DJI MAVIC 3 ENTERPRISE SERIES INTRODUCTION

YOUR EVERYDAY COMMERCIAL DRONE

CONTENT

- **Product Introduction**

- Product Comparison

- Use Cases

Overview of Mavic 3 Enterprise Series

- **The Mavic 3 Enterprise Series comes in two versions: the Mavic 3E and the Mavic 3T.**

- **The Mavic 3E is the entry-level commercial drone with a 4/3-inch camera and mechanical shutter in the DJI enterprise product line that can fulfill basic needs.**

- **The Mavic 3E+RTK is the entry-level surveying drone adding timesync, and RTK capability.**

- **The Mavic 3T is the new entry-level thermal drone, an improvement from the Mavic 2 Enterprise Advanced.**

- Portable Design

- 45min maximum Flight Time

- 4/3 inch CMOS Wide Camera (M3E)

- 640*512@30Hz Thermal camera (M3T)

- Up to 56x Hybrid zooming

- O3 Enterprise Transmission

- RTK Module/Speaker (Optional)

M3E

M3T

LIGHT AND PORTABLE

The foldable and lightweight airframe can support small units with individual tasks allowing flexibility wherever a drone is needed.

Weight: 915g(M3E), 920g(M3T)

Mavic 3 Enterprise Series Models

M3E

- **Wide：** 4/3 inch CMOS, 20MP, 3.3um Pixel Size, Mechanical Shutter, 24mm Equivalent Focal Length

- **Tele：** 1/2 inch CMOS, 12MP, 56x Hybrid Zoom, 162mm Equivalent Focal Length

M3T

- **Wide：** 1/2 inch CMOS, 48Mp, 24mm Equivalent Focal Length
- **Tele：** 1/2 inch CMOS, 12MP, 56x Hybrid Zoom, 162mm Equivalent Focal Length
- **Thermal：** 640 * 512@30Hz, DFOV 61°, 40mm Equivalent Focal Length

M3E Wide Camera

Wide Camera

- 4/3 inch CMOS, 20MP
- Large pixel size: 3.3um, increasing daily operation time
- Mechanical shutter: avoid rolling shutter effect, shutter life 200,000 times
- Minimum Photo Interval: 0.7s
- Smart Low Light Photo
- **Utilize the RTK module to achieve centimeter-level GCP-free mapping accuracy**

Wide Camera

M3E/M3T Tele Camera

Both the M3E and M3T integrate with a 12MP tele camera, which supports up to 56x hybrid zoom, enabling long-distance inspections/scouting

Camera Specification

- 1/2 inch CMOS, 12MP, 162mm Equivalent Focal Length
- 56x hybrid zoom: 1x-7x is digital zoom of wide camera, and 7x-56x is digital zoom of tele camera.

Synchronized Split-screen Zoom

- M3T supports up to 28x synchronized zoom between thermal and visual cameras. Users can scale both images at the same time. This doubles efficiency and makes it easier to compare details side by side.

56x Hybrid Zoom

Synchronized Split-screen Zoom

M3T Thermal Camera

M3T integrates a high-resolution thermal sensor (640*512@30Hz) to make informed decisions by quickly identifying objects onsite.


Thermal Camera

Improved Surveying Efficiency

- **Improved flight time of 42 minutes (with RTK module)**

- **The shutter speed is 0.7 seconds**

- **Max speed: 15 Meters per second**

- **Ability to capture over 2 square kilometers in a single flight**

- **With the new 100W charging hub, it only takes 70 minutes to fully charge a single battery. When in the field with only 4 sets of batteries this can fulfill a full day of flight operations.**

Area size covered by a single flight (km2)
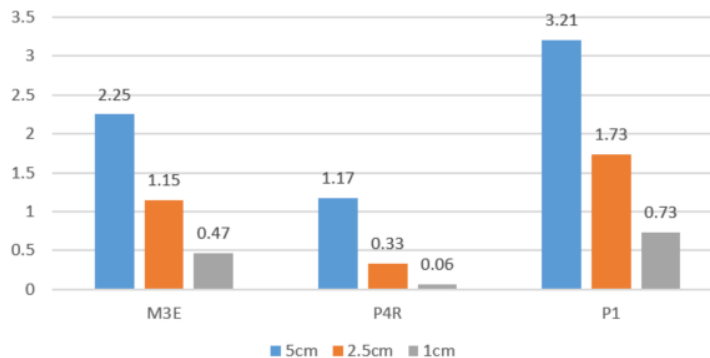
Charging Hub (Optional)

* GSD 5cm, Altitude 185m, 80% frontal overlap, 60% side overlap, 15m/s flight speed, 2D mapping. 11% battery remaining.

Centimeter Mapping Accuracy

- **Timesync 2.0** can reach centimeter-level accuracy with the RTK module.

- **Mechanical shutter** ensures no rolling shutter effect under high-speed movement.

- In order to ensure the accuracy of modeling, the M3E camera will be calibrated with internal parameters when it's produced, and the internal parameters will be written in the XMP information of each image.

- The mapping accuracy is relative to the GSD, and M3E GCP-free accuracy is about 2 times that of GSD. For example, at 100m flight height, GSD=H/37=2.7cm, accuracy is within 5.4 cm

- Similar accuracy level to P4R/M300+P1

Test Accuracy without GCP（GSD 3.3cm）

Index	dx(m)	dy(m)	dz(m)
1	0.002	-0.002	0.017
2	0.011	-0.005	0.02
3	0.007	0.002	0.068
4	-0.004	-0.007	0.048
5	0.019	0.015	0.085
6	0.03	-0.015	0.013
7	0.015	-0.002	0.056
RMSD	**0.016**	**0.009**	**0.051**

O3 Enterprise Transmission

- **4 Antenna Design, 2 Transmitters and 4 Receivers**

- **Range: 9-15 kilometers with low interference and 1.5 to 3 kilometer range when in a area with strong interference. (FCC)**

- ***Supports 4G Transmission by updating firmware (Not supported in US market)**

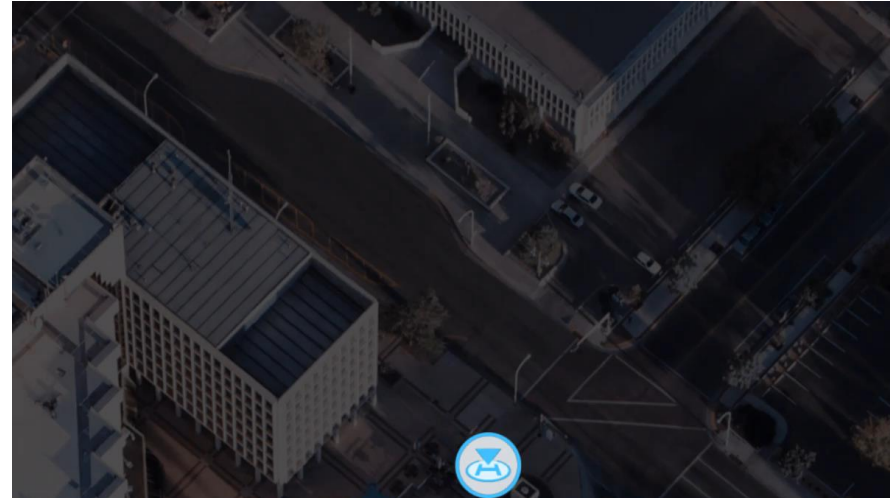* Not supported at the time of release, and will be supported through firmware updates.

Enhanced Safety

- **Omnidirectional Obstacle Sensing:** Multiple wide-angle vision sensors work seamlessly with a high-performance vision computing engine to sense obstacles in all directions precisely and plan a safe flight route that avoids them.

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- Omnidirectional Obstacle Sensing: Multiple wide-angle vision sensors work seamlessly with a high-performance vision computing engine to sense obstacles in all directions precisely and plan a safe flight route that avoids them.

- **Advanced RTH:** When enabling the advanced RTH setting the optimal route back to the home point can be quickly executed without traditionally climbing to a pre-set altitude first.

Enhanced Safety

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- Advanced RTH: When enabling the advanced RTH setting the optimal route back to the home point can be quickly executed without traditionally climbing to a pre-set altitude first.

- **APAS 5.0:** With the advance pilot assistance system, the aircraft can continually sense objects in all directions and bypass them quickly and smoothly.
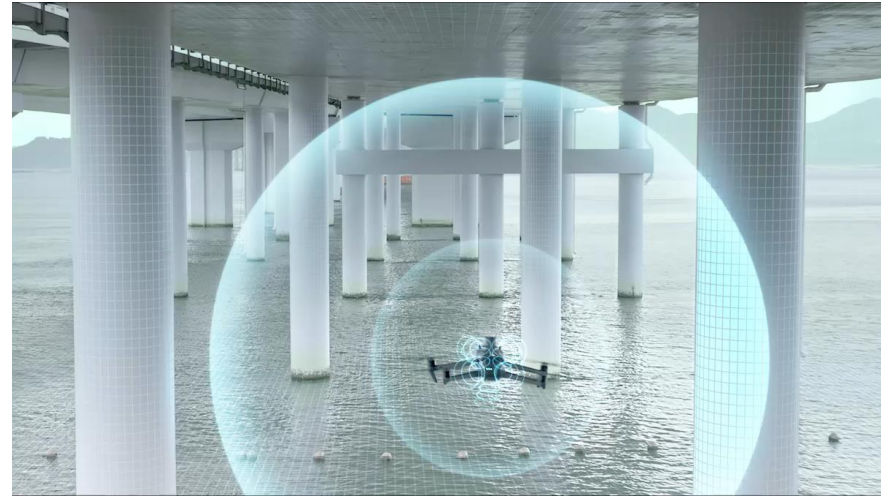
Accessories

DJI RC Pro Enterprise

- 5.5 inch, up to 1000 cd/m²
- 3 hour battery life (no external battery)
- Built-in microphone
- Supports DJI Cellular Module (not supported in US)
- 1.5 hours to fully charge, can charge while operating
- Supports mini-HDMI out and screen recording

RTK Module

- Detachable RTK module
- Weight 20g
- Supports network RTK, custom network RTK and D-RTK 2 mobile station
- Photo supports writing RTK provider's information

Speaker

- Louder volume (100m@78dB)
- Supports recording and loop playback
- New UI interface, easy to use
- Play options: Record & broadcast, text to speech, or uploading a file.

DJI Cellular Module

- Drone and RC support 4G enhanced image transmission
- The dongle on the RC also can be used for RTK, FH2, livestreaming, etc.

Professional Software

DJI Pilot 2

- The RC has built-in DJI Pilot 2 APP
- Supports multiple mission planning options, including waypoint, mapping, oblique, linear.

DJI FlightHub 2

- Flight Hub 2 features are also available including live streaming, aircraft info, live 2D mapping, panorama and media upload, and mission planning.

DJI Terra

- You can import images taken by M3E/M3T to Terra for 2D/3D reconstruction. M3T mapping is not reccomended due to unreliable accuracy.
- Both M3E and M3T include one DJI Terra Electricity version license for 3 months. The free Terra license will be automatically activated when the drone is activated

DJI Thermal Analysis tool 3.0

- DJI Thermal Analysis Tool 3 is supported at launch allowing you to create a report and manipulate the radiometric thermal data with the specific parameters following data capture.

Extensibility

MSDK

- Supports 3rd party APP

PSDK*

- Maximum payload weight: 130g
- Mavic 3 E is also the first smaller enterprise drone with PSDK support

Cloud API

- The Cloud API is supported for those who want to pull important information such as live video feed, photos, and telemetry from the drone without having to develop their own mobile application.

* Not supported at the time of release, will be supported through firmware updates.

Regional Restrictions and In The Box

Regional Version

- **China： Can only fly in China (1*AC)**
- **NA： Can fly anywhere except China (1*AC)**
- **General： Can fly anywhere except China (6*AC)**
- **Demo Unit： No flying area restrictions (8*AC)**

AC = Power Cord options

In The Box

- **Standard Package:** Aircraft*1 + battery*1 + SD card*1 + gimbal cover*1 + propeller*3 (pairs) + RC*1 + standard charger*1 (100W) + AC*1 + USB-C*1 + dual USB-C*1 + packaging (such as manual, certificate of conformity, etc.)
- **Optional:** RTK, speaker, Charging Hub (100W), battery, 4G dongle
- **Battery set (optional):** 3*batteries + 1* Charging Hub (100W),

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In The Box

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- Product Introduction

- **Product Comparison**

- Use Cases

Comparison: M3E VS M3T vs Mavic 3

	M3E	M3T	Mavic 3
Shutter	• Mechanical + Electronic	• Electronic Only	• Electronic Only
APP	• Pilot 2, support multiple routes planning	• Pilot 2, support multiple routes planning	• DJI Fly, No MSDK
Minimum Photo Interval	• 0.7s	• 2s	• 2.5s
Thermal Camera	• No thermal camera	• Thermal Camera	• No thermal camera
Extensibility	• MSDK, PSDK, Cloud API	• MSDK, PSDK, Cloud API	• No SDK
Internal Parameter Calibration	• Internal Parameter Calibration for each unit	• Internal Parameter Calibration for each unit	• No Calibration
Smart Photography	• No	• No	• Support time-lapse photography, point of Interest, etc.

Compared with the Mavic 3:

- The M3E supports mechanical shutter, Pilot 2 which can be used to plan surveying missions, 0.7s photo interval, RTK, SDK and internal parameter calibration. Suitable for surveying and inspection work.
- The M3T integrates thermal sensor, supports RTK, SDK, and route planning. Suitable for public safety, inspection scenarios.

Note: M3E can do high-precision mapping, M3T is not recommended for surveying work.

Comparison: M3E VS P4R

	M3E	P4R
Weight	• 915g	• 1391g
Portability	• Foldable	• Unfoldable
Diagonal Length	• 380mm	• 350mm
Maximum Ascent Speed	• 6m/s (N mode), 8m/s (S mode)	• 6m/s (mission flight), 5m/s (manual Flight)
Max Descent Speed	• 6m/s	• 3m/s
Max Wind Speed Resistance	• 12m/s	• 10m/s
Max Flight Time	• 42min (with RTK module)	• 30min
Operating Temperature	• -10-40℃	• 0-40℃
Maximum flight speed of mapping mission	• 15m/s	• 13m/s
Max Service Ceiling Above Sea Level	• 6000m	• 6000m
Propeller	• Integrated with the aircraft, detachable	• Needs to be installed every time

Compared with the P4R, the M3E is lighter, more portable, has stronger battery life, and stronger environmental adaptability.

Comparison： M3E VS P4R

Module		M3E	P4R
Wide Camera	CMOS	• 4/3 Inch	• 1 Inch
	Effective Pixels	• 20MP	• 20MP
	Pixel Size	• 3.3um	• 2.4um
	Minimum Photo Interval	• 0.7s	• 2.5s
	Image Format	• JPEG/DNG(RAW)	• JPEG
	Maximum Image Resolution	• 5280 * 3956	• 5472 * 3648
	360° Panorama Image	• Supported	• Not Supported
Tele Camera	Tele Camera	• 1/2-inch CMOS, 12MP, 7x-56x zoom	• Not Supported
Other Modules	Obstacle Avoidance	• Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft	• Forward/Rear/Downward binocular vision system, with infrared sensors at two sides
	Advanced RTH	• Supported	• Not Supported
	Beacon	• Supported	• Not Supported
	APAS	• APAS5.0	• Not Supported

The M3E has tele camera, higher mapping efficiency and stronger obstacle avoidance capability

Comparison: M3E VS P4R

Module		M3E	P4R
RC	RC	• DJI RC Pro Enterprise	• Standard RC and SDK RC
	Transmission	• O3 Enterprise (15km, FCC)	• OcuSync (7km, FCC)
	4G Image Transmission	• Supported	• Not Supported
	HDMI	• Supported	• Not Supported
	Screen	• 5.5 inch, 1920 * 1080, 64G ROM	• 5.5 inch, 1920 * 1080, 16G ROM
	APP	• Pilot 2 APP	• GSR APP
SDK	MSDK	• Supported	• Supported, SDK controller
	PSDK	• Coming Soon, maximum weight 135g	• Not Supported
	Cloud API	• Supported	• Not Supported
	FH2	• Supported	• Not Supported
	Accessories	• RTK, Speaker	• Not Supported

- The M3E RC has greater image transmission range and supports 4G image transmission.
- M3E has better extensibility than P4R, supporting MSDK, PSDK, cloud API, FH2 and speakers, etc. P4R only supports MSDK.

Comparison: M3E VS P4R

Module		M3E	P4R
Mission Planning	Mapping	• Supported	• Supported
	Oblique	• Supported	• Supported
	Linear	• Supported	• Supported
	Waypoint	• Supported	• Supported
	Terrain Follow	• Supported	• Supported
	Detailed Inspection in Terra	• Coming Soon	• Supported
	Panorama	• Supported	• Not Supported
	Linear Flight (Adjust Height)	• Not Supported	• Supported
	Double Grid	• Not Supported	• Supported
	Angled Flight Route	• Not Supported	• Supported
	Block Segmentation	• Not Supported	• Supported
	RTK Rover	• Not Supported	• Supported

• The APP used by M3E is Pilot 2, and the route planning is not as advanced as GSR used by P4R

Comparison: M3T VS M2EA

Specifications	M2EA	M3T
Weight	909 g	920g
Dimensions (L×W×H)	Folded: 214×91×84mm, Unfolded: 322×242×84mm	Folded: 221×96.3×90.3mm, Unfolded: 347.5×283×107.7mm
Diagonal Distance	354 mm	380.1 mm
Max Ascent Speed	6 m/s (S-mode) 5 m/s (P-mode)	8 m/s (S-mode)
Max Descent Speed	5 m/s (Descend Vertically) 7 m/s (Tilt)	6 m/s (S-mode)
Max Speed	20m/s	21 m/s (S-mode)
Max Service Ceiling Above Sea Level	6000m	6000m
Maximum Transmission Range	10km (FCC)	15km (FCC)
Max Flight Time	31min	45min
Max Wind Speed Resistance	10 m/s (scale 5)	12 m/s (scale 6)
Operating Temperature	-10° to 40° C	-10° to 40° C
GNSS	GPS+GLONASS	BeiDou+Galileo+GPS
Internal Storage	24GB	Not Supported
Panorama	Supported	Supported
Obstacle Sensing	Forward/Rear/Downward binocular vision Left/Right single vison Up/Down infrared sensor	Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft

- Compared with the M2EA, the M3T has enhanced transmission, is more durable, adaptable to the environment, and has stronger obstacle avoidance capability.

Comparison: M3T VS M2EA

Specification	M2EA	M3T
Camera	Wide + Thermal	Wide + Tele + Thermal
Stabilization	3-axis motorized (tilt, roll, pan)	3-axis motorized (tilt, roll, pan)
Angular Vibration Range	±0.005°	±0.007°
Sensor Resolution	640*512@30Hz	640x512@30Hz
Metering Method	Spot Meter, Area Measurement	Spot Meter, Area Measurement
Digital Zoom	16x	14x
Visual Camera Sensor	1/2" CMOS	Wide: 1/2" CMOS Tele: 1/2" CMOS
Effective Pixels	48MP	Wide: 48MP Tele: 12MP
Zoom	32×Digital zoom	56x hybrid zoom
Video Resolution	4k30p	4k30p

- Compared with the M2EA, the M3T integrate with a 12MP tele camera, which supports up to 56x hybrid zoom, enabling long-distance scouting

CONTENT

- Product Introduction

- Product Comparison

- **Use Cases**

Hailuogou Glacier Surveying

Background

- Hailuogou Glacier is a typical marine low-altitude glacier in China. The Institute of Mountain Hazards and Environment of Chinese Academy of Science leads their team to carry out glacier surveying in Hailuogou year round, studying the dynamic changes of glaciers through muti-period surveying.

- Traditional surveying method (e.g RTK), requires 1-2 days to complete a full-scale ice surveying with low efficiency. Comprehensive topographic data is unable to be obtained as the ice surface is hard to access.

Panorama：https://720yun.com/t/4fvk6lrysdy?scene_id=98862524

Hailuogou Glacier Surveying

Aerial survey solution

- A layered shooting plan is applied as only 2 hours are available for shooting due to fog and rain in the area. The section is divided into **1500m**, **1000m**, **500m** and low altitudes relative to take off points for terrain following through a historical DSM after checking the survey area in Google map.

- **9** flights in total，**4349** photos

- 11.5 hours modeling by Terra

- **M3E Application advantage: Light and Portable, GCP free, Up to 1500m, High efficiency**
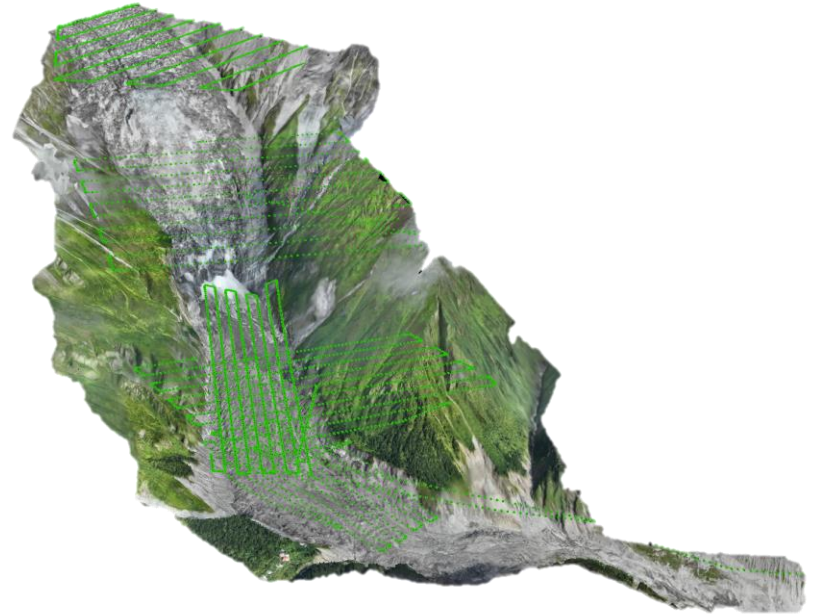
photo point distribution map

3D Model of Hailuogou Glacier
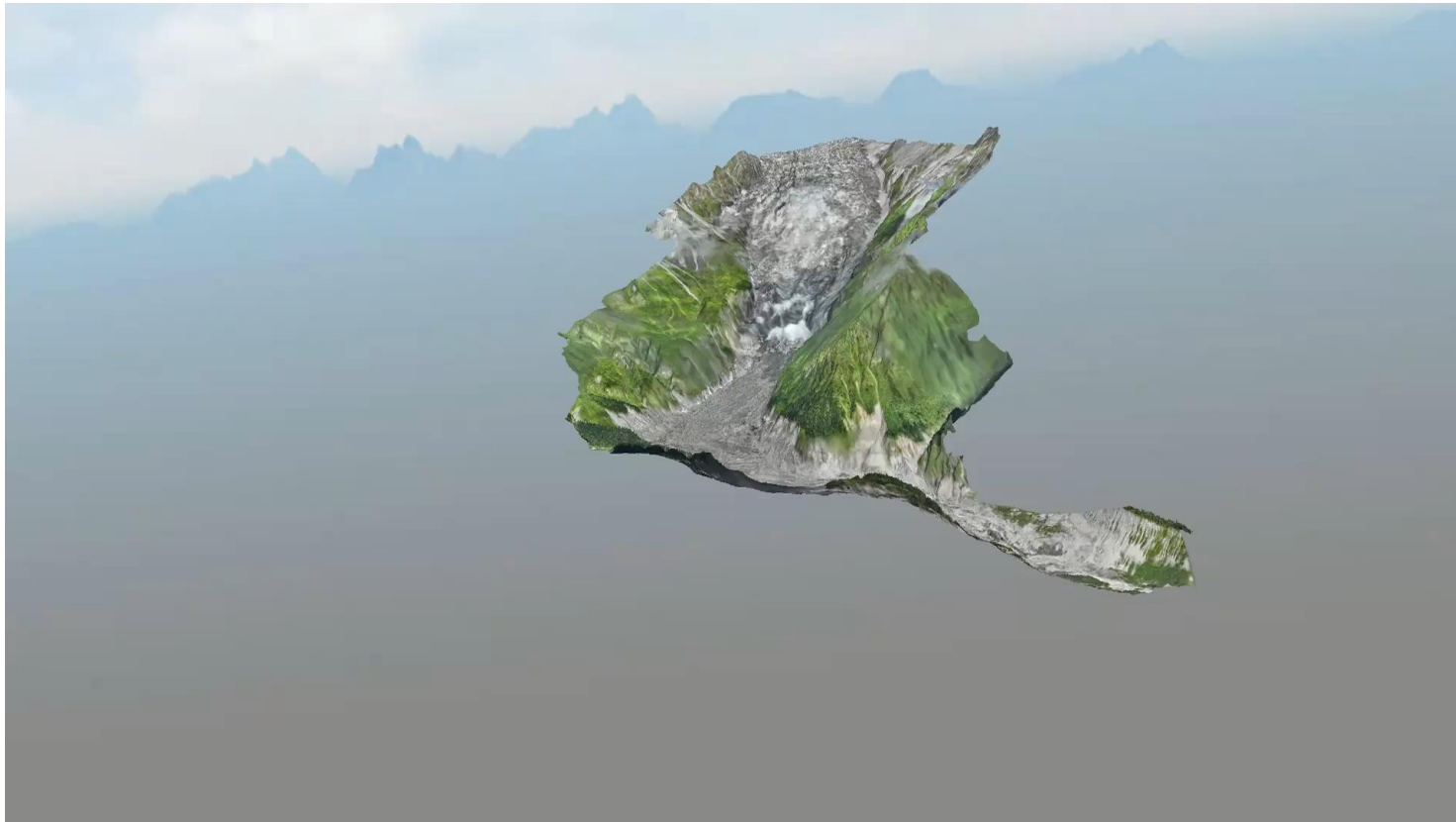
Jiayu Pass Heritage Modeling

Aerial survey solution

- Route planning software: DIM (refined route design based on rough modeling of the structure)
- Hardware: M3E + Battery*3
- Resolution: 1.5mm, as close as 5 meters away from the tower
- Data collection: 2 flights, 724 photos

Advantages

- **Lightweight:** Lightweight drone required with density of tourists
- **Safety:** Customizable omnidirectional obstacle avoidance helped ensure a safe flight even just 5 meters away from the tower
- **Efficiency:** Long battery life, 0.7s photographing interval lead to high efficiency for data capture
- **Millimeter Resolution:** Millimeter resolution results from all angles.
- **Integrated operation:** M3E + Terra, automatic operation
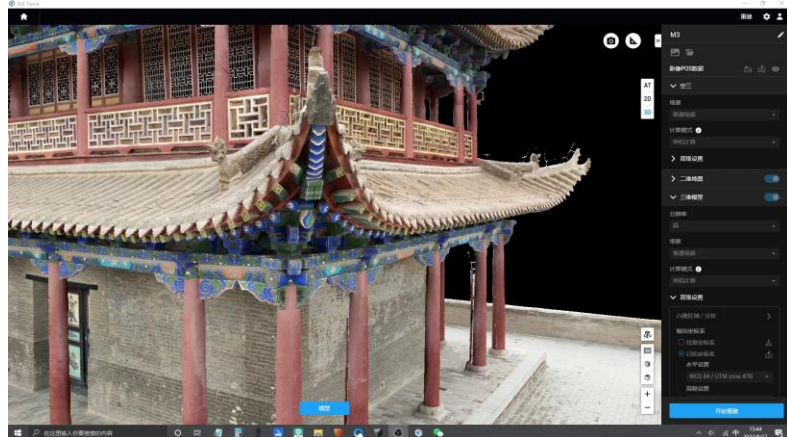
Jiayu Pass 3D Model Recording

QINGXU-ORTHOMOSAIC

BACKGROUND

- Application： Land Resources Survey, Comprehensive Survey of Urban Construction and Land Use in Qinghu County, Taiyuan, Shanxi
- Size： **15km² @** at least 5cm GSD
- Complex environment: high difficulty in selecting take-off and landing points due to signal interference
- Tight schedule: Data delivery within 1 week

IMPLEMENTATION

- Hardware: M3E*1+Battery*9
- Flight parameter: 150m altitude, 4cm GSD@15m/s
- Route design: 10 sections, 80%/70% overlap
- Data collection: Single day(8:30-17:40), 15 flights
- Data status: 9838 photos, 105GB
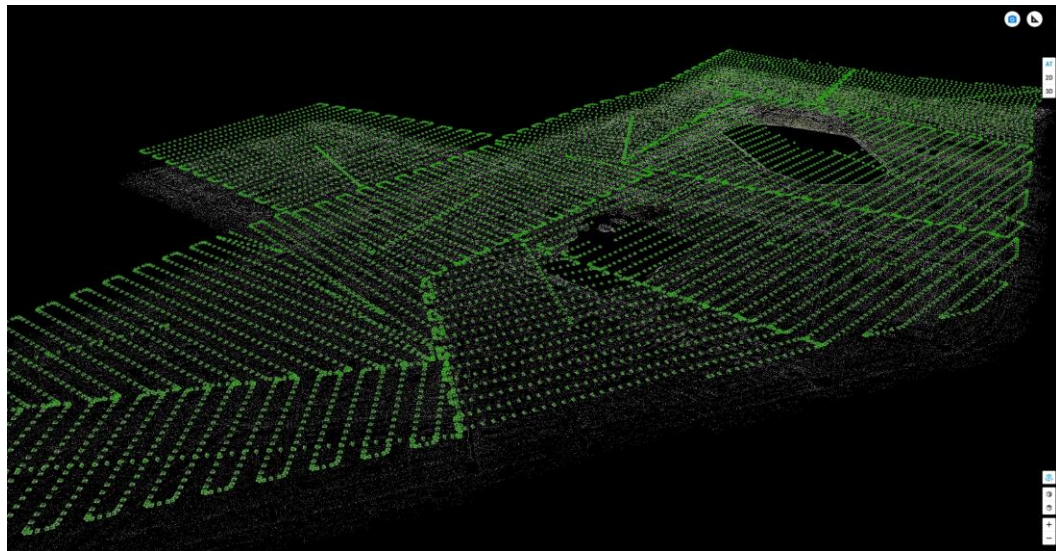
9838 aerotriangulation photos

M3E data collection

M3E data collection

QINGXU-ORTHOMOSAIC

HIGH EFFICIENCY

- 1km² with 4cm GSD in one single flight
- 15-18km² orthomosaic @4cm GSD per day

PREMIER QUALITY

- GCP Free Aerotriangulation Acurracy: 3.2cm horizontally, 7.0cm vertically
- GCP Free Model Acurracy: Level 5cm, Elevation 7.1cm
- Bright and colorful images captured even after 5 pm
- Stable GCP free accuracy, uniform color and brightness of data from day to night

EASY OPERATION

- Strong Signal：O3+Enterprise transmission and 4G image transmission，Unblocked signal
- Flexible takeoff：Compact, able to take off anywhere
- One handbag to carry, ultimate portability

	DJI Terra GCP Free Aerotriangulation Acurracy			3D model GCP Acurracy	
Name	dx(m)	dy(m)	dz(m)	Flat point error	Elevation error
GCP1	-0.020	0.013	0.146	0.017	0.124
GCP2	0.032	-0.001	0.082	0.048	0.104
GCP3	0.027	0.000	0.028	0.051	0.024
GCP4	0.039	-0.006	0.087	0.038	0.094
GCP5	-0.022	0.010	0.075	0.022	0.089
GCP6	-0.008	0.021	0.037	0.024	0.045
GCP7	0.023	0.029	-0.079	0.022	-0.013
GCP8	0.005	-0.015	0.029	0.014	0.055
GCP9	-0.022	0.012	0.054	0.022	0.070
GCP10	0.014	-0.021	0.032	0.017	0.040
GCP11	0.014	-0.003	0.081	0.018	0.092
GCP12	0.067	0.009	0.080	0.058	0.086
GCP14	0.023	0.035	0.049	0.004	0.041
GCP15	-0.047	-0.007	0.043	0.040	0.014
Medium Error	**0.036**	**0.030**	**0.070**	**0.050**	**0.071**
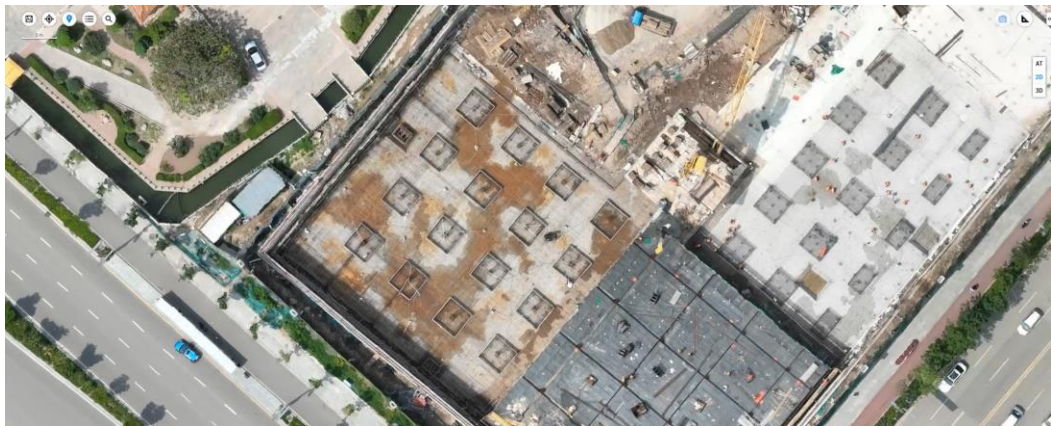
Orthomosaic Recording

FENHE RIVER-LONG DISTANCE RIVER INSPECTION

BACKGROUND

- Refined modeling within 300m on both sides of the river

- Range: 53km, with at least 3cm accuracy

- Tight schedule: 2 days

IMPLEMENTATION

- Hardware: M3E*1+Battery*9

- Flight parameter: 120m altitude, 3.2cm GSD@15m/s

- Route design: Linear Mission Planning, 5 routes, 300m width

- Data collection: 7 flights in total, 8 home points per day

- Data status: 8470 photos, 90GB
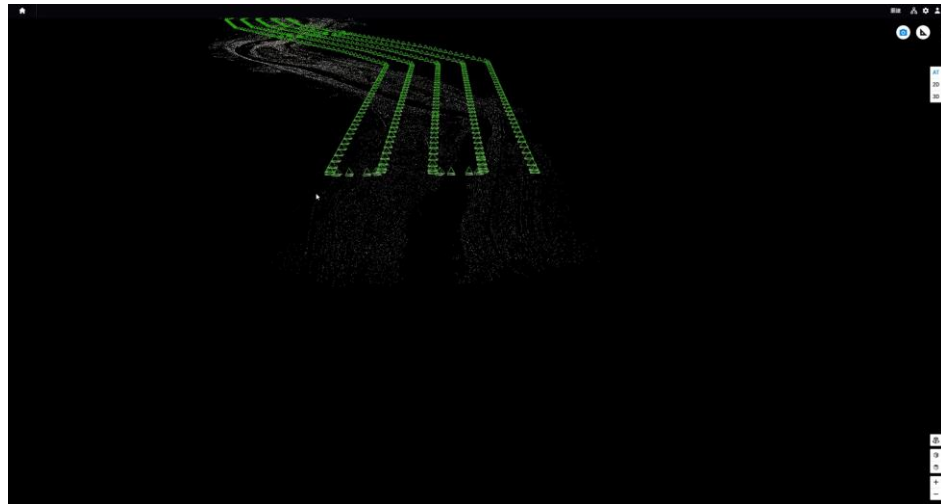
53km river aerotriangulation result

M3E data collection

M3E data collection

FENHE RIVER-LONG DISTANCE RIVER INSPECTION

FASTER

- 15m/s speed, 0.7s photographing interval
- Fully automatic operation, stable flight and no invalid photos
- 53km route surveying @3cm GSD per day

STRONGER

- 7km O3+image transmission
- Equipped with 4G Dongle, enhancing image transmission
- Flight monitoring, continuous RTK signal, comfortable operation

QUICKER

- 1 minute to take off
- Flexibility for take off or landing
- Extremely maneuverable, "fly at your own will"

Facilities Status Inspection
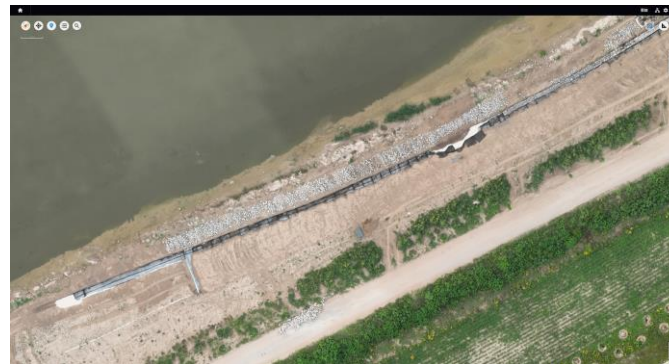
Project Progress
Inspection

G20 HIGHWAY INSPECTION

BACKGROUND

- Highway maintenance surveying inspection requires refined modeling, which covers 500m extension on both sides
- Range: surface and slope modeling @3km length, at least 2cm accuracy
- Time sequence collection：Repeated collection performed weekly, and multi-period data compared

IMPLEMENTATION

- Hardware: M3E*1+Battery*3
- Flight parameter: 70m altitude，2cm GSD@15m/s
- Route design: 80%/60% overlap, Area Mission Planning
- Data collection: 3 flights, 2 hours to complete
- Data status: 3528 photos, 30GB

Road crack survey

Slope crack survey

G20 HIGHWAY INSPECTION

SUPERIOR RESOLUTION

- 2cm resolution, highly saturated colors
- Able to identify surface and slope cracks
- Better resolution than P4R at the same GSD

ENHANCED OBSTACLE AVOIDANCE

- Omnidirectional visual obstacle avoidance activated during entire flight, identifying obstacles accurately
- Safe operation at lower flight altitude

HIGHLY ACCURATE TIMING ACQUISITION

- GCP free @Level 3cm, Elevation 4cm
- Accurate multi-period data comparison, analyzing slope changes.
- Comprehensively supported by DJI Terra, enabling M3E high precision surveying

G20 modeling presentation

SOUTHERN NANNING-3D

BACKGROUND

- Diversity: 10.5km², including ancient village tourism, aquaculture, high-standard farmland etc.
- Time-sequential data retention: aerial photograph, recording and development process archiving
- Publicity: 3D model presentation

IMPLEMENTATION

- Hardware：M3E*1+ battery*6
- Flight parameter：150m altitude，4cm GSD@15m/s
- Route design：Area Mission Planning + Oblique Flight, 80%/60% overlap
- Data collection：8 flights in total, sync to FlightHub 2
- Data status：4221 photos，GCP free with 5cm accuracy
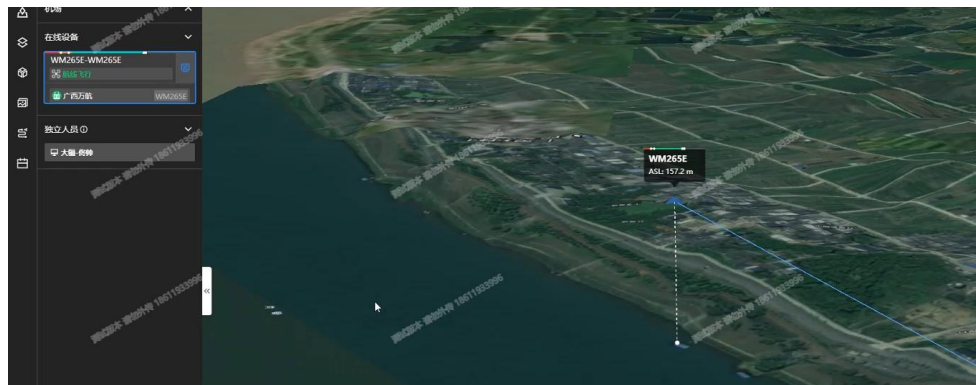
M3E data collection sync to FlightHub 2

Live streaming sync to the cloud

SOUTHERN NANNING-3D

POWERFUL 3D MOEDELING

- Main area modeling via oblique flight @ 50m altitude
- 0.1km² coverage by a single flight
- 5X more efficient than P4R, about 1/2 of P1's

FLIGHT HUB 2 ARCHIVING

- Route live streaming
- Route photos sync to cloud
- *3D upload browsing
- Realizing sequential acquisition and multi-level multiplexing of data

DIGITAL LINE GRAPH GENERATION

- DLG Generated by EPS
- High quality real 3D modeling, easy to generate DLG

*Note: 3D model uploading is planned to be supported in the H1 of next year

Flight Hub 2 3D model presentation
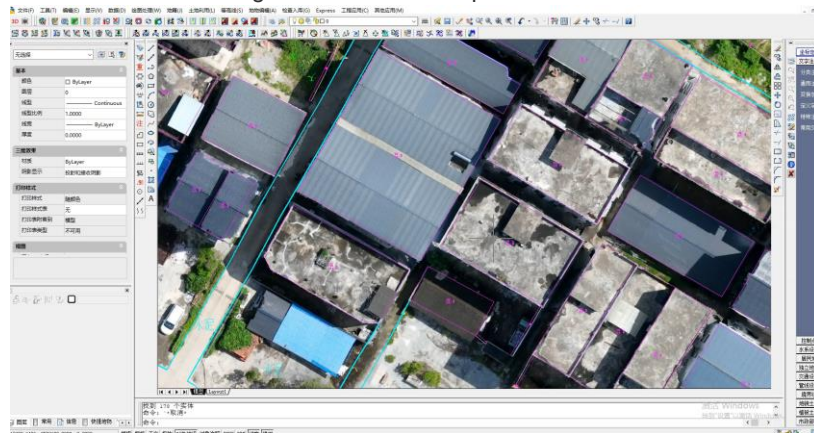
DLG generation based on Real 3D modeling

BAOXING EARTH DISASTER CLOSE-RANGE PHOTOGRAMMETRYY

BACKGROUND

- Yaan Baoxing： Wenchuan Earthquake, Lushan earthquake main disaster area, surrounded by mountains
- Huge drop： 700m maximum altitude drop, crossed power lines
- Earth Disaster Survey： large numbers of exposed rock, high-frequency investigation

IMPLEMENTATION

- Hardware: M3E*1+M300/P1*1
- Route design: First 3D modeling (M300), then Earth Disaster Survey (M3E) based off of the model
- Data collection: 40 flights by M3E
- Data status: 1200 photos for each disaster site, 30000 photos in total

25 Distribution of Hidden Hazard Points

crossed power lines, hard to operate

BAOXING EARTH DISASTER CLOSE-RANGE PHOTOGRAMMETRYY

WPM SUPPORT

- 10-20 meters shooting distance
- Route planning via WPM
- Automatic capture of hidden hazard points

FLEXIBLE OPERATION

- Adaptability to sudden strong crosswind, and complex environment with wires
- M3E Omnidirectional obstacle avoidance
- Automatic flight - safe, manual flight - easy

PORTABILITY

- Able to be carried in a backpack
- Portable and lightweight for inter-mountain transportation, easy operation
- Maximize labor savings
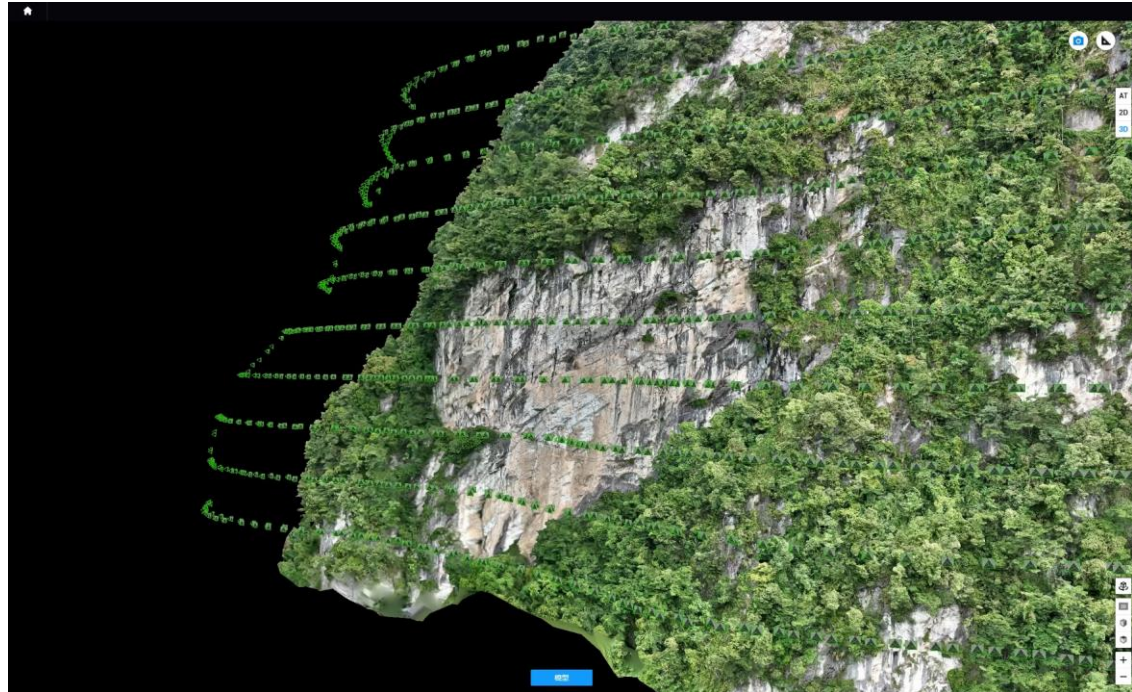
Hidden Hazard Points 3D modeling

MCCOWN GORDON CONSTRUCTION

NEEDS

- Monitoring job site progress over time and delivering updates to key clients within the product.
- Use cases include project updates, volumetric analysis, cut/fill & grade analysis, and inspection of assets onsite.

CHALLENGES

- Large number of jobsites, large-scale sites (well over 160 acres), timeliness of gathering data, dealing with harsh working environments.

MCCOWN GORDON CONSTRUCTION

BENEFITS

- Need for a holistic solution for mgmt. and project teams to better be aware of real-time advancements, setbacks, and potential risks.

VALUE

- "The Mavic 3 Enterprise has sped capture time onsite by over 200%. Even after a 25 minute survey we still have 35% battery left. Amazing!" – Michael Gekas
- "Image quality on the Mavic 3 Enterprise is great! The image sharpness, dynamic range, and exposure has been greatly improved even over the industry standard Phantom 4 RTK. This drone resets the industry standard" – Asher Hughes
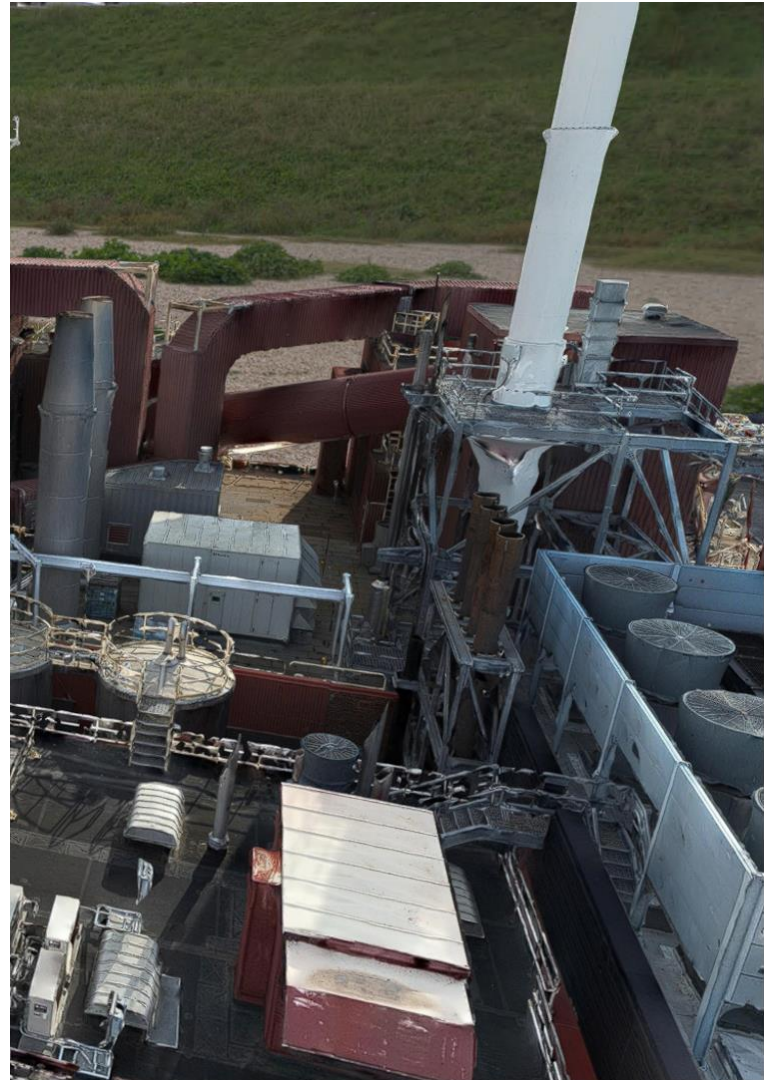
NETZE BW POWER GRID INSPECTION

Pylon Serial Number Reading

Insulator Strip Inspection

Zoom Camera Inspection
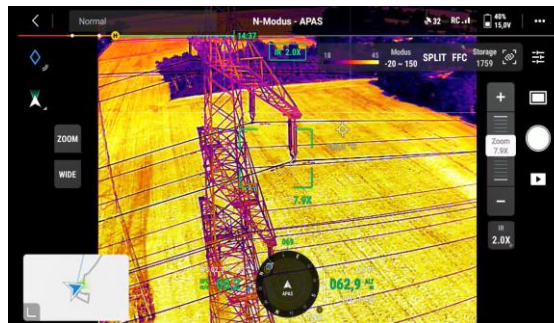
Thermal Inspection

Key Value

- 7 times optical zoom, ensures a safer distance of 20 meters away for inspection, and more efficient operation.

- There is no need for the user to fly drones inside the pylon for the inspection of the interior insulator strips.

- Thermal camera can find abnormal problems with equipment, such as wire clamps and cutter gates, detecting possible hazards quickly.

- Omnidirectional and customizable obstacle avoidance system helps ensure flight safety.

PANZHIHUA POWER GRID INSPECTION

BACKGROUND

- Panzhihua, a mountainous region with an average altitude of 2000m, poses challenges to UAV inspections and efficiency.
- The purpose of this test is to implement refined inspections for certain 110kV single-cycle tension towers.

EFFICIENCY COMPARISON

- M2EA: 1.8 pylons per flight
- M3E: 3.5 pylons per flight
- Conclusion: The battery life of M3E is about **50%** longer than that of M2EA, and the **focusing speed** is significantly improved. A single battery can support the inspection of 3.5 pylons, which is 1.9 times higher than that of M2EA.

PEARLAND POLICE ACCIDENT RECONSTRUCTION

BACKGROUND

- An accident has occurred and officers need to quickly document the scene.
- Time delays result in potential crashes from the backed-up traffic, officers at risk standing on the road, and lost time and money for drivers within the region.

SYSTEM BENEFITS

- Option to utilize RTK module for corrections. A few checkpoints can be used instead of multiple ground control.
- 0.7s photo interval, 15m/s max speed, and higher resolution allow the data collection to be quickly completed.
- Processing of imagery in DJI Terra provides an accurate 3D model to document scene.

Law Enforcement Patrol Mission Deployment

BACKGROUND

- Officers are dispatched based on a report of a catalytic converter theft. See a suspect flee into the woods.

- Additional teams try and set up a perimeter around the area while determining if the suspect is still within the wooded area.

MISSION READY TOOLS

- An arriving officer is able to quickly deploy the drone from the back of the patrol vehicle before the suspect gets to far.

- Thermal tools including zoom, isotherms, and temperature alarm help the operator identify the location of the suspect.

- Longer flight time allows the operator to keep the drone in the air until the ground units can arrive and drop a pin on their drone location to easily return.

FAQ

Index	Questions	Answers
1	Does the M3E use a Hasselblad camera?	The camera's specification is same as the M3, but with the addition of mechanical shutter. And unlike the Hasselblad natural color solution used by the consumer M3, the M3E focused more on the modeling quality, so M3E does not use Hasselblad natural color solution.
2	Does M3E support Timesync?	Yes, M3E supports Timesync 2.0
3	Does M3E/M3T support High-Res Grid Photo	Not supported
4	Does the M3E/M3T's battery support self-heating?	Not supported
5	What is the maximum flight time of M3E/M3T with RTK module?	42-43min
6	Can users update the firmware of M3's remote controller to support M3E/M3T or the other way around?	No
7	Does the M3E/T support dual control?	Not supported
8	Does the M3E/T support D-RTK2 mobile station?	Yes. When using D-RTK2, switch to Mode 5 - Broadcast Mode
9	Does M3E/T support M2 series accessories?	Not supported
10	Does the M3E/T support controlling the YAW angle of the gimbal?	Not supported
11	Does the M3E/T support PPK?	M3E supports to save original satellite observation files for PPK processing which requires third-party PPK processing software.
12	Does M3E/T support PSDK?	Not supported at launch. Will be supported in later firmware updates.

FAQ

Index	Questions	Answers
13	Does M3E Series support Remote ID in US?	Remote ID will be supported via firmware updates.
14	Does M3E Series support AirSense (ADS-B in)?	Yes
15	How can you turn the beacon on?	Go to Common settings -> LED settings -> Navigation Beacon On/Off
16	What are the options to save photos for the M3E and M3T?	For M3E, you can only select to save wide or zoom photos, and can not save zoom + wide at the same time For the M3T, you can select to save Current view, Visual camera (wide or zoom), and infrared at the same time. Current view saves photos taken with current cameras, and it can save the screenshot in SBS mode.
17	Does M3E Series support AI Spot Check?	Not Supported
18	Does M3E Series support Live Mission Recording?	Yes

DJI Care Enterprise

& Maintenance Program

CONTENTS

1   **DJI Care Enterprise for DJI Mavic 3 Enterprise Series**

2   **DJI Enterprise Maintenance Program for DJI**

1. DJI Care Enterprise

	DJI Care Enterprise for DJI Mavic 3 Enterprise Series				
Content	DJI Care Enterprise Basic	DJI Care Enterprise Basic Renew	DJI Care Enterprise Plus	DJI Care Enterprise Plus Renew	DJI Care Enterprise Basic (2-Year Plan)
Service Period	The 1st year	The 2nd year	The 1st year	The 2nd year	2 years
Service	Two low-price replacements for one year	One low-price replacement for one year	Unlimited free repair and replacement services within the coverage amount for one year	Unlimited free repair and replacement services within the coverage amount for one year	Three low-price replacements for two year
Covered Areas	Mainland China, Hong Kong, Japan, AU, EU, UK, USA, Canada, and Korea				
DJI Care Express	Supported	Supported	/	/	Supported
Covered Parts	aircraft body, camera and gimbal bound with the current aircraft, propellers, battery, DJI RC Pro Enterprise				
Additional Service	One free maintenance service[1]	Extended Warranty Period[2]	One free maintenance service[1]	/	One free maintenance service[1], Extended Warranty Period[2]
Price	10% Product RRP	9% Product RRP	20% Product RRP	24% Product RRP	15% Product RRP (Equivalent to 45% Discount on Basic Renew)

[1] Free Maintenance

JP: one free basic maintenance service; Other Regions: one free standard service; KR, HK: not provided with free maintenance service

[2] Extended Warranty Period

Within the service period of DJI Care Enterprise Basic Renew or DJI Care Enterprise Basic (2-Year Plan), the official warranty period for your product will be extended by at least 12 months.

(1) Parts with extended warranty period covered by DJI Care Enterprise Basic (2-Year Plan) and DJI Care Enterprise Basic Renew: main controller, vision system, gimbal and camera, propulsion system (excluding the propellers) and DJI RC Pro Enterprise.

(2) For EU and UK users, the warranty period of your product will not be extended.

1. DJI Care Enterprise – DJI Care Express

Compared with normal replacement service, the Express option allows users to skip the damage assessment, quotation, and payment confirmation process.

1. Online Repair Request

2. Replacement Sent

Online Repair
Request Submitted

Replacement
Payment Complete

DJI Receives
Damaged Product

DJI Ships out
the Replacement Unit

Replacement
Unit Received

1. DJI Care Enterprise – DJI Pilot HMS
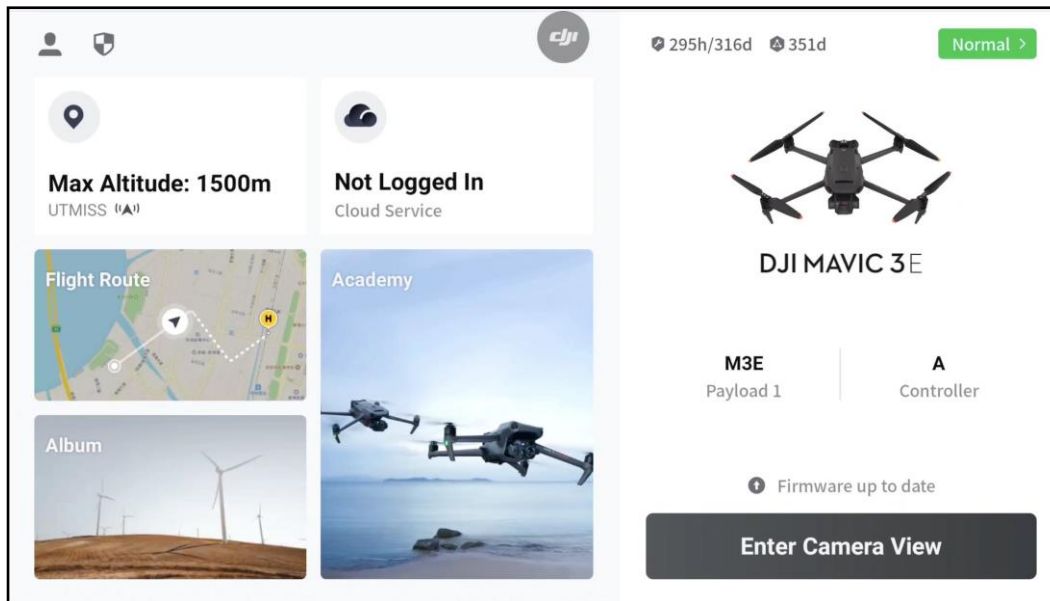
The service content of DJI Care Enterprise will be displayed in Pilot HMS

- Update DJI Pilot to the latest version before getting started.

- Enables users to purchase, bind, and use a DJI Care Enterprise series service plan, and to get reminded of the expiry date of the current service plan.

1. DJI Care Enterprise – DJI Pilot HMS
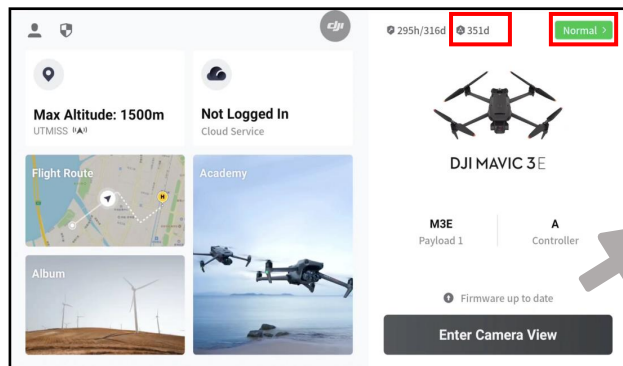
Tap "HMS" on the home page. If the device has been bound with a DJI Enterprise service plan, the coverage status will be displayed in the "DJI Care Enterprise" module.
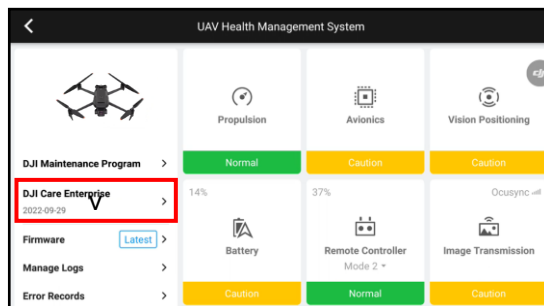
① If the device has been bound with a DJI Enterprise service plan, the expiration date will be displayed as shown in the picture above.
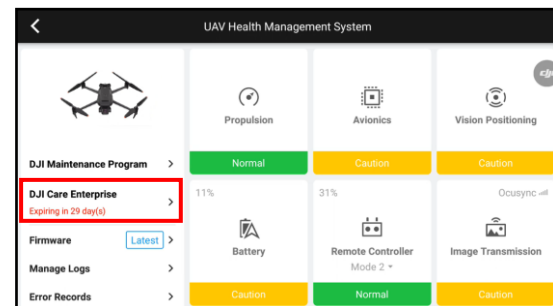
② For devices that have been bound with a DJI Enterprise service plan, the expiration time displayed in the app turns red with a month of coverage remaining.
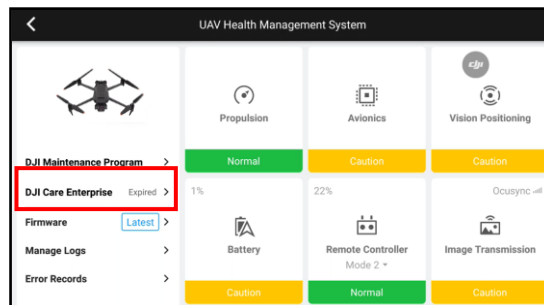
③ For devices that have been bound with a DJI Enterprise service plan, if the service plan has expired, it prompts "Expired" at the "DJI Care Enterprise" module.

1. DJI Care Enterprise – DJI Pilot HMS

Click "DJI CARE ENTERPRISE", and then the detailed service info will be displayed.

①：If a device has not yet been bound with a DJI Care Enterprise service plan, and then the detailed service info and purchase link of the plan will be displayed, as well as DJI's official link for device binding

②：If a device has been bound with DJI Care Enterprise, and then the detailed service info, coverage rights, renewal requirements and purchase link of DJI Care Enterprise Renew will be displayed, as well as access to DJI's official website for device binding, and Online Repair Request.

2. DJI Enterprise Maintenance Program

DJI Enterprise Maintenance Program for DJI Mavic 3 Enterprise Series		
Maintenance Type	**Service Items**	**Maintenance Period**
Basic Plan	Deep clean, parts inspection, and update & calibration	The actual device condition shall prevail when determining the maintenance period.
Standard Plan	Deep clean, parts inspection, update & calibration, and easily worn parts replacement	Flight time 300 H / year
Premium Plan	Deep clean, parts inspection, update & calibration, easily worn parts replacement, and propulsion system replacement	Flight time 600 H/ three years

*The recommend maintenance cycle and maintenance type may vary for different regions. Please refer to the local standard as the official recommendation.

*The need for a maintenance check may be triggered by either the total usage time or the total flight time, whichever comes first.
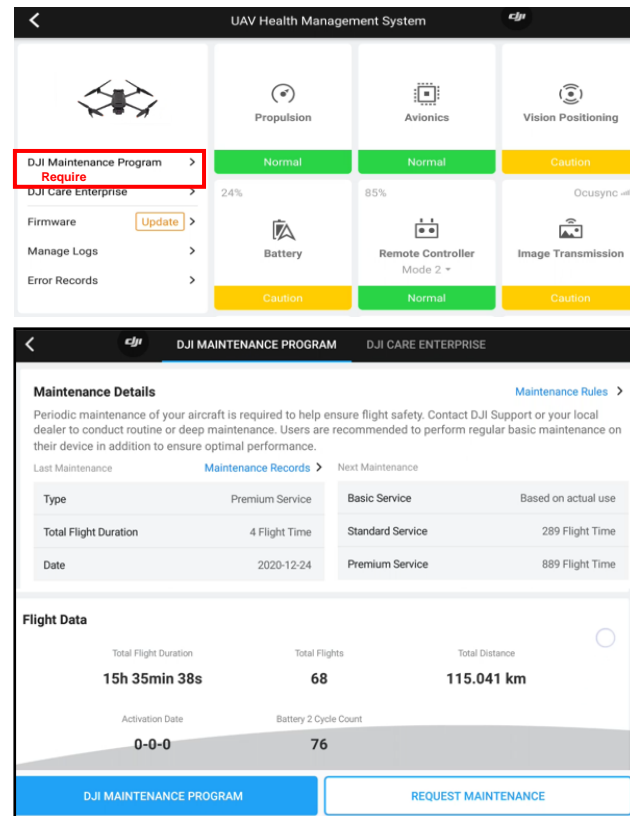
2. DJI Enterprise Maintenance Program – DJI Pilot HMS
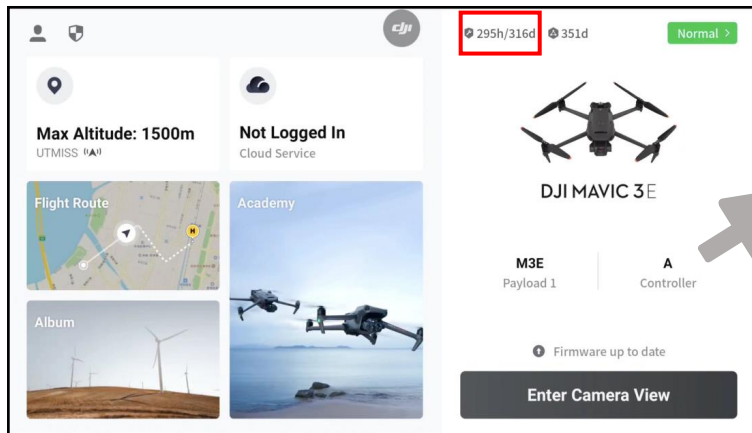
Standard Service ： Yellow reminder 7 days/50 Flight Time in advance

Premium Service ： Yellow reminder 30 days/100 Flight Time in advance

Standard Service and Premium： If a device is not inspected on time, the app will prompt "XX h Exceeded"

in red at the related maintenance service.