

TERRAMIND FX

Instant 3D Mapping and AI Analytics from Drones: Reconstruct and analyze terrains in real time directly on mobile devices—no network required—while the drone is in flight.

Gain on-the-ground situational awareness with photorealistic 3D quality and advanced terrain analytics.



Terramind FX Terrain generates real-time 3D maps of operational terrains directly on mobile devices during data capture. It provides tactical advantages with instant situational analysis.



Terramind FX Command collects and analyzes 2D and 3D terrain data to support strategic decision-making. It includes advanced AI analytics tools such as ground path planning and hazard detection. Designed for command centers, it also enables sharing tactical information through GIS applications (e.g. TAK).



Terramind FX Pocket simplifies strategic decision-making on any mobile device by visualizing detailed situation reports transmitted in real time by field teams.



TERRAMIND FX

Instant Terrain Reconstruction and AI Analytics
on Mobile Devices

Designed for Complex Operations

Autonomous

Operates without Internet or external infrastructure.
Automatic georeferencing in GPS-covered areas.

Versatile

Functions indoors and outdoors with various sensors (RGB, thermal, etc.).
Suitable for dynamic environments (crises or military operations).

Robust

Resilient to corrupted video streams (radio signal loss, etc.).*
Handles flight interruptions during 3D reconstruction.*

Cost-effective

No need for LiDAR sensors.
No component installed on-board the UAV.
Reducing costs and logistical constraints.

Features	Specifications
Compatible Platforms	<ul style="list-style-type: none">• All STANAG 4609-compatible drones*• DJI and Parrot drones• Scalable software architecture ensures interoperability with a wide range of drones
Input Data	<ul style="list-style-type: none">• Standard audiovisual streams or STANAG 4609*• Optional GPS data• Compatible with thermal cameras, LiDAR, and RTK modules
3D Mapping	<ul style="list-style-type: none">• Proprietary, patented photorealistic 3D technology• Progressive reconstruction during flight: 3D maps usable mid-flight• Reconstruction of dynamic elements (fire, smoke, persons, vehicle, etc)• 3D reconstruction from meter to kilometer scales
Edge AI Analytics	<ul style="list-style-type: none">• Text, icon, and image annotations directly on 3D maps• Distance, surface and volume measurements• Automatic hazard detection (e.g., high-voltage power lines)• Person and vehicle detection (static or in motion)• Safe landing zone detection• Secure ground path planning• Line-of-sight and intervisibility area estimation*
Georeferencing	<ul style="list-style-type: none">• GPS coordinates for every 3D point (±5 meters or more precise with RTK modules)• Overlay with existing 2D maps
Real-Time Edge Processing	<ul style="list-style-type: none">• Optimized for Windows and Android mobile devices• Operates without Internet or server-based computations
Export and Sharing	<ul style="list-style-type: none">• Sharing 3D situation reports via email and SMS• Interoperable with GIS applications (e.g. TAK*)• Export to OBJ and PLY format

*Military edition only



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