

LLC

AVIS AGRO

THE AVIS A50 AGRICULTURAL UNMANNED AERIAL SYSTEM (UAS)

UNMANNED AERIAL VEHICLE (UAV) WITH A TAKE-OFF WEIGHT OF UP TO 150 KG WITH A GROUND CONTROL STATION BASED ON SKYDROID G20 AND AVIS CLOUD SERVICES. THE UAV IS BUILT ACCORDING TO A MULTIROTOR SCHEME OF THE HEXACOPTER TYPE. IT IS INTENDED FOR THE INTRODUCTION OF SUBSTANCES IN AN ULTRA-LOW-VOLUME MANNER.

AREAS OF CONCERN

The UAS is designed specifically to solve problems in the field of precision agriculture, in particular, for aerosol application of substances in open fields. UAV makes it possible to efficiently process large agricultural lands, minimizing labor costs and increasing the accuracy of the use of agrochemicals. Cloud services allow you to store field processing maps, usage history, and monitor service intervals.

UNIQUENESS

High-precision insertion with real-time correction of the insertion parameters, automatic planning of the insertion work with correction as the insertion is performed. The UAV is designed taking into account aviation approaches and requirements for strength and durability. Key concept: the development of not a simple spraying tool, but a "real-time digital agronomist" capable of not only performing operations, but also instantly correcting them based on an analysis of the condition of each square meter of the field.

CURRENT STATUS

The first prototype was made. The first flights were conducted in automatic mode, the software for increasing the level of autonomy and cloud services are being improved. A batch of 5 flight samples is being prepared for production. The UAS has a high degree of localization - more than 82%, and software (flight control system) - 100%.

