

WingtraPilot Features

Free Software Updates	✓	regularly enabling new features and stability improvements
Mission Planning	✓	create in app flight plans, load existing missions or import KML data
KML Import	✓	for seamless mission import from GIS programs
Advanced mission planning	✓	multi area planning & zero overlap for population counting algorithms
Offline Functionality	✓	ability to pre-load maps for full offline operation in the field
Automated pre-flight checks	✓	guarantees battery health, GPS reception, leveled take-off spot
Interactive checklist	✓	guides the operator for efficient and safe operation
Terrain Following	✓	global terrain model for constant flight altitude & obstacle avoidance
Battery Swap & Resume	✓	automatically splits large missions & resumes after batteries have been swapped
Beyond visual line of sight (BVLOS)	✓	full mission capability even without connection to the ground station
Intelligent wind control	✓	advanced control algorithms handle wind no matter how the mission was planned
Adaptive Geofence	✓	allows to dynamically constrain radius of operation to prevent fly-aways
Intelligent RTH	✓	automatically detects low battery or too high winds & safely returns to home
Real time monitoring	✓	displays information like flight location, altitude & mission progress up to 8km
Intuitive Altitude Display	✓	graphically displays absolute flight altitude as well as flight altitude & terrain elevation above ground
Smart Voice	✓	provides comprehensive audio feedback to the operator during the mission
Operator Intervention	✓	operator can take command at any time with one click & return to home
Single SD card workflow	✓	eliminates risk of mismatched or lost data even for the PPK workflow
Multi-flight geotagging	✓	allows to georeference all flights at the end of the day & save time on the field
PPK data handling	✓	manages correction step for CORS or local base station networks
Postprocessing agnostic	✓	fully compatible with all known mapping software including geotag file formats. Pix4D recommended
Logs on Demand	✓	remote system diagnosis for premium class support

Facts about WingtraOne Payloads

Payload protection	✓	fully integrated into WingtraOne, shock free vertical landing
Payload flexibility	✓	fully modular with single standard USB-C interface
Payload swapping	✓	in less than 2min on the field
Payload damping	✓	individually optimized passive damping for brilliant sharp images
Power supply	✓	externally by main batteries to ensure missions with 1000s of images

Facts & Features of the WingtraOne

Product of Switzerland	✓	designed & assembled in Switzerland with highest quality standards for most reliable operations
Ready to fly	✓	fully assembled & no need to to attach wings, propeller or set up a catapult every time
Automated launch	✓	fully automated vertical take-off without human interaction (no hand launch, no catapult)
Vertical take-off and landing (VTOL)	✓	autonomous precision landing on tail
Interactive landing	✓	allows for precise correction of landing position
Composite Wing	✓	robust glass-fibered body & wings, Formula 1 light weight technology
High performance motors	✓	2 light weight, brushless motors for high flight performance and low noise level
Smart Batteries	✓	smart battery technology, UN compliant Li-ion cells
Radio communication link	✓	8 km (5 mi), bi-directional antennas for optimal range
Titanium gear servos	✓	light weight, high speed & ultra reliable flap actuation
Onboard computer	✓	versatile work computing power for a smooth workflow
Optimized propeller	✓	custom crafted from German beechwood
Redundant Sensors	✓	fully redundant sensors (GPS, IMU, Magnetometer)
Quad-constellation GPS	✓	2 modules that exploit GPS, Glonass information and ready for Galileo, Beidou
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