



# **HORUS**

TECHNOLOGIES

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Intelligence & Security Solutions

**VTOL SONGBIRD 150**



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# SONGBIRD 150



## ABOUT SONGBIRD 150

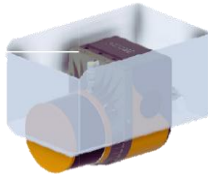
The Songbird is the result of years of testing, software development and optimization.

It combines advantages of fixed-wing aircraft with multirotor drones by vertical take-off and landing (VTOL) via motor transition. It results are longer flight distances with the requirement of single parking place.

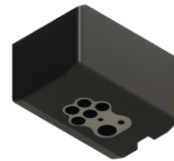
The Songbird carries payloads up to 4,4 kg (9.7lb), enabling operation with large battery capacity, dual cameras or highly specialized sensors such as LiDAR or other real-time mapping solutions, medical transportation.



ISR with EO/IR gimbal



Lidar



Multispectral camera



External transportation pod

Depending on the payload, up to 25 km<sup>2</sup> (10sq mi) can be covered per flight. The Songbird has been extensively tested in extremely challenging environments, from the windswept dust in the hot African desert, to the challenging terrain of the humid, South American rainforest.

## GROUND CONTROL SOFTWARE

The Droneintelligence software makes client's user experience easy and multifunctional at the same time. It has everything essential for a large variety of applications from surveillance to professional mapping. You will be able to control everything during the flight including online changes if needed. An opportunity to use SRTM (Shuttle Radar Topography Mission) model helps to choose the best flight parameters directly in the software. It is possible to use it either for terrain follow mode, to find the best take-off point based on the area's elevation profile or to avoid collisions.

For the increasing demand in BVLOS-flights (beyond visual line of sight) are being integrated and successfully tested the use of ADS-B/FLARM technology to operate in cooperation with manned air traffic including operations in controlled airspace at airports also via DroneIntelligence software.

It is possible to configure the Songbird with 4G/5G technology to make accessible both telemetry and the data from the plugged payload from anywhere in the world, with ip radio for medium range application also in a compromised environment and also using both these technologies together.



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## SONGBIRD 150

### SURVEILLANCE EDITION



\*Possible multi payload configuration

## MAIN FEATURES

- Fly under tough circumstances
- Capable to withstand wind up to 15m/s
- Low noise emission
- Video transmission up to 50 km (may vary depending on the antennas and the radio)
- With 4G or 5G everywhere in the world
- Tested in high- and low temperature conditions
- Invisible in the sky
- High flight altitude with a high-resolution sensor
- Flexible software to allow quick reactions to the situation Droneintelligence © software
- Resistant against jamming

<b>Wingspan</b>	2,98 m / 3,12 m
<b>MTOM</b>	14 kg
<b>Maximum Payload</b>	4,4 kg
<b>Body Material</b>	Glass / Carbon fiber composite
<b>Cruise Speed</b>	17-32 m/s
<b>Max flight time</b>	Up to 120 min
<b>Range</b>	110 km
<b>Altitude</b>	
• <b>Service ceiling</b>	5000 m
• <b>At take-off</b>	4000 m
<b>Wind Tolerance</b>	
• <b>Start/Landing auto</b>	7 m/s
• <b>Start/Landing manual</b>	11 m/s
• <b>Fixed Wing Mode</b>	15 m/s
<b>Rain Tolerance</b>	Moderate rain
<b>Propulsion</b>	4 Tilting electric motors

## IN THE BOX

- Airframe  
Songbird 150



- Ground Control  
System



- Battery Kit



- IMSI Catcher



- Sensor



- Shed IP  
(MOD rev. 5.1 available)

