



GET THE CROP STATUS RIGHT OVER LARGE AREAS

1150

COVER UP TO
1150 HA
PER FLIGHT

5

NARROW SPECTRAL
BANDS (RED, GREEN,
BLUE, RED EDGE,
NIR)

5

GSD DOWN
TO 5 CM

2

KG WEIGHT
VLOS & BVLOS
CERTIFIED



Expert line

DATASHEET

DT18 AG

LONG-RANGE MINI UAV
SURVEY, MONITOR & INSPECT

INDUSTRIES



Agriculture
& Forestry

KEY APPLICATIONS

- ✓ Field Research & Microplots Management
- ✓ Remote Surveillance of Crop Practices
- ✓ Plant Counting & Gap Detection
- ✓ Precision Agriculture
- ✓ Large Scale Farms, Plantations & Herd Scouting
- ✓ Forest Characterization

KEY DIFFERENTIATORS

Best in class for crop data quality: the fully integrated, state of the art Agricultural sensor acquires data in 5 narrow bands (Red, Green, Blue, Red Edge, Near Infrared). Combined with the flight characteristics of DT18, it provides incomparable data quality.

Quick return on investment (ROI): durable and reliable solution for intensive use, increase in productivity thanks to better yields during data collection (multiple field mapping).

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).

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 120 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 Hand launched or catapult / Belly (no damage to crops)
- Cruise speed 61 km/h (33 kts)

- Maximum surface area covered (75% overlap)
 - 90 ha (222 ac) mapped with 4.8 cm GSD @ 70 m AGL
 - 210 ha (520 ac) mapped with 10.2 cm GSD @ 150 m AGL
 - 1150 ha (2840 ac) mapped with 47 cm GSD @ 700 m AGL

Communication range Up to 20 km / secured link

Operating conditions

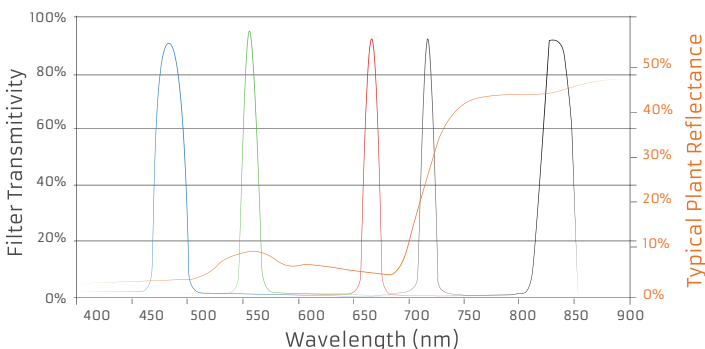
- Wind resistance 50 km/h, moderate rain
- Take-off & landing altitude / ceiling 0 to 2000 m ASL / 2500 m ASL
- Landing space Typically: 5 m x 10 m / Recommended: 10 m x 20 m



SENSOR

MicaSense RedEdge Multispectral Camera

- Narrow & calibrated spectral bands Red, Green, Blue, Red Edge, Near Infrared
- Resolution (GSD) 4.8 cm @ 70 m AGL
10.2 cm @ 150 m AGL
- Width x Height 960 x 1 280 pixels
- Image acquisition Configurable (standard: 1 ima/sec.)
- Sensor type Global shutter, distortion free
- Calibration panel included*



DELIVERABLES

Raw data compatible with

Delair-Stack® and photogrammetry software.

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

Ortho Image & DSM (Digital Surface Model), DTM (Digital Terrain Model), Precise Scouting Maps: NDVI, NDRE, MCARI, SAVI, & other Ag index map, Plant Counting, Gap Detection, Plant Height, Field Vectorization, Vegetation Height, Plant Density, and many more.

Analytics compatible with

Delair-Stack®
ESRI ArcGIS, QGIS, ENVI, eCognition.

