

PRODUCTIVE & PLANT-FOCUSED

The smartest plant mapping drone ever



150ha

(370 ac)
@8 cm GSD

PPK

as you go

5

GSD down
to 5 cm

3G/4G

UX11 AG

PROFESSIONAL SMALL UAV,
MAP BEYOND THE VISIBLE WITH EASE

INDUSTRIES



Agriculture



Forestry



Power &
Utilities



Environment &
Conservation

KEY APPLICATIONS

All applications requiring temporal analysis
or precise geolocation

Mapping & GIS

Field trials

Field inventory

Large Scale Farms and Plantations Scouting

Precision Agriculture

Forest inventory and management

Traceability for sustainability

Environmental and Conservation

Due diligence of farms

KEY DIFFERENTIATORS

Designed for best grade spectral data quality and precisely geolocalized plant data. Fully integrated true multispectral camera for bird view, biomass and chlorophyll insights in one flight. With optional PPK activation for surveygrade results.

BVLOS-ready communications - optional radio link or mobile connectivity via 3G network (4G-ready) for unlimited range.

Bird Take Off and Landing - BTOL - precise takeoffs and landings - high-angle (30 degrees) for restricted areas, low-speed landing using distance measurement technology.

Easy-to-use Android™ mission planning and monitoring app - pre-flight checklist, no-fly zones, modern user interface, in-flight data review.

UAV SPECIFICATIONS

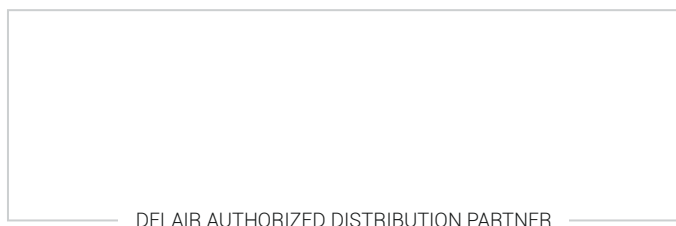
Endurance ¹	Up to 52 minutes
Weight (payload included)	1.6 kg (3.52 lbs)
Wingspan	1.1 m (43 in)
Deployment time ¹	5 min
Cruise speed	54 km/h (33.5 mph)
Take-off / Landing	Hand-launched (angle: 30 degrees) / Belly landing (angle: 30 degrees)
Flying range ¹	47 km (29 mi)
Maximum surface area covered ¹ (70% overlap, results may vary depending on conditons)	
- 90 ha (230 ac) mapped with 5 cm GSD at 75 m (246 ft) AGL	
- 150 ha (370 ac) mapped with 8 cm GSD at 122 m (400 ft) AGL	
- 600 ha (1500 ac) mapped with 34 cm GSD at 500 m (1,640 ft) AGL	
Communication range	
3G/4G	Unlimited (within network coverage)
Delair Link (2.4 GHz radio) ¹	FCC up to 10 km (6.2 mi), CE up to 5 km (3.1 mi)
Operating conditions	
Weather	45 km/h (28 mph) wind resistance, moderate rain
Temperature ¹	-20 to 45 C (-4 to 110 F)
Maximum takeoff altitude ¹	Takeoff at 3,600 m (11,800 ft)
Landing accuracy ¹	~5 m (16 ft)
GNSS	PPK optional (software activated), L1/L2, GPS+GLONASS



SENSOR

Micasense RedEdge MX sensor - fully integrated

Sensor type	Global shutter, distortion free
Narrow & calibrated spectral bands	Red, Green, Blue, Red Edge, Near Infrared
Live picture preview on ground (RGB/NDVI)	
Image acquisition rate	Automatically adjusted in flight (configurable overlap)
Width x Height	1280 x 960 pixels
Calibration panel included	



DELAIR AUTHORIZED DISTRIBUTION PARTNER

(1) Actual results may vary depending on UAV configuration, battery age and condition, and operational, environmental and climate conditions.

DELIVERABLES

USE DELAIR AFTER FLIGHT SOFTWARE (INCLUDED) FOR PPK PROCESSING. RAW DATA COMPATIBLE WITH ALL PHOTOGRAMMETRY SOFTWARES

ANALYTICS

- Orthomosaic image & DSM (Digital Surface Model),
- Scouting Maps: bird view, green biomass, chlorophyll content and others
- Plant Counting, Gap Detection, Plant Height
- Field, rows, microplots boundaries vectorization
- Management zones and sampling points and many more.

ANALYTICS COMPATIBLE WITH

GIS softwares (ESRI ArcGIS, QGIS, ENVI, eCognition, Globalmapper and many more), MyJohnDeere and some Farm Management Information Systems / ag DST.

Specifications subject to change without notice to improve reliability, function or design or otherwise.

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