

DON'T CHOOSE BETWEEN CENTIMETER
LEVEL ACCURACY AND ENDURANCE
WITHOUT GCP: HAVE IT ALL

100

UP TO 100 KM
OR 20 KM²
PER FLIGHT

2

VERTICAL ACCURACY
DOWN TO 2 CM
WITHOUT GCP

21.4

MPIX
PROFESSIONAL
SENSOR

2

KG WEIGHT
VLOS & BVLOS
CERTIFIED



Expert line

DATASHEET

DT18 HD PPK

LONG-RANGE MINI UAV
SURVEY, MONITOR & INSPECT

INDUSTRIES



Geospatial



Power
& Utilities



Mines &
Quarries



Oil & Gas



Railways
& Roads



Emergency

KEY APPLICATIONS

✓ Large Scale Monitoring

✓ Corridor Mapping

✓ Topographic Surveys

✓ Vegetation Monitoring

✓ Linear Infrastructure
Inspection

✓ Anomaly Detection

✓ Emergency Mapping

KEY DIFFERENTIATORS

High data quality & expert grade technology: 100 km range in 2 kg of condensed technology - real-time video and images, professional camera precisely synchronized with L1/L2 PPK GNSS receiver and high-end IMU down to 0.025° accuracy to achieve Direct Georeferencing, long range telecom.

Safe technology: first UAV certified in the world for daily BVLOS operations (since 2012). Design complying with aeronautical certification methods. Advanced safety features (real-time front video, autopilot fail-safe mechanisms, geofencing).

Quick return on investment (ROI): covers more distance than any competitor of that size. Drastically reduces acquisition costs for long distance infrastructures and large areas: 400 km or 8000 ha per day and no need for GCP. Vertical accuracy down to 2 cm. Seamlessly integrated with Delair-Stack® powerful processing functions.

Field readiness: hand-launched, automatic take-off, field proven, with real-time status of the quality of the acquisition; more than 300 000 km of flight experience and 5 min of deployment time.

UAV SPECIFICATIONS

Endurance	Up to 105 min
Weight (payload included)	2 kg
Wingspan / Length	1.8 m / 1.2 m
Material	Composite (fiberglass, carbon, kevlar)
Deployment time	5 min
Take-off / Landing	Catapult / Belly
Cruise speed	61 km/h (33 kts)
Maximum surface area covered (60% overlap) / best accuracy*	
.... 1.6 km ² mapped with 1.1 cm GSD @ 80 m AGL / accuracy: 1.6 cm	
.... 3.3 km ² mapped with 2.1 cm GSD @ 150 m AGL / accuracy: 3.2 cm	
.... 17.5 km ² mapped with 9.7 cm GSD @ 700 m AGL / accuracy: 15 cm	
*Check out our white paper for detailed information	
Communication range	Up to 20 km / secured link
Operating conditions	
Wind resistance	50 km/h, moderate rain
Take-off & landing altitude / ceiling	0 to 2000 m ASL / 2500 m
Landing space	Typically: 10 m x 20 m / Recommended: 20 m x 40 m



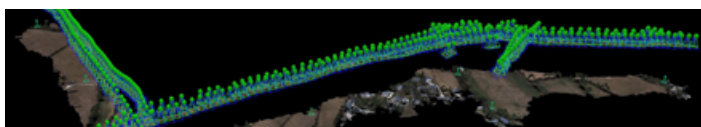
SENSOR

Red Green Blue (RGB) industrial sensor

Sensor type	Global shutter, distortion free
Resolution	21.4 Mpix
Dynamic range	70 dB
HFOV / VFOV	38° / 32°
In-flight sensor configuration	Histogram visualisation - shutter, gain, brightness configuration
In-flight picture transmission and QAQC	Real-time histogram plot, real-time photo stitching
High quality raw output	

PPK function

High precision GNSS receiver	Dual-band GNSS (L1/L2)
Higher precision IMU	Angle accuracy 0.025°
Absolute position accuracy	Down to 1.6 cm



DELIVERABLES

Raw data compatible with

Delair-Stack® and all photogrammetry software.

Analytics available on Delair-Stack® with on-demand format

Ortho Image & DSM (Digital Surface Model), Contour Lines, Cross Sections, Elevation Profiles, Stock Pile Volume Calculation, Vegetation Encroachment, Anomaly Detection, and many more.

Analytics compatible with

Delair-Stack®
ESRI ArcGIS, QGIS, Surpac, GlobalMapper, AutoCAD, PLS-CADD and many more.

