

# Songbird 150 High-Precision Mapping

**Germandrones Songbird 150** with **RIEGL VUX-120<sup>23</sup>** is the ultimate solution for aerial surveying. Thanks to its VTOL configuration, it can cover more distance in the same time than a quadcopter while maintaining the same flexibility for takeoff and landing.

## Songbird 150

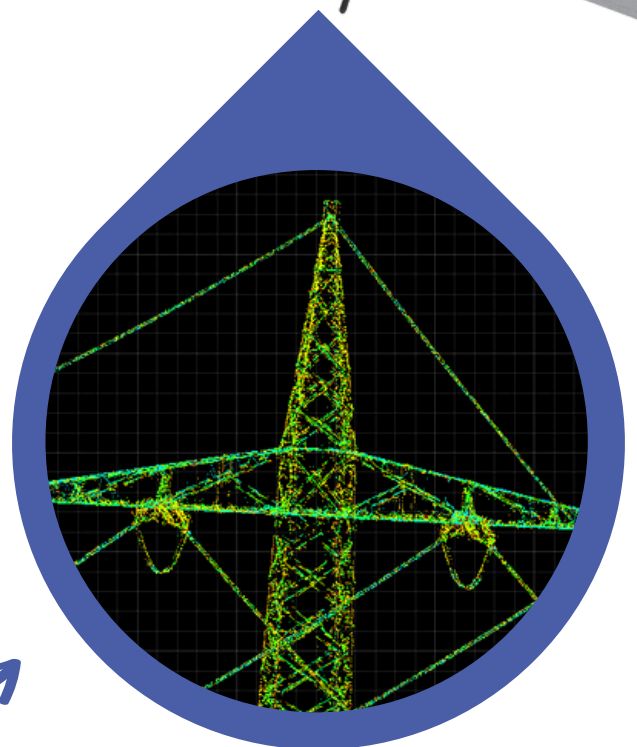
MTOW	14 kg
Available Wing Spans	2,98 m / 3,12 m
Working Speed	20 m/s
Max. Flight Time with RIEGL VUX-120 <sup>23</sup>	60 min
Max. Wind Speed	
Start & Landing	9 m/s
In Flight	14 m/s
Operating Flight Height (AGL)	Up to 720 m
Range	72 km (normal weather conditions)
Battery	Lithium-Ion
Telemetry	LTE/5G module Flexible bandwidth Broadcast module

**RIEGL VUX-120<sup>23</sup>**



**Point density above 700 pt/m<sup>2</sup> at a height of 60 meters and a ground speed of 20 m/s.**

- Accurate georeferencing (0.02-0.03 m, post-processed) is performed using RIEGL's high-precision inertial subsystem RiLOC-F
- Data processing and georeferencing are done via RIEGL's RiPROCESS software



## Advantages of Songbird 150



5 - 10 min to assemble



Vertical takeoff and landing



Propulsion: 4 electric motors with tilt mechanism



PX4-based flight controller



Material: fiberglass/carbon composite



Automatic flight with Droneintelligence GCS by Germandrones

## Advantages of Songbird 150 and RIEGL VUX-120<sup>23</sup>

- Mission planning and autonomous flight are handled by Germandrones' Droneintelligence software
- Areas up to 8.5 km<sup>2</sup> or 1190 football pitches can be quickly captured
- It is less maintenance- and cost-intensive than helicopters and reduces carbon footprint
- **RIEGL VUX-120<sup>23</sup>**: Delivers survey-grade and high-quality 3D point clouds (precisely georeferenced and with high point density)
- Nadir, forward and backward scanning for unrivaled completeness of scan data

