

55 KM/H HIGH WIND RESISTANCE NARROW SPECTRAL BANDS (RED, GREEN, NIR)

BLUE, RED EDGE, NIR)

MIN
DEPLOYMENT

rofessional line

DATASHEET

# <u>UX</u>5 AG

PROFESSIONAL UAV SURVEY, MONITOR AND INSPECT

# **INDUSTRIES**



# **KEY APPLICATIONS**

- Crop Scouting
- Precision Agriculture
- ✓ Forest Characterization
- ✓ Vegetation Monitoring
- Water Drainage & Irrigation Systems Design

# **KEY DIFFERENTIATORS**

**Leading image acquisition quality and data accuracy** thanks to Micasense RedEdge technology (5 bands, global shutter).

**Field readiness and operational performance:** all-weather performance, all-terrain technology, high resistance compatible with an intensive use.

**Landings: less space, more accuracy** - reverse thrust for precise landings in confined spaces for landing confidence every time.

Accessible technology & intuitive workflow with Delair-Stack® data processing softwares.

# **UAV SPECIFICATIONS**

Endurance	Up to 45 min
Weight (payload included)	2.5 kg
Wingspan	1 m

Material ..... EPP foam; carbon frame structure; composite elements

Deployment time 5 min

Cruise speed 80 km/h

Take-off / Landing ...... Catapult (angle: 20 degrees) / Belly (angle: 14 degrees)

Flying range ...... 60 km

Maximum surface area covered (70% overlap)

.... 120 ha (297 ac) mapped with 6.1 cm GSD @ 90 m AGL

.... 210 ha (519 ac) mapped with 10.2 cm GSD @ 150 m AGL

.... 1000 ha (2471 ac) mapped with 51.1 cm GSD @ 750 m AGL

#### Operating conditions

Wind resistance	55 km/h, moderate rain
Altitude	Ceiling up to 5000 m

Landing space ...... Typically: 20 m x 6 m / Recommended: 50 m x 30 m

# **SENSOR**

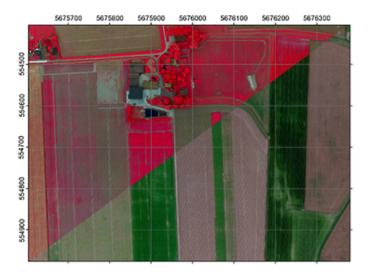
#### MicaSense RedEdge Multispectral Camera

Narrow & calibrated spectral bands	Red, Green, Blue, Red Edge, Near Infrared
Resolution (GSD)	6.1 cm @ 90 m AGL
Width x Height	10.2 cm @150 m AGL
Image acquisition	

Sensor type ...... Configurable (standard: 1 ima/sec.)

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, and other Ag index map, Plant Counting, Gap Detection, Plant Height, Vegetation Height, Field Vectorization, and many more.

#### **Analytics compatible with**

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

