

DJI TERRA

Make the World Your Digital Asset



Plan. Process. Analyze and Execute.

Capture, analyze and visualize your environment with DJI Terra – an easy to use mapping software developed to help industry professionals transform real-world scenarios into digital assets.



Digitize the World Around You



Public safety

Achieve rapid turnaround time for gathering on-site critical information



Construction

Collect, measure and analyze data with accuracy across projects



Infrastructure

Easily perform detailed inspections on complex assets and structures



Agriculture

Get an in-depth understanding of your field to help you generate greater yields



Filming

Optimize previsualization to improve planning workflows across your team



Energy

Safely inspect vertical assets and structures, with special optimizations for power lines

Mission Type







Waypoints Mission Planning

Create efficient flight paths using predefined waypoint actions and adjustable parameters like altitude, speed, gimbal pitch angle, aircraft heading and more. For more complex and tight missions that require high attention to detail, use 3D Flight Visualization to design and simulate tasks on existing 3D models.





Area Mission Planning

With just a few taps on the screen, you can automate complex missions, allowing you to seamlessly capture imagery which can be processed to produce a variety of maps and models for further analysis, and to aid decision-making.





Oblique Mission Planning

When accuracy is essential and details are vital to your critical operations, Oblique lets you capture a rich 3D model data set by adjusting the angle of the camera at a tilted angle, giving you an extra crisp view of the asset.





Corridor Mission Planning

Create automated flight missions around roads and railways by simply drawing a line on the map. Adjust mission settings to change the total area mapped, giving you the flexibility to choose between creating high-definition 2D maps and 3D models or quick overviews.





Detailed Inspection Mission Planning

Automatically generate waypoints and flight routes based on one or more points selected in a local 3D model or point cloud (or a third-party point cloud). A simulated camera view including the selected point is displayed onscreen to enable better waypoint selection and more efficient flight route planning, automating inspection workflows.

Mapping¹

Seamless Workflows, Accurate Results

Unparalleled efficiency and user experience

Import images with ease while navigating the intuitively designed interface effortlessly. Bulk process up to 400 images/1 GB of RAM², minimizing the wait time between field workand digital visualization.

Run reconstruction missions using data from multiple graphics cards simultaneously to improve efficiency.

Meet and exceed your project standards

Generate highly detailed 2D orthomosaics and 3D models with enhanced absolute accuracy by setting Ground Control Points (GCPs) and checkpoints, so you can measure and inspect with ease.

View a quality report of your mission to ensure the results meet your accuracy standards.

• Compatibility and flexibility

Convert the coordinates of your maps and models into 8500+ major coordinate systems by simply selecting the output that fits your needs.

Incorporate POS data, GCPs, or both sets of data to create georeferenced maps and models with enhanced accuracy directly in the target coordinate system required by the project.

[1] System requirements: Windows 7 or above (64 bit, 16GB RAM), NVIDIA graphics card (4GB) with compute capability 3.0 or above

[2] The processing capacity of 400 images/1 GB of RAM is estimated using the size of images captured using the Phantom 4 RTK. This is the equivalent of processing 8 gigapixels of data/1 GB of RAM.

2D Maps



Real-time Mapping

Quickly generate a 2D orthomosaic of the selected area in real-time. Not only is this ideal for creating detailed flight paths in remote areas but it's also useful for time-sensitive missions that require quick decision-making on site.



2D Reconstruction

Generate high resolution orthomosaics, enabling you to get detailed and accurate measurement results for all your critical projects.



2D Multispectral Reconstruction³

Using multispectral data from P4 Multispectral, generate radiometrically calibrated reflectance maps for remote sensing research and more, or produce vegetation index maps including NDVI and NDRE. Create prescription maps for variable rate application using DJI's Agras drones to improve crop yields while driving down costs.

[3] Aircraft supported: P4 Multispectral.Blue (B): 450 nm ± 16 nm, green (G): 560 nm ± 16 nm, red (R): 650 nm ± 16 nm, red edge (RE): 730 nm ± 16 nm, near-infrared (NIR): 840 nm ± 26 nm
Vegetation indices supported: NDVI, GNDVI, NDRE, LCI, OSAVI.

3D Models



Real-time 3D Mapping⁴

When efficiency is key, quickly render and visualize a 3D model of the mapped area. Make decisions based on the preliminary model and check for completeness immediately or plan 3D flights on-site.



3D reconstruction

Get sharp and realistic representations of your surroundings throughout various industrial applications, be it accident reconstruction, tracking progress on major construction projects and more.

LiDAR Data Processing



Point Cloud Data Processing

Process point cloud data captured by the Zenmuse L1 in DJI Terra. In just one click, calculate POS data, fuse point cloud and visible light data, export point clouds in standardized formats, and generate fieldwork reports.

Data Analysis



2D & 3D Measurements

Acquire key dimensions across an array of terrains with easy-to-use analysis tools that enable you to obtain a variety of measurement data based on linear, area and volumetric measurements.





Edit labels of measurements on existing models, which can be used for reporting and improving communication throughout ongoing projects.





Photo Inspection

Closely inspect every detail of the model so you can pinpoint and highlight any critical elements in the real world.

Seamless Connection with Your Fleet of DJI Drones

Use DJI Terra to plan and execute flights for: Phantom 4 RTK (Remote Controller) Phantom 4 Pro V2.0 Phantom 4 Pro + V2.0 Phantom 4 Pro Phantom 4 Advanced and Phantom 4 Matrice 300 RTK (Detailed Inspection)

Use DJI Terra to process data from: Phantom 4 Series drones Zenmuse P1 Zenmuse L1 Zenmuse X7

The Beginning of Next Generation Mapping Solutions

Harness the power of AI-driven mapping solutions designed to take your industrial projects to the next level. Whether it's object classification, site inspections and more, you can start developing task-specific mapping solutions to seamlessly carry out missions.

1 Data acquisition

Define mission objective, plan desired flight plan, and with a tap of a few buttons, autonomously collect critical data so you can achieve the required outcome.

2 Data Processing

Utilize refined image recognition technology to generate 2D and 3D data, resulting in a more realistic representation of your assets, objects, surroundings and more.

3 Data Application

Implement tools and machine learning techniques, which can be used across a variety of different industries – like classification algorithms for identifying trees, objects, and other scenarios.

4 Execution

Take the required action, and enjoy more efficient processes with machine control – be it automated crop spraying, monitoring work sites, transporting materials and more.

Authorization



Online Mode

Connect devices to the internet regularly to verify permissions and use paid features.



Offline Mode⁵

For users with high requirements for information security, paid features can be used without connecting devices to the internet.

Computation Method



Standalone Computation

Computations are done using one computer, fit for reconstructions with smaller datasets.



Cluster Computation

Multiple computers conduct computations simultaneously, significantly improving efficiency, fit for large-scale reconstructions.

[5] The following online features are not available in Offline Mode: (1)Unlocking GEO Zones (2)Map loading and location searching (3)Without logging into a DJI account, some flight control functions in DJI Terra will be restricted.

Terra License Plans

Feature/Version	Agriculture (Online Version)	Pro (Online and Offline Versions)	Electricity (Online Version)	Cluster (Offline Version)
Real-time 2D Mapping	~	~	~	~
Agricultural application	~	~	~	~
2D Reconstruction (Field)	~	~	~	~
2D Multispectral Recons- truction	~	~	~	~
2D Reconstruction (Urban)		~	~	~
KML file import		~	~	~
Output Coordinate System		~	~	~
ROI Reconstruction		~	~	~
Image POS import		~	~	~
Multi-GPU Reconstruction		~	~	~
3D Reconstruction		~	~	~
3D Mission planning		~	~	~
Real-time 3D Mapping		~	~	~
GCPs		~	~	~
LiDAR Point Cloud Accuracy Optimization		~	~	~
Electricity Application			~	~
Detailed Inspection			~	~
How to buy?	DJI Store		Contact us	

One-month free trial license is now available at DJI Terra's official website.

About DJI Enterprise

DJI Enterprise is a global team dedicated to developing world class drone solutions for a new generation of work. These solutions help businesses across agriculture, infrastructure, public safety sectors and more to empower workers, enhance jobs and digitize operations.



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