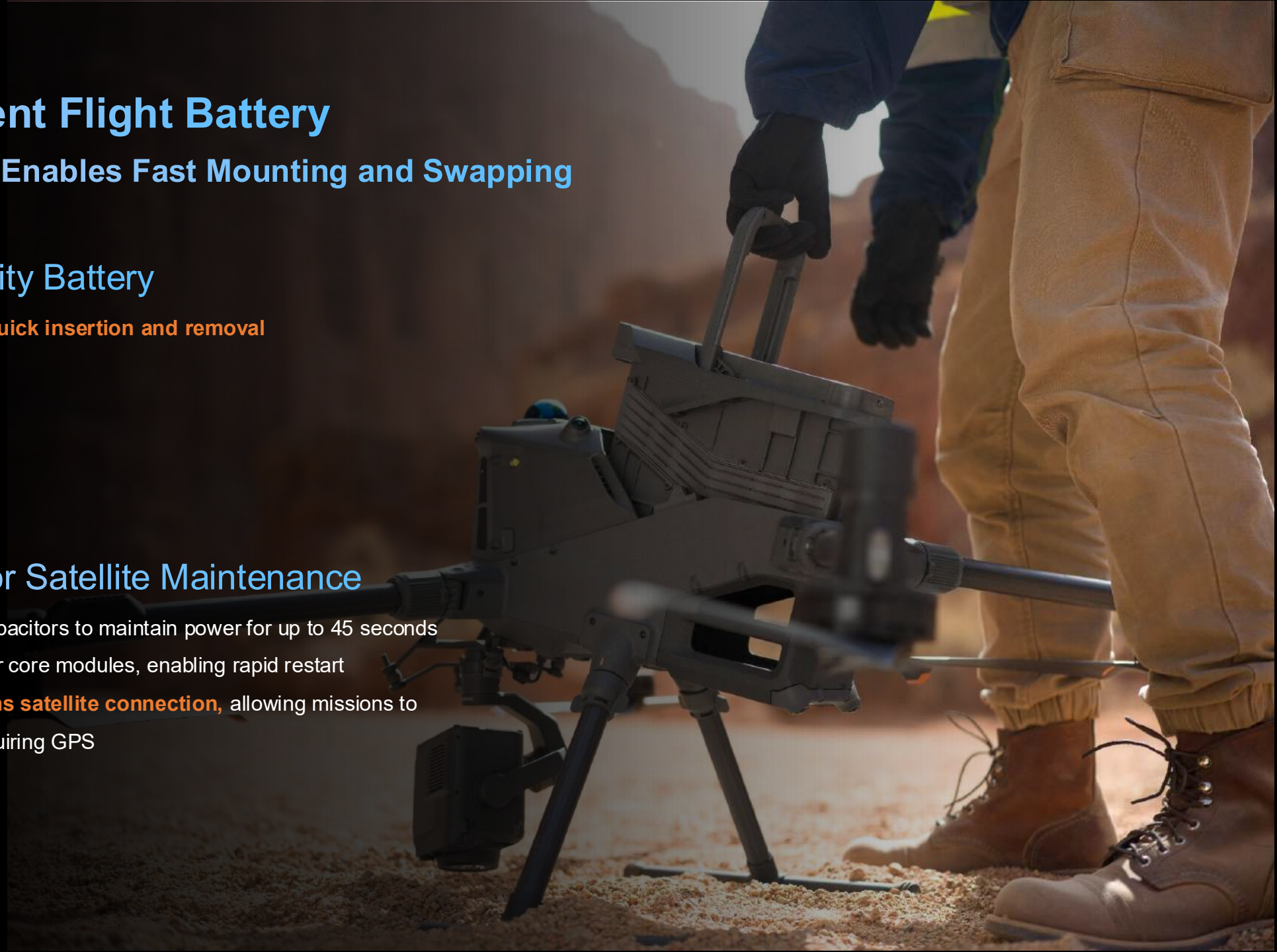
## New Handle Design Enables Fast Mounting and Swapping

### TB100 High-Capacity Battery

- Top-insert design allows for **quick insertion and removal**
- **Capacity: 20,254 mAh**
- Type: Li-ion 13S
- **Energy: 977 Wh**
- Cycle life: 400 cycles

### Hot-Swap Ready for Satellite Maintenance

- The M400 features built-in capacitors to maintain power for up to 45 seconds during battery replacement for core modules, enabling rapid restart
- Upon restart, the drone **retains satellite connection,** allowing missions to resume quickly without reacquiring GPS



# BS100 Multifunctional Battery Station

## Significantly Faster Charging，Rapid and Seamless Battery Rotation

### Charging Capacity

- Supports up to 3 × TB100 batteries and 2 × WB37 batteries

### Charging Modes & Time

- Charge Level Mode:

  Standby 90%, Standard 100%
- Speed Mode:

  Rapid Mode – **0 to 100% in 45 minutes** @ 220V, 70 minutes @ 110V

  Quiet Mode – 0 to 100% in 110 minutes @ 220V and 110V

### Intelligent Battery Management System

- Connect to the remote controller for battery station management
- Supports full battery status monitoring
- One-tap settings for auto-discharge and firmware updates



# Aircraft Transport Case

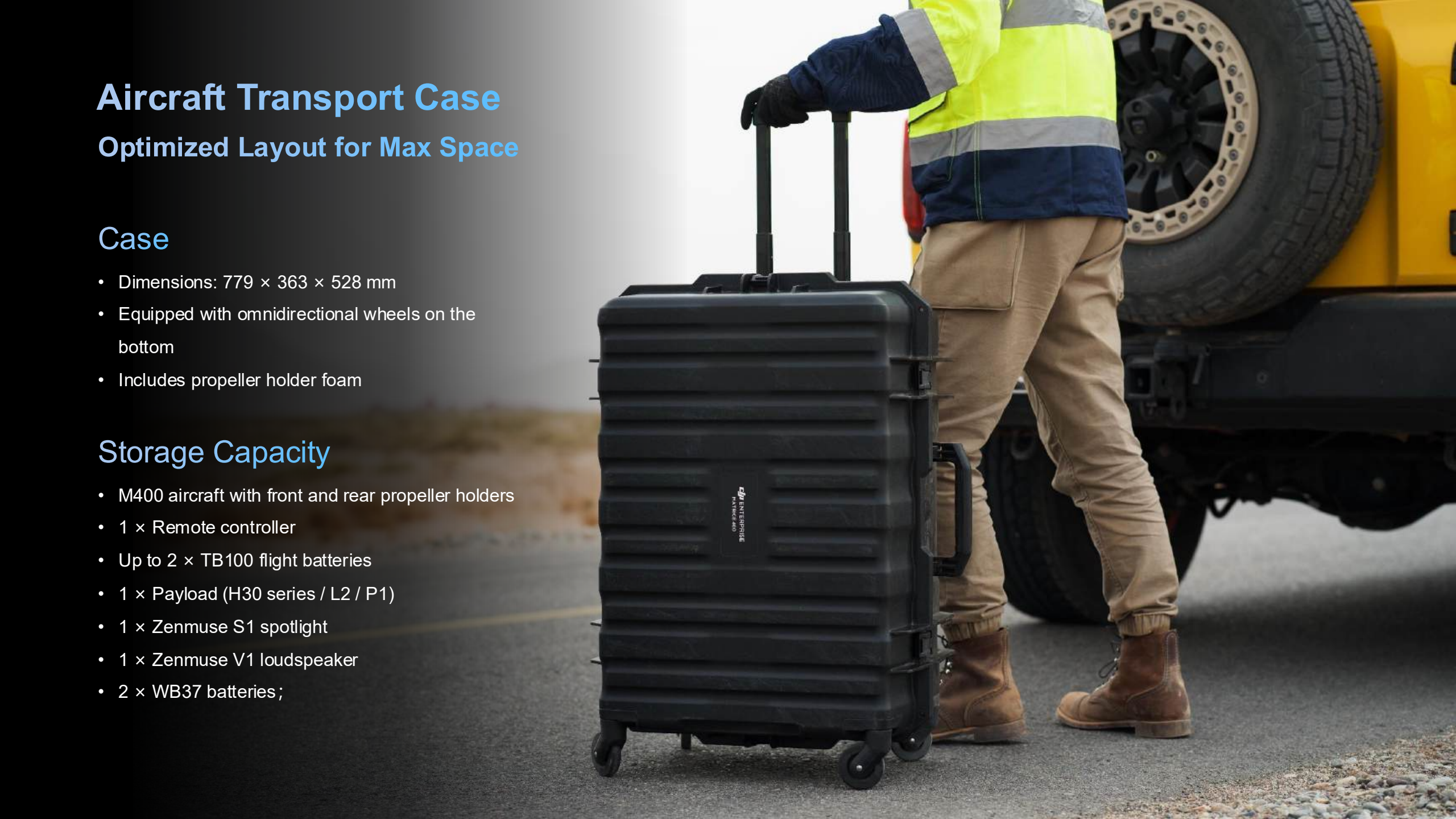
## Optimized Layout for Max Space

### Case

- Dimensions: 779 × 363 × 528 mm
- Equipped with omnidirectional wheels on the bottom
- Includes propeller holder foam

### Storage Capacity

- M400 aircraft with front and rear propeller holders
- 1 × Remote controller
- Up to 2 × TB100 flight batteries
- 1 × Payload (H30 series / L2 / P1)
- 1 × Zenmuse S1 spotlight
- 1 × Zenmuse V1 loudspeaker
- 2 × WB37 batteries;



# Manifold 3

## High-Performance Onboard Computing Unit

## Powerful and Compact

- Delivers up to **100 TOPS** of computing power, supporting **parallel acceleration via GPU and DLA cores** for model inference and edge AI tasks
- **Only 120 grams**, minimizing impact on drone flight endurance

Payload SDK

Intelligent Computing Platform

Easy Development



# Manifold 3

## High-Performance Onboard Computing Unit

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- **Only 120 grams**, minimizing impact on drone flight endurance



## Payload SDK

## Intelligent Computing Platform

## Easy Development

# Manifold 3

## High-Performance Onboard Computing Unit

Powerful and Compact

## Payload SDK

- Fully supports and is compatible with PSDK V3, enabling seamless integration with underlying communication protocols to access flight platform sensor data efficiently
- Native support for **hardware-accelerated video encoding and decoding**, enabling fast access to video streams, payload control, and flight control functions



Intelligent Computing Platform

Easy Development

# Manifold 3

## High-Performance Onboard Computing Unit

Powerful and Compact

Payload SDK

## Intelligent Computing Platform

- Third-party developers can directly utilize the computing power of Manifold 3 and, through integration with PSDK, build high-performance end-to-end automatic solutions—from data acquisition to task execution.

Easy Development



# Manifold 3

## High-Performance Onboard Computing Unit

Powerful and Compact

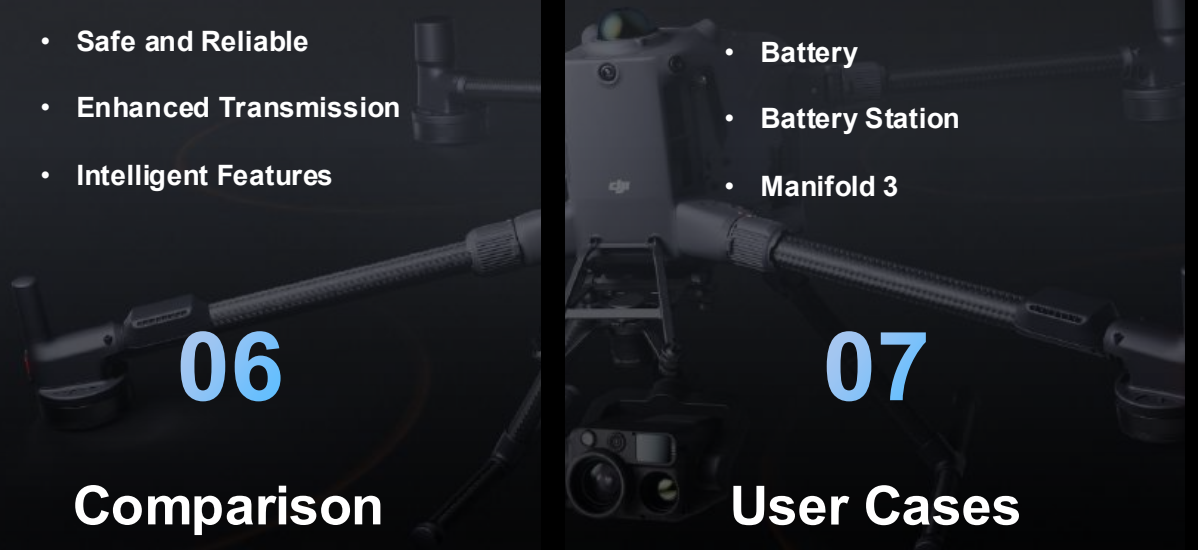
Payload SDK

Intelligent Computing Platform

## Easy Development

- Runs on Ubuntu OS, enabling convenient installation and execution of Linux software. Supports development tools such as CUDA and OpenCV, as well as SSH for remote debugging. Developers can flexibly leverage PSDK features and computing resources to build high-performance applications powered by open onboard computing





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# Ecosystem Development

## New Tethered Battery – TB100C

### Tethered Battery

- Tethered battery and 3rd party ecosystem power supply provides continuous power for the drone. Enables long-duration hovering or mission execution, significantly improving operational time and efficiency
- **Capacity: 20,254 mAh**
- **Battery Type**: Li-ion 13S
- **Energy: 977 Wh**
- **Cycle Life**: 400 cycles
- Supports **in-box charging** with BS100 battery station

### Tethered Mode

- The tethered battery can be integrated with DJI ecosystem partner power systems to enable long-duration tethered flight operations



# Ecosystem Development

## Payload SDK

### PSDK Updates

The Payload SDK (PSDK) v3 includes two main modules:

- Payload Development: Enables integrating custom payloads with M400.
- Application Development: Extends flight control features. Use Manifold 3 on M400 to release full PSDK potential for onboard controlling features.

### SkyPort V3

- Designed for quick-release payloads, mounted via an adapter ring to gimbal port
- Adapter ring includes a built-in SDK authentication chip
- Exclusive to M400, supporting new functions and features specific to the M400, not compatible with M300 or M350

### E-Port V2 Developer Kit

A plug-and-play PSDK development kit for M400-based payloads, including:
GD32 development board, E-Port coaxial cable, SkyPort V3 adapter ring, SkyPort V3 coaxial cable, Coaxial cable terminal connector, XT30 power cable, X-Port adapter board, Electronic ribbon cable

### 3rd Party Solutions

- Tethered battery system
- Oblique photography camera
- Gas monitoring and water sampling
- Cleaning and spraying systems

# Ecosystem Development

## Mobile SDK / CloudAPI

### MSDK Updates

- With the DJI Mobile SDK (MSDK), developers can create custom mobile applications for the Matrice 400 drone. Enabling **deeper integration into industry workflows** and significantly improving operational efficiency.

### CloudAPI Updates

- Supports fast integration with third-party cloud platforms via the **DJI Cloud API**, which is based on the **MQTT protocol** and through **DJI Pilot 2**.
  This enables functions such as **real-time data transmission**, **live streaming**, and **flight route upload**

### 3rd Party Solutions

- Tethered battery system
- Oblique photography camera
- Gas monitoring and water sampling
- Cleaning and spraying systems

# Algorithm Developer Plan

## Opening Onboard Computing

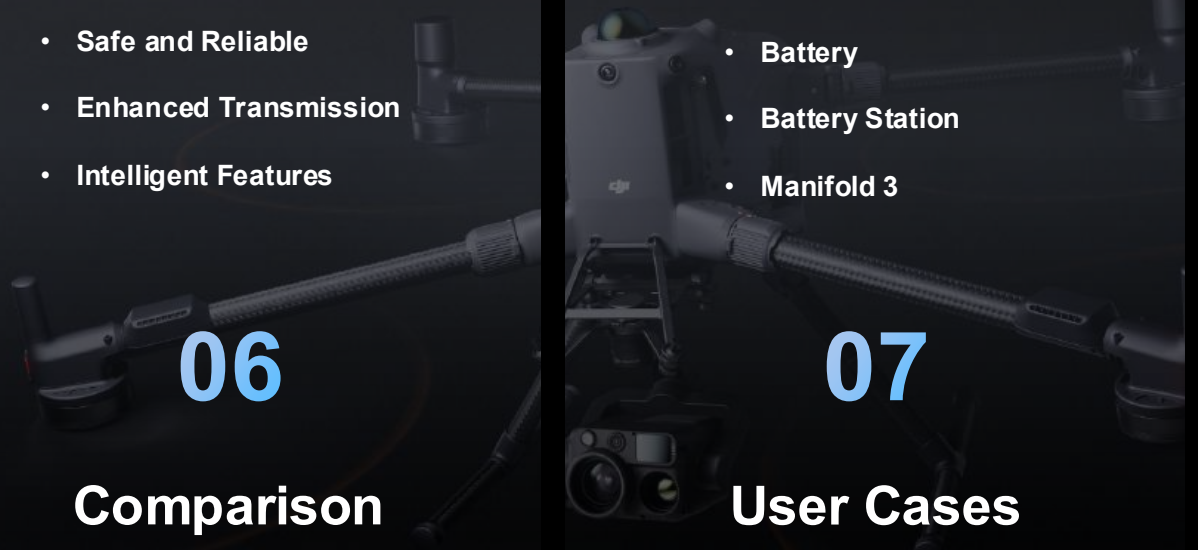
### Algorithms on Aircraft

- Supports 10 TOPS (IN8) computing capability
- This onboard computing power can be utilized to train a **customized model and detect certain types of objects**
- Provides the necessary model training tools and third-party developer certification process




### Intelligent Computing Platform

| Obtain Model Source Code | Train Model | Upload Model | Upload Images for Validation | Distribute Model |
|---|---|---|---|---|
| Download the model patch file and instructions from the developer website | Currently only supports image detection algorithms | Upload the model to the developer platform | Quantify the model and verify the model performance | Model will be packaged based on aircraft SNs for online or offline distribution |



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# Matrice 400 Highlights

## Main Equipment

Aircraft



Remote Controller



Battery



Battery Case



## Accessories

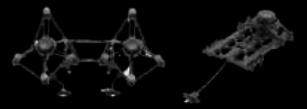
Sub2G SDR



Tethered Battery



Gimbal Port



## Compatible Payloads

H30 Series



Zenmuse S1

Zenmuse V1



L2



P1



Manifold 3



DRTK-3



# In the Box

## M400 Package

| Category | Quantity |
|---|---|
| Matrice 400 Aircraft (with propeller holder) | 1 |
| Remote Controller (with DJI RC Plus 2 sub2G SDR Module) | 1 |
| WB37 Battery | 1 |
| Carrying Case | 1 |
| Landing Gear | 2 |
| Propellers (Pair) | 2 |
| Propeller Washers and Screws | 6 |
| Remote Controller Strap and Bracket | 1 |
| USB-C to USB-C Cable | 1 |
| Power Cable | 1 |
| Gimbal Damper | 4 |
| Screws and Tools | 1 Set |
| Cleaning Tools | 1 Set |
| Rubber Port Covers and Screws | 1 Set |

## Accessories

| Part Number | Item Name |
|---|---|
| CP.EN.00000683.01 | BS100 Intelligent Battery Station (General) |
| CP.EN.00000682.01 | BS100 Intelligent Battery Station (KR) |
| CP.EN.00000673.01 | TB100 intelligent flight battery |
| CP.EN.00000677.01 | TB100C Tethered Battery |
| CP.EN.00000644.01 | DJI E-Port V2 Development Kit |
| CP.EN.00000645.01 | DJI E-Port V2 Ribbon Cable Suit |
| CP.EN.00000675.01 | M400 2510F propeller |
| CP.EN.00000678.01 | DJI RC Plus 2 sub2G SDR Module |
| CP.EN.00000676.01 | M400 shock absorbing ball |
| CP.EN.00000672.01 | Matrice 400 Third Gimbal Connector |
| CP.EN.00000671.01 | Matrice 400 Dual Gimbal Connector |
| CP.EN.00000647.01 | DJI Skyport V3 Ribbon Cable Suit |
| CP.EN.00000646.01 | DJI Skyport V3 Suit |
| CP.RC.00000031.01 | DJI RC Plus 2 |
| CP.MA.000000712.03 | DJI Cellular Dongle 2 |

# Software Compatibility



## Pilot 2

- RC Plus 2 with DJI Pilot 2 App
- Quick camera switch, real time view
- Manual and multiple flight routes



## FlightHub 2

- All-in-one cloud-based drone operations management platform for drone operation information sharing
- Remotely control via FH2



## DJI Terra

- 2D, 3D modeling
- Point cloud modeling

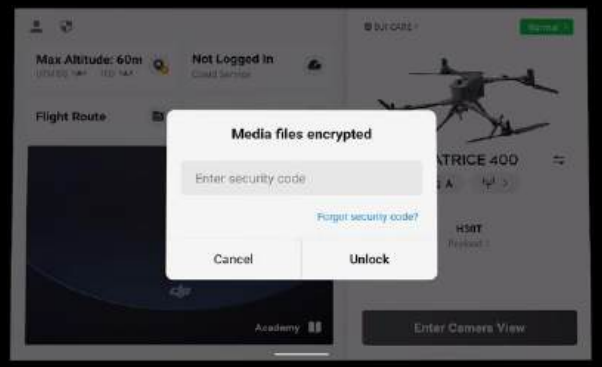


## DJI Modify

- 3D model editing
- Point cloud editing

# Data Security

## Media Encryption, Local Storage,  Log Clearing




### Media Encryption

- Add a security code to prevent any unauthorized party from accessing the media data on your drone.
- DJI employs AES-256-XTS encryption. The media data is non-decryptable - not even by DJI.
- After a password is set, the drone will prompt for the password each time it starts to access data on the SD card.




### Local Storage

- Standard Mode: Normal internet connectivity; users can enable/disable specific network services as needed.
- Restricted Network Mode: Disables most network services except maps, RTK, livestreaming, etc.
- Local Data Mode: Disables all network services, and ensures no network requests are made.




### Log Clearing

- Supports selective clearing of logs from the remote controller, payload, and aircraft; also supports viewing the log deletion history.
- Tap "Clear All Device Data" via the Settings in DJI Pilot 2 to erase your drone data, including drone logs, payload logs (excluding logs from third-party payloads) and/or remote controller logs.

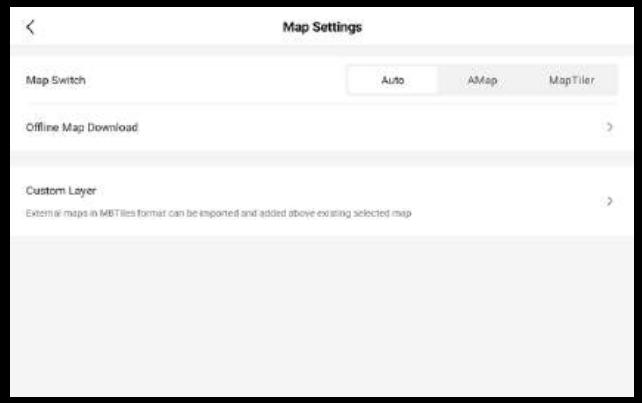
# Data Security

## Operate Offline, Flight Hub On-Prem




### Offline Firmware Updates

- Update hardware without connecting to the internet.
- Users can download firmware to a storage device such as an SD Card that can transfer firmware updates to the remote controller for transmission to hardware components

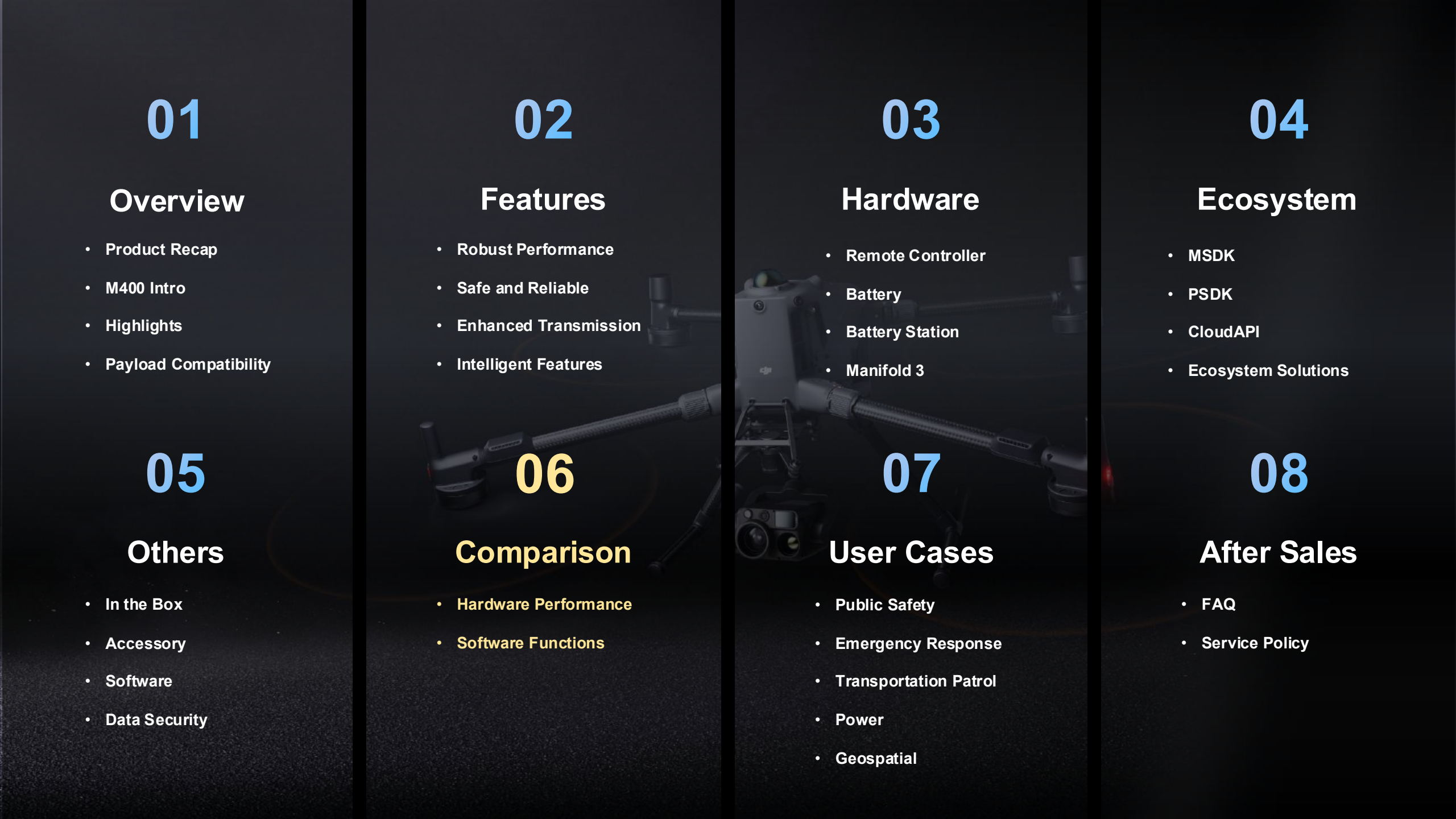



### Offline Maps

- Bring in your own map data in mbtiles format

### FH2 On-Premise

- Deploy Flight Hub 2 on a server location of choice
- Keep all flight logs, maps, photos, and videos within your organization’s infrastructure
- Manage how data is stored, backed up, and accessed.



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# M400 VS M350

| Module | | M400 | M350 | Conclusion |
|---|---|---|---|---|
| Aircraft | Takeoff Weight (with propellers) | Without Batteries: 5020±20 g<br>With Batteries: 9740±40 g | Without Batteries: 3770 g<br>With Batteries: 6470 g | 1. 50% increase in mission efficiency per flight<br>2. 220% payload capacity VS M350<br>3. Stronger payload capacity and more interfaces for up to 7 payloads |
| | Dimensions | Unfolded: 980×760×480 mm (L×W×H) (with landing gear)<br>Folded: 490×490×480 mm (L×W×H) (with landing gear and gimbal) | Unfolded: 980×760×480 mm (L×W×H) (with landing gear)<br>Folded: 490×490×480 mm (L×W×H) (with landing gear and gimbal) | |
| | Max Payload | 6 kg | 2.7 kg | |
| | Max Takeoff Weight | 15.8 kg | 9.2 kg | |
| | Diagonal Wheelbase | 1070 mm | 895 mm | |
| | Max Ascent Speed | 10 m/s | 6 m/s | |
| | Max Descent Speed | 8 m/s | 5 m/s | |
| | Max Horizontal Speed (at sea level, no wind) | 25 m/s | 23 m/s | |
| | Max Takeoff Altitude | 7000 m | 7000 m | |
| | Max Flight Time (no wind) | 59 minutes with a H30T | 42 minutes with a H30T | |
| | Max Wind Speed Resistance | 12 m/s | 12 m/s | |
| | Operating Temperature | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) | |
| | Ingress Protection Rating | IP55 | IP55 | |
| | GNSS | GPS + Galileo + BeiDou + GLONASS | GPS + GLONASS + BeiDou + Galileo | |
| | Ports | USB-C Debug Port × 1: USB 2.0<br>E-Port V2 × 4: Lower part of the drone, with 120W single-port power<br>Cellular Dongle 2 Interface × 2: Underside of the drone | E-Port V2 × 2: Upper part of the drone<br>Cellular Dongle 2 Interface: Underside of the drone | |
| | Max Payload Capacity | 7 | 3 | |
| | Auxiliary Light Number | 2 | 1 | |
| Sensing | Sensing System Type | Omnidirectional binocular vision system (surround view provided by full-color fisheye vision sensors)<br>Horizontal rotating LiDAR, upper LiDAR and downward 3D infrared range sensor<br>Six-direction mmWave radar | Six-direction binocular vision system (black & white)<br>Six-direction infrared sensing system | 1. Triple Sensing System: Vision, LiDAR, mmWave Radar<br>2. Power line–level obstacle avoidance<br>3. Work in all conditions |
| | Power-Line-Level Obstacle Sensing | Support | Not support | |
| Transmi-ssion | Transmission | DJI O4 Enterprise Enhanced Video Transmission System | DJI O3 Enterprise Video Transmission System | 1. 2.5× more video transmission antennas<br>2. 2× maximum transmission range<br>3. Supports 5 transmission frequency bands for stronger anti-interference<br>4. Dual 4G transmission with dual SIM standby<br>5. Airborne relay enables missions in blocked or mountainous environments |
| | sub2G | Support | Not Support | |
| | Operating Frequency and Transmitter Power (EIRP) | 900M, 1.4GHz, 2.4GHz, 5.2GHz, 5.8GHz | 2.4GHz, 5.2GHz, 5.8GHz | |
| | Max Transmission Distance | 40 km (FCC)<br>20 km (CE/SRRC/MIC) | 20 km (FCC)<br>8 km (CE/SRRC/MIC) | |
| | Antenna | WLAN Antenna × 8: 6 vertically polarized antennas and 2 horizontally polarized antennas<br>sub2G Antenna × 2: 2 vertically polarized antennas | WLAN Antenna × 4: 3 vertically polarized antennas and 1 horizontally polarized antennas | |
| | 4G Dongle Number | 2 | 1 | |
| | Airborne | Support | Not Support | |

# M400 VS M350

| Module | | M400 | M350 | Conclusion |
|---|---|---|---|---|
| Intelligent Features | AI Detection | Support | Not Supported | Versatile Scenarios, Greater Efficiency<br>More convenient automated flight functions<br><br>Faster and more effective security & search-and-rescue missions<br><br>More efficient power line following and ground wire inspection in utility operations<br><br>Enhanced route planning and terrain following for mapping missions<br><br>Shipborne takeoff and landing expands over-water operation capabilities |
| | AR Projection | Support | Not Supported | |
| | Real-Time Terrain Follow | Support | Not Supported | |
| | Ship-Based Auto-Landing | Support | Not Supported | |
| | Crossing Power Line Follow | Support | Not Supported | |
| | Cruise & POI & FlyTo | Support | Not Supported | |
| | Smart 3D Capture | Support | Not Supported | |
| | Slope & Geometric Route | Support | Not Supported | |
| Battery | Capacity | 20,254 mAh | 5,880 mAh | Battery Upgrades<br>1 kWh battery capacity for longer flight time<br>No pairing required, easier storage and battery swapping<br>25% faster charging speed (220V) |
| | Cell Type | Li-ion 13S | Li-ion 12S | |
| | Energy | 977 Wh | 263.2 Wh | |
| | Cycle Count | 400 | 400 | |
| | Tethered Battery | Support | Not Supported | |
| Intelligent Battery Case | Charging Time | 220 V: 45 minutes (Fast Charging Mode);<br>110 V: 70 minutes (Fast Charging Mode);<br>110 minutes (Silent Mode) | 220 V: 60 minutes<br>110 V: 70 minutes | |
| Remote Controller | Screen Resolution | 1920×1200 | 1920×1200 | Brighter screen, ideal for night operations<br><br>Supports sub-2G antenna extension for stronger video transmission |
| | Screen Size | 7.02 inches | 7.02 inches | |
| | Brightness | 1400 nits | 1200 nits | |
| | Backlit Keys | Support | Not Supported | |
| | IP Protection Rating | IP54 | IP54 | |

# Public Safety Solution

## FlightHub 2

**Public Cloud**

- Supports real-time video streaming, remote sharing, and flight control for collaboration
- Enables sync lines and areas drawing and observed view data to the cloud
- Supports multi-drone streaming and sharing

**On-Premise Version**

- Supports fully offline deployment with same capabilities as public cloud
- Offers real-time video streaming, remote sharing, and drone control
- Secure, stable, and smooth operation



## DJI Matrice 400

- 50% increase in mission efficiency per flight
- 220% payload capacity VS M350
- Dual 4G transmission with automatic band switch
- Uses sub2GH band for better anti-interference

## DJI Pilot 2 APP

- Visible and thermal AI detection
- Cruise, FlyTo, and POI functions
- AR Street View
- Remotely Control by FlightHub 2



## H30T

- 34× optical zoom
- 400× digital zoom
- 3,000 m laser rangefinder
- 1K HD thermal imaging
- Full-color and black & white night vision



## Zenmuse S1

- Multiple lighting modes
- High brightness with low power consumption
- Reliable and refined user experience
- Compact and flexible mounting options



## Zenmuse V1

- Multiple broadcast modes
- Loud, long-range audio transmission
- Directional pickup with environmental noise reduction
- Precision control for targeted voice broadcasting

# Emergency Response Solution

## FlightHub 2

- Supports real-time video streaming, remote sharing, and flight control for collaboration
- Enables sync lines and areas drawing and observed view data to the cloud
- Supports multi-drone streaming and sharing





## DJI Matrice 400

- 50% increase in mission efficiency per flight
- 220% payload capacity VS M350
- Dual 4G transmission with automatic band switch
- Uses sub2GH band for better anti-interference
- Airborne Relay



## H30T

- 34× optical zoom
- 400× digital zoom
- 3,000 m laser rangefinder
- 1K HD thermal imaging
- Full-color and black & white night vision



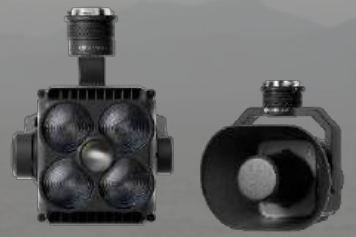
## Tethered Battery

- Equipped with a tethered battery and supporting power supply systems, providing continuous power for the drone
- Enables extended hovering or mission duration, significantly improving operational time and efficiency



## Worker M400/M4T

- Using M400’s relay functions, the drone can transmit data even in mountain blocks, signal interruptions, or network dead zones, greatly expanding the mission range



## S1/V1

- Multiple lighting modes
- High brightness with low power consumption
- Multiple broadcast modes
- Loud & long transmission
- Directional audio pickup with environmental noise reduction

# Power Inspection Solution



## DJI Matrice 400

- 50% increase in mission efficiency per flight
- 220% payload capacity VS M350
- Dual 4G transmission with automatic band switch
- Uses sub2GH band for better anti-interference
- Airborne Relay

## DJI Pilot 2 APP

- Visible and thermal AI detection
- Cruise, FlyTo, and POI functions
- Remotely Control by FlightHub 2



## H30 Series

- 34× optical zoom
- 400× digital zoom
- 3,000 m laser rangefinder
- 1K HD thermal imaging
- Full-color and black & white night vision



## L2

- Frame-based LiDAR, high-precision self-developed positioning system, and 4/3 CMOS visible mapping camera
- Collects point cloud data with power line follow function, crossing lines automatically



## Worker M400/M4T

- Using M400's relay functions, the drone can transmit data even with mountain blocks, signal interruptions, or network dead zones, greatly expanding the mission range



Infrared thermal analysis tool for marking, analyzing, and processing images to identify abnormal temperature points

## Thermal Analysis Tool

- 2D and 3D Reconstruction
- Supports visible light PPK post-processing
- TIFF orthophotos and elevation models,
- LAS format point clouds



## DJI Terra

# Mapping Solutions



## DJI Matrice 400

- 50% increase in mission efficiency per flight
- 220% payload capacity VS M350
- Dual 4G transmission with automatic band switch
- Uses sub2GH band for better anti-interference
- Airborne Relay

## DJI Pilot 2 APP

- Visible and thermal AI detection
- Cruise, FlyTo, and POI functions
- Remotely Control by FlightHub 2



## D-RTK 3

- Functions as both an RTK base station and a rover
- Supports satellite-based self-initialization and can obtain high-precision checkpoint and control point information



## L2

- Frame-based LiDAR, high-precision self-developed positioning system, and 4/3 CMOS visible mapping camera
- Collects point cloud data with power line follow function, crossing lines automatically



## P1

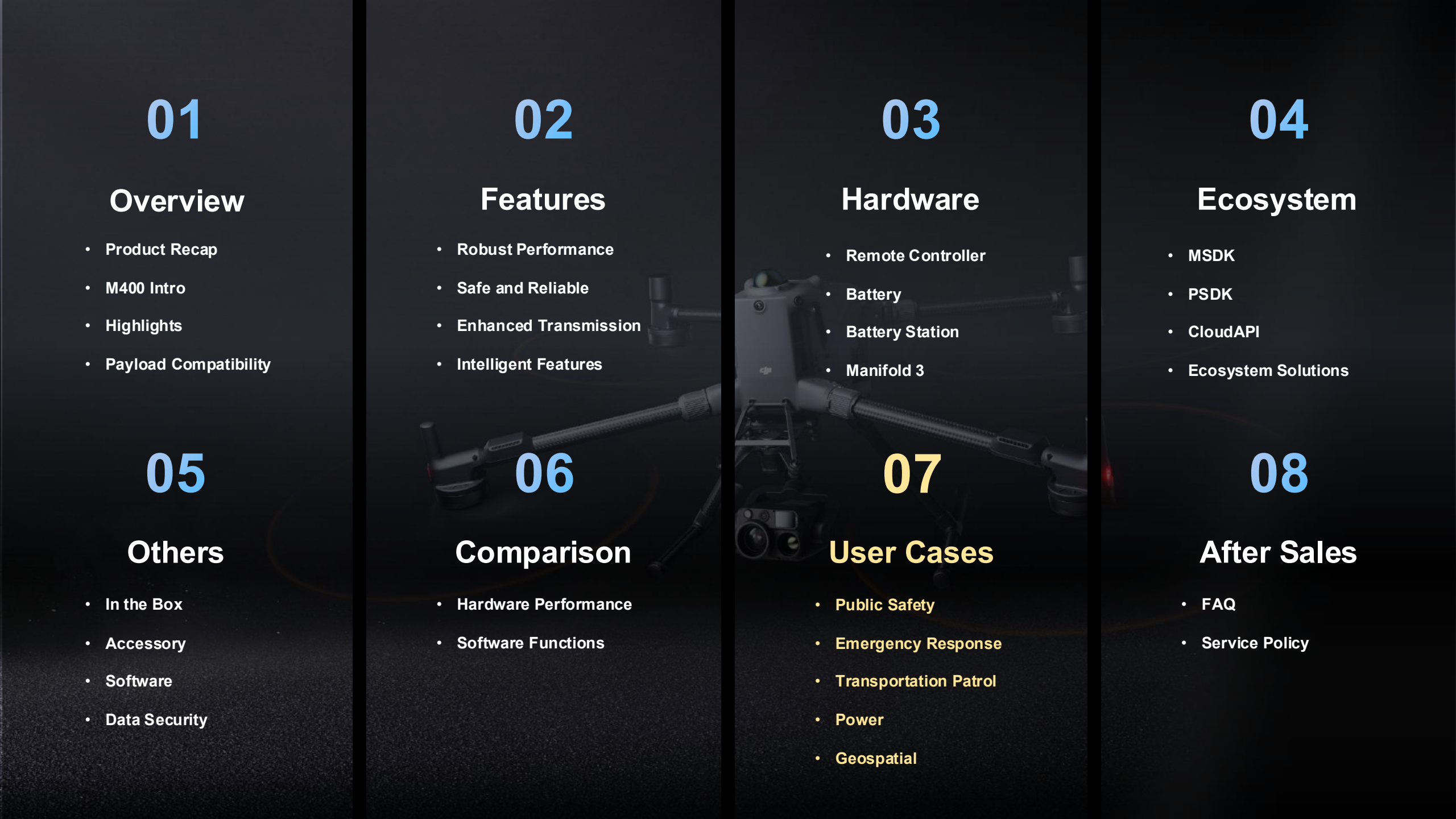
- Supports 2D orthophoto, 3D oblique, and 3D Smart capture
- No need for ground control points to achieve 1:500 cadastral survey accuracy;
- 45-megapixel full-frame camera.

## DJI Terra

- 2D and 3D Reconstruction
- Supports visible light PPK post-processing
- TIFF orthophotos and elevation models,
- LAS format point clouds
- Contour lines in DXF and SHP format

## DJI Modify

- 3D Model Editing
- Point Cloud Modification



## 01
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- Product Recap
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- Enhanced Transmission
- Intelligent Features

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- Battery Station
- Manifold 3

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- Power
- Geospatial

## 08
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# Security Patrol-Nanjing Maritime

## Route options and efficiency greatly improved

### Background

Maritime patrol faces challenges managing busy waterways with blind spots and enforcement difficulties, ;
Drones have been used for years to improve efficiency and modernize patrols.

### M400 usage advantage

- **Dual 4G video**: Auto-switches to the best network for steady signal at sea.
- **AR distance check**: Quickly detects boats outside of spec in real time.
- **Night IR AI**: Tracks vessels and reads ship numbers with H30 for accurate enforcement.
- **Max 6kg payload**: Drops AEDs, lifebuoys, and medicine fast in emergencies.
- **Supports ship takeoff** and auto-landing for safer, wider operations.






# Emergency Rescue – Fujian

## Flight route types and efficiency greatly improved



### Challenges in disconnected environments

- Steep, forested terrain blocks quick rescue access
- High altitude and no 4G limit drone range. blocking deep rescue access

### Reliable performance in extreme conditions

- 24/7 search and rescue in rain, fog, and rugged mountains.
- Strong adaptability and reliable in extreme conditions.








### Mountain rescue with aerial relay

- Using the M400 as an aerial relay for search and rescue, video signal remains strong even 3km into the mountains
- Aerial relay solves urgent communication issues in blocked, disconnected, and complex terrains

# Traffic Management

## Flight planning is more efficient with optimized route types

### AR maps + Intelligent recognition assist law enforcement

- By overlaying road network data on maps and using intelligent recognition, Operators can share clear locations with ground teams for coordinated action.

### AR power line view for day/night obstacle avoidance

- During flight, obstacles such as power lines are clearly displayed on screen, enhancing safety， detects and avoids overhead lines and obstacles in real time during missions.

### Real-time data transfer and remote control

- During operations, Flighthub 2 transmits real-time data, allowing the command center to stay updated on the situation, In emergencies, experienced pilots can remotely control drones to manage the scene.



# Topographic Survey

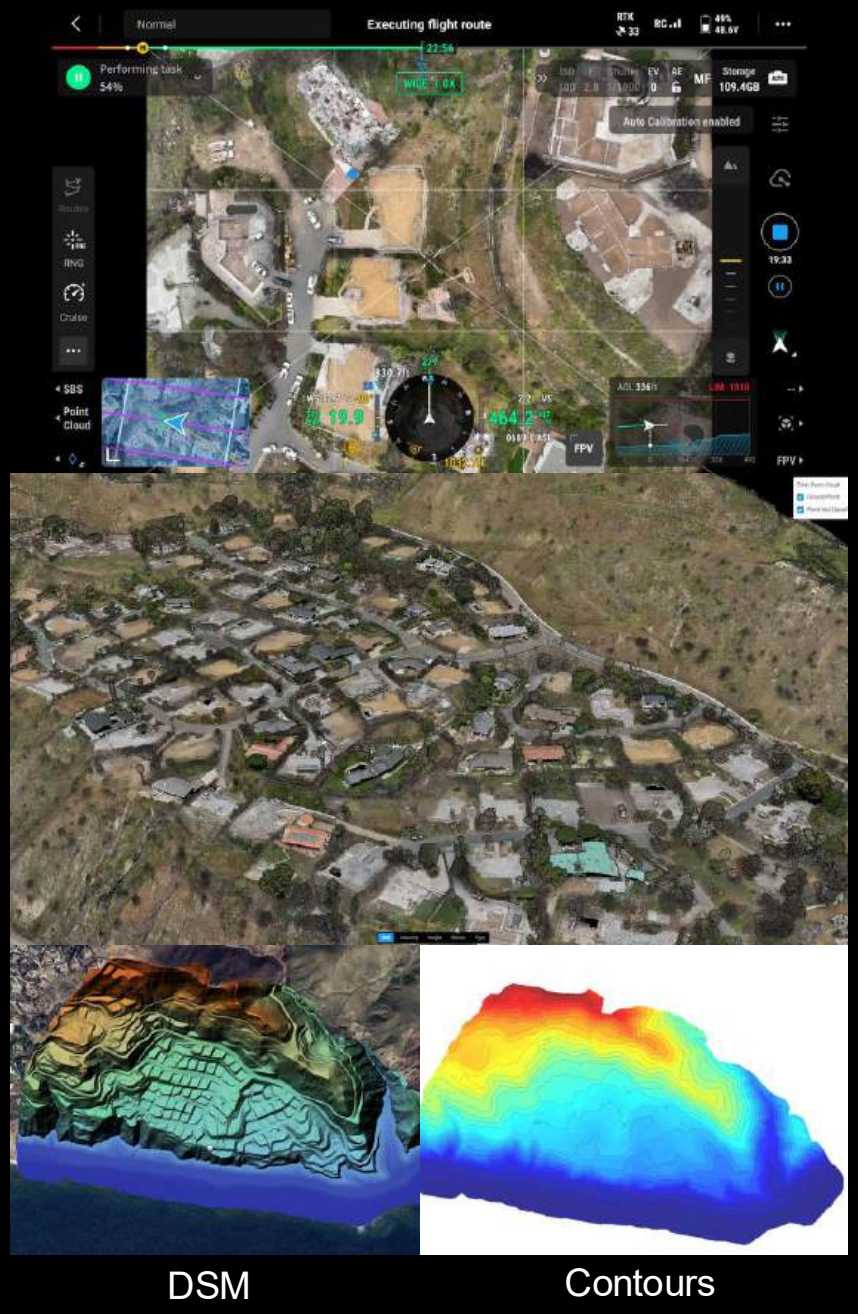
**Collect Topographic Data Efficiently with DJI Integrated LiDAR Solution**

## Task Challenge

- **Outdated Elevation Data**: It's difficult to obtain current DSM/DEM for accurate terrain-following. Preplanned missions often don’t reflect real-world terrain changes, requiring operators to monitor flights closely.
- **Operational Complexity**: Large-area mapping requires frequent battery swaps, increasing the chances of RTK reconvergence delays and potential human error.

## M400 Advantage

- **Real-Time Terrain Following**: The M400 supports dynamic terrain following during both mapping missions and manual flights. Operators simply set the desired above-surface elevation, and the M400 automatically adjusts in real-time to maintain consistent altitude over varying terrain. This ensures uniform Ground Sampling Distance (GSD) and consistent LiDAR point density across the scanned area.
- **Extended Flight Efficiency:** With significantly longer effective flight time compared to its predecessor, the M400 allows for greater area coverage per mission. This reduces the need for frequent battery swaps and improves overall data acquisition efficiency.



# Power transmission Line Inspection

## Line-following flight greatly improves point cloud collection efficiency.

### Usage Background

Gansu spans 1,800 km as a major energy hub, with 14,000+ km of high-voltage lines across complex terrain and high-risk areas.

### Safer and high-efficient modeling with M400

- With L2 and line-following, drones can automatically scan power lines and collect LiDAR data, **covering up to 40 km per flight.**
- **Automatic bypass**: The drone's LiDAR detects crossing lines and avoids them safely without stopping the mission.
- **Dual 4G modules** improve video transmission stability, helping drones handle mountain signal blocks in Gansu's power grid.
- **Mountain operations with two drones**: One hovers as a relay while the other inspects, ensuring smooth signal and wider coverage.



**Line-following avoids crossing lines**



**Relay signal effect**



**Dual-drone relay**



**LiDAR points cloud sample**

# Mapping-Large-area mapping Task - Great Wall

## Faster flights and longer endurance improve mapping efficiency.

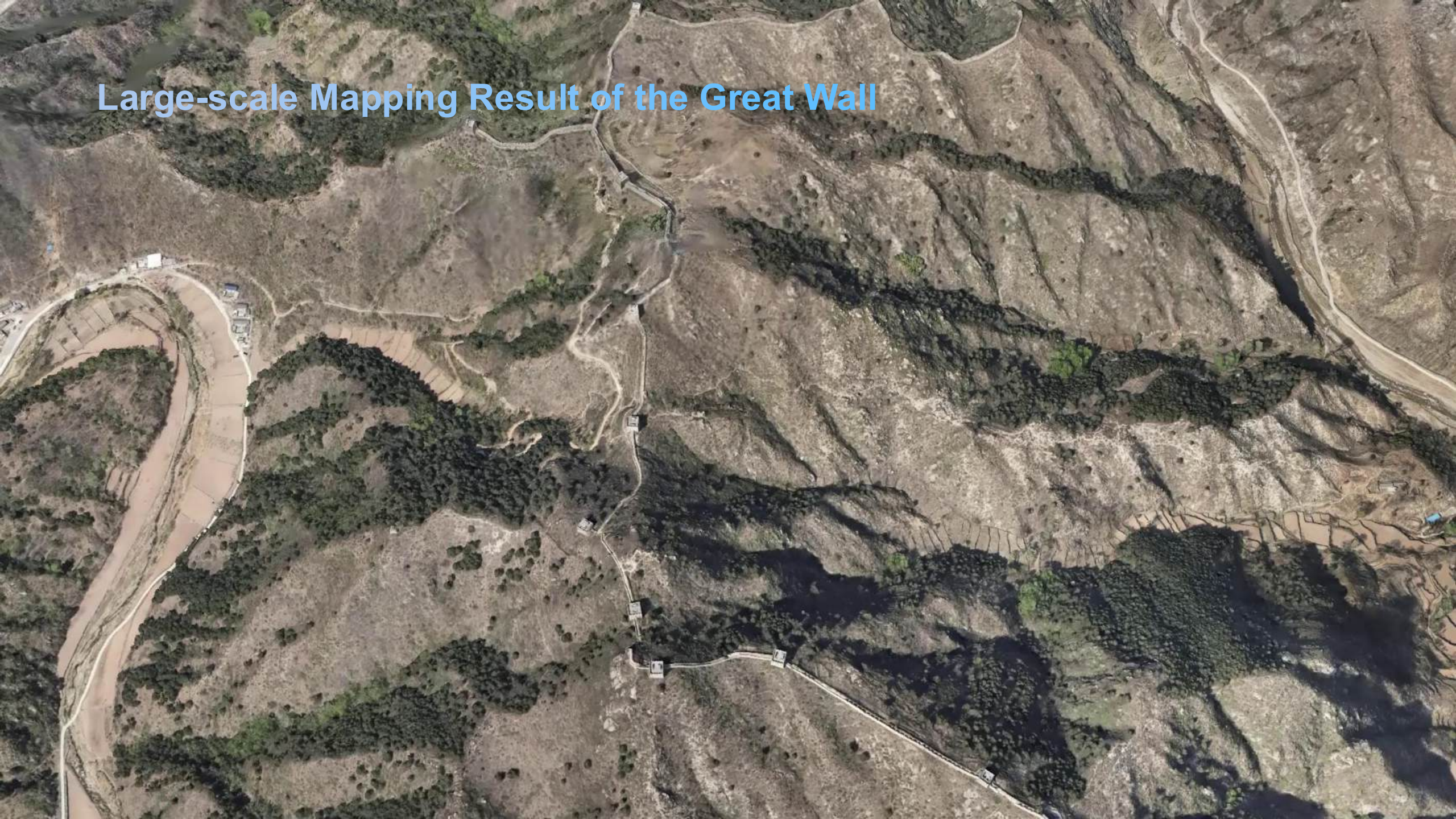
### Task Challenge

- Short operation window: Due to airspace and weather limits, 3D data for 10 km² must be collected within half a day.
- Harsh conditions: Sudden strong winds during work demand high device stability.

### M400 Advantage

- Flight speed up to 25 m/s with P1, greatly improving efficiency.
- Real-time terrain following ensures consistent GSD and high-precision mapping in mountainous areas with 400m elevation difference.
- Stable flight even in strong winds of 17-23 m/s during typhoon conditions.
- Supports various flight paths—geometric, inclined, and close-following—to capture detailed data of local structures like city walls.
- Outdoor missions last 3 hours, completing 10 km² data collection in windy conditions.




Large-scale Mapping Result of the Great Wall



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- FAQ
- Service Policy

# 1. FAQs

## 1. What is the flight restriction logic for each version of the DJI Matrice 400 aircraft?

| Version | Chinese mainland (Excl. HK, TW, & MO) | HK, TW, & MO + South China Sea | Polar regions + High seas | US | Others |
|---|---|---|---|---|---|
| DJI Matrice 400 (CN) | √ | √ | × | × | × |
| DJI Matrice 400 (US) | × | × | × | √ | × |
| DJI Matrice 400 (General) | × | √ | √ | √ | √ |
| DJI Matrice 400 (Demo Unit) | √ | √ | √ | √ | √ |
| DJI Matrice 400 (Beidou) | √ | √ | × | × | × |

Note: For the CN/Beidou version, if you need to fly in the high seas and polar regions, please contact the DJI Fly SAFE team to apply for unlocking. The demo units include the Chinese mainland version and the general version, with the country code version being the demo unit version, flyable worldwide.

# 1. FAQs

**2. What is the certification level of the DJI Matrice 400 in Europe?**

EASA C3 certification.

**3. Is the DJI Matrice 400 waterproof?**

This product has an IP55 protection rating and can fly in rainfall of 100mm/24 hours. However, the protection rating is not permanently effective and may decrease due to wear and tear.

**4. How to obtain information and technical support for the DJI Matrice 400 "DJI Developer Program"?**

You can obtain relevant information from the DJI Developer Website or contact dev@dji.com for assistance.

**5. Does the DJI Matrice 400 support the D-RTK 2?**

Yes, in broadcast mode.

**6. Does the DJI Matrice 400 support hot swapping?**

This product supports battery hot swapping. The built-in core component power capacitor will supply power to the aircraft when there is no battery, and the hot swap must be completed within 45 seconds.

**7. Does the DJI Matrice 400 support dual control functionality?**

Yes.

# 1. FAQs

**8. What payloads does the DJI Matrice 400 support?**

Gimbal and camera: H30, H30T, L2, P1 (other older gimbal and cameras will not be compatible in the future);

Functional accessories: S1 spotlight, V1 speaker, Manifold 3;

Ecosystem development accessories:

- Compatible with third-party PSDK payloads already developed on the M350 RTK aircraft (PSDK payloads need to be upgraded by contacting the corresponding manufacturer);
- DJI X-port;
- DJI E-Port V2 Development Kit;
- DJI E-Port V2 Coaxial Cable Kit;
- DJI SKYPORT V3 Adapter Set;
- DJI SKYPORT V3 Coaxial Cable Kit.

**9. Does the DJI Matrice 400 support mounting an upward gimbal bracket?**

No.

**10. What mounting methods does the DJI Matrice 400 support?**

It supports flexible configuration with either a single downward gimbal or a dual downward gimbal setup, and is compatible with an additional gimbal connector on the underside.

**11. How many payload ports does the DJI Matrice 400 aircraft have in total?**

4 external E-Port 2.0 ports, with the E-Port 4 able to connect to an E-Port Hub Expansion Plate to expand to four payload ports, supporting up to 7 payloads.

# 1. FAQs

**12. What types of propellers does the DJI Matrice 400 support?**

Comes with 2510F propellers only. The standard propellers support flight at an altitude of 7000 meters.

**13. Does the DJI Matrice 400 allow users to replace the propellers themselves?**

Only supports temporary emergency user replacement of propellers. After completing the day's operation, it is recommended to confirm with dealers whether the propeller mount is secure and safe.

**14. Precautions for using the top-mounted circular scanning laser radar on the DJI Matrice 400 aircraft**

When not in use, be sure to mount the circular scanning laser radar protective cover. If the dome is dirty, please use the included cleaning cloth to wipe it clean promptly to avoid affecting the Obstacle Avoidance performance.

**15. Does the DJI Matrice 400 support relaying? How many aircraft can be relayed simultaneously?**

Supports onboard relaying, providing relay functionality for another Matrice 400.

**16. Does the DJI Matrice 400 support D-RTK 3?**

Yes.

**17. Does the DJI Matrice 400 aircraft support 4G enhanced transmission?**

Supported, and the body supports mounting 2 4G enhanced transmission modules.

# 1. FAQs

**18. What is the difference between DJI RC Plus 2 Enterprise and DJI RC Plus 2 Enterprise Enhanced?**

DJI RC Plus 2 Enterprise Enhanced is equipped with the DJI RC Plus 2 Sub-2G Transmission Module, supporting Sub-2G communication bands.

**19. Does the DJI RC Plus 2 Enterprise Enhanced remote controller support Matrice 350 RTK, DJI Matrice 4 series drones, Mavic 3 Enterprise series, and Mavic 3D Enterprise series?**

Yes. However, these models do not support the sub2G communication band, and the Mavic 3 Enterprise series and Mavic 3D Enterprise series must be upgraded to version 14.1 to support model linking.

**20. Do DJI RC Plus 2 Enterprise and DJI RC Plus 2 Enterprise Enhanced support using other USB-C port chargers to charge the battery?**

Yes. To ensure charging speed, it is recommended to prioritize using the USB-C port of the BS100 battery box for charging, and other chargers with a power of over 65 watts that support the PD protocol.

**21. How can you charge the TB100 battery?**

The BS100 battery box can be used for charging.

**22. How long does it take to fully charge a TB100 Intelligent Flight Battery?**

Using 220 volts: In rapid mode, it takes approximately 45 minutes to fully charge one DJI Matrice 400 battery. In silent mode, it takes approximately 110 minutes to fully charge one DJI Matrice 400 battery.

Using 110 volts: In rapid mode, it takes approximately 70 minutes to fully charge one DJI Matrice 400 battery. In silent mode, it takes approximately 110 minutes to fully charge one DJI Matrice 400 battery.

*The above data is measured under laboratory conditions (room temperature) and is for reference only.

# 1. FAQs

**23. Does the DJI Matrice 400 battery support self-heating function?**

Yes. When used with the charging case, if the TB100/TB100C battery temperature is below 5°C, plug into the battery case and turn on the power, the battery will automatically heat up first. When the battery temperature exceeds 20°C, it exits self-heating and begins charging. When used with the aircraft, if the battery temperature is below 20°C, plug into the aircraft, the battery will automatically start heating to 20°C, then stop heating and enter the insulation mode.

**24. What are the usage precautions for the TB100C Tethered Battery?**

The tethered battery needs to be used with DJI ecosystem manufacturer's tethered power supply system (tethered mode). Please consult the relevant ecosystem manufacturer for details.

**25. Can the tethered battery tethered connection cable be used to lift the battery?**

The connecting wire extended from the tethered battery is a current wire, do not use it directly to lift the battery.

**26. What should be noted when inserting or removing the battery?**

The battery should be inserted into the aircraft's battery compartment before pressing down the handle to avoid interference between the handle and the rotating shaft, which may cause forced breakage. After the WB37 battery is fully charged, press the unlock button to remove the remote controller battery from the charging case.

**27. What are the functions of the USB-C port on the charging case?**

The USB-C port can be used for charging.

# 1. FAQs

**28. What is the max charging power of the BS100 battery case?**

TB100 battery port:

100 volts to 110 volts AC Adapter: 54.6 volts DC, max current 21.7 amps;

110 volts to 180 volts AC Adapter: 54.6 volts DC, max current 27 amps;

180V to 240V AC: 54.6V DC, maximum current 40A.

**29. How to update the firmware of DJI Matrice 400?**

The following methods can be used to update the firmware:

1. Connect the aircraft to a computer and use the DJI Assistant 2 (Enterprise Series) to update the firmware of the aircraft and remote controller.
2. Use the DJI Pilot 2 app to update the firmware of the aircraft and remote controller. ;
3. Visit the DJI official website to download the offline firmware update package for the aircraft and remote controller, then plug the SD card containing the firmware package documents into the remote controller to perform an offline update.

**30. Does the DJI Matrice 400 support integration with FlightHub 2 for remotely controlling the aircraft and DJI payloads?**

Yes. The DJI Matrice 400 supports remote control through FlightHub 2 for drone command flights, gimbal and camera, PSDK accessories, and flight route-related functions.

**31. What SDK developments does the DJI Matrice 400 support?**

Supports Manifold 3 platform, Payload SDK, Mobile SDK, and Cloud API. For technical support, please contact dev@dji.com for assistance.

# After-sales Policy -DJI Care

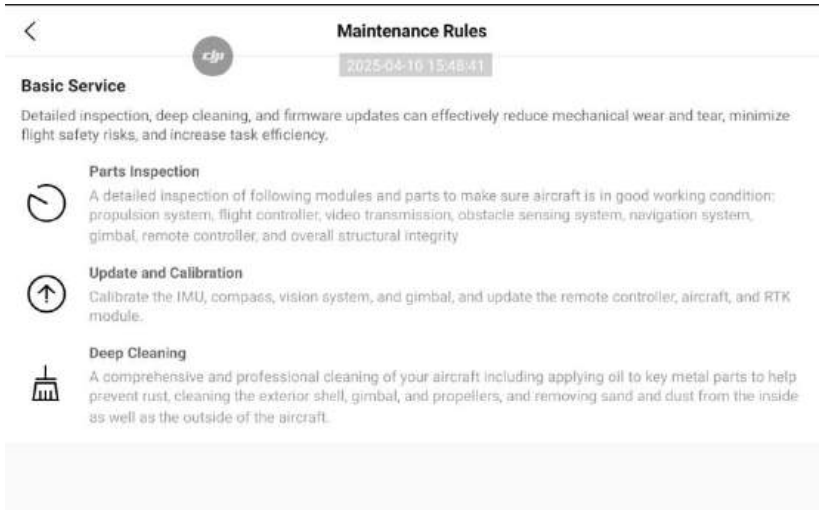
| | |
|---|---|
| **Supported models** | Matrice 400 |
| **Online area** | Mainland China, the United States, Canada, Australia, Japan, South Korea, EU27 , the United Kingdom, Switzerland, Norway, Liechtenstein, Iceland, Serbia, Monaco , Mexico |
| **Service Type** | DJI Care Ultimate |
| **Sales Model** | First Year Care : One year of DJI Care Ultimate Edition for free in Greater China and overseas RO regions<br>Renewal Care : Sold separately |
| **Service Binding** | First Year Care : The host comes with one year of DJI Care Ultimate Edition, Care is automatically activated, no activation code required<br>Renew Care : Use the activation code to bind on the Care activation page |
| **Service time** | The service is valid for 1 year , and can be renewed up to 2 times for the Ultimate Edition until the 3rd year |
| **Service Content** | • Free maintenance quota sharing<br>• Battery replacement, 1 battery per year<br>• Two-way free shipping, water ingress protection |
| **Protection components** | Aircraft body, propellers, smart battery box, remote control, downward single gimbal assembly, downward dual gimbal assembly, third gimbal bracket (extra enjoyment of free replacement of |
| **Purchase Binding Conditions** | The first year is free of charge for one year of Ultimate Edition , and the service will take effect upon activation of the new machine<br>The Ultimate Edition is not included with the demo unit and can be purchased if any of the following **conditions are met** .<br>• Brand new and unactivated<br>• The activation time is not more than 15 days<br>• Completed repair by DJI and within 72 hours<br><br>To renew DJI Care Ultimate , you must meet all of the following conditions .<br>• Purchased DJI Care Ultimate, and the total service period is no more than 2 years<br>• The last DJI Care service is valid or within 15 days of expiration |
| **Sales Channels** | Industry sales PI system, DJI official store (renewal only , Care renewal supports regions: China, the United States, Europe, and the United Kingdom (excluding Hong Kong, China)) |

# Matrice 400 Maintenance Rules

| Maintenance Type | Maintenance items | Maintenance recommendations | Maintenance cycle | Online area |
|---|---|---|---|---|
| **Basic maintenance** | Deep cleaning, component inspection, upgrade calibration | Return to factory | Every 150 hours of flight or 6 months of activation | Mainland China, North America, EU, UK, Australia, Japan |
| **General maintenance** | Deep cleaning, component inspection, upgrade calibration, replacement of wearing parts | Return to factory | Every 300 hours of flight or 12 months of activation | Mainland China, North America, EU, UK, Australia |
| **Deep maintenance** | Deep cleaning, component inspection, upgrade calibration, replacement of wearing parts, power system replacement | Return to factory | Every 900 hours of flight or 36 months of activation | Mainland China, North America, EU, UK, Australia, Japan |

- Maintenance services are available for all aircraft except those that have been privately dismantled, modified, or flooded.
- The maintenance period or flight duration, whichever comes first.
- The time stated every 6 months/12 months/36 months is the activation time of the drone.
- If the aircraft is used in a harsh environment, including but not limited to sand and dust, high salt at the seaside, high temperature and high humidity, nearby pollutants (chemical plants, lumber mills, sewage treatment plants), and an environment with frequent catkins, the maintenance interval needs to be shortened to 3 months.
- DJI will adjust the maintenance type and cycle for different regions. For the latest service details, please consult your local dealer or DJI technical support

# Matrice 400 Maintenance Reminder Update

| Maintenance reminder update | Page display |
| --- | --- |
| • **Maintenance display reminder:**<br>The APP will display maintenance reminders by region. Maintenance reminders will not be displayed in countries and regions without maintenance services.<br>As shown in the picture on the right, in countries where maintenance services are not available, if you click the DJI Maintenance Program column on the HMS page of the APP Pilot2 , the maintenance reminder will not be displayed, but only Maintenance service is not supported in your area at the moment. |  |
| • **Maintenance display content changes:**<br>The "Battery Test" item has been deleted from the component test items displayed on the maintenance rules page.<br>As shown in the picture on the right, on the maintenance rules page of the APP Pilot 2 , the component inspection description does not include "battery inspection". |  |

# DJI Matrice 400

Engineered for Excellence, Designed for Versatility