



# UAV BIRDIE

# BIRDIE - YOUR TAILOR-MADE UAV

ONE PLATFORM,
MULTIPLE APPLICATIONS:

SURVEYING
CONSTRUCTION
FORESTRY
AGRICULTURE
ENVIRONMENT
POWER ENGINEERING

BIRDIE UAV is the complete mapping solution, made for achieving survey-grade accuracy and delivering high-quality data. The use PPK L1/L2 saves your time and field works, as you won't need Ground Control Points.

Simple hand launch and precise landing of BIRDIE make it a perfect match even for beginners. Managing your flight will be extremely easy thanks to the intuitive all-in-one flight controller.

GSM connectivity and ADS-B receivers ensure the highest level of safety and prepare the platform to conduct BVLOS flights.

Meet the tailor-made UAV BIRDIE, the drone adjusted to your needs.

### **MEET UAV BIRDIE**



### **PRODUCTIVE**

60 minutes of a flight and accuracy up to 1 cm/px, thanks to high-quality optical sensors: 24-Mpix or optional 42-Mpix full-frame camera.



### **PRECISE**

Precise point positioning GPS RTK L1 L2 saves your time and workforce, providing you with the survey grade accuracy without using Ground Control Points.



### SAFE AND INTUITIVE

UAV BIRDIE is strongly user-friendly drone as it requires no specialized flying skills. Multiple safety features include the intuitive pre-flight checklist and ADS-B in/out transceiver.



### COMPLETE

The 360-degree photogrammetric system: BIRDIE platform, the intuitive all-in-one flight controller with flight planning app, and optional post-processing software of your choice.

### **UAV BIRDIE – DETAILS THAT MAKE A DIFFERENCE**



### **INTELLIGENT BATTERY**

9000 mAh Li-lon cells, battery's system protecting against short circuit or overheating. Intuitive and safe charging.



### GSM/3G/LTE CONNECTIVITY

Unlimited connectivity range, within the network coverage. Allows for remote supervision of UAV flight and taking over the control in case of emergency.



### **AUTOMATIC DATA SAVING**

Your data's safety: flight logs automatically saved on camera's SD card – after executing a mission and disarming the plane.



### PRECISE LANDING

Safe and precise landing thanks to the reverse thrust. Steep final approach and landing precision, even in the narrow space.

### **TECHNICAL DATA**

	Birdie Geo	Birdie Geo+	
Platform dimensions [length x height x wingspan in mm]	140 x 560 x 140	140 x 560 x 140	
Folded dimensions [length x height x width in mm]	637 x 580 x 321	637 x 580 x 321	
weight [kg]	2,3	2,35	
Max. payload [kg]	0,6	0,6	
Max. speed [km/h]	90	90	
Max. wind speed [km/h]	54	54	
Number and type of rotors	1, electric	1, electric	
Max stay in the air [min]	60	60	
Launching method	From hand	From hand	
POSITIONING			
Type of GNSS receiver	single-frequency code-phase (GPS, GLONASS, GALILEO, SBAS)	RTK multi-constellation, multi-frequency receiver (GPS, GLONASS, GALILEO, SBAS)	
Correction services	DGNSS	PPK, RTK (RTCM), RTN (NTRIP)	
IMU	Integrated with autopilot	Integrated with autopilot	
SENSORS			
Type of camera	Sony A6000	Sony RX1R II	
Focal length [MPx]	24	42	
Type of lens	Voigtlander 21 mm	Carl Zeiss 35 mm	
Image resolution [cm for certain height ]	2 cm for 100 m	2 cm for 150 m	
Productivity in one fligth [area for certain resolution]	1,8 km² for 2 cm	2,5 km² for 2 cm	
Optional sensors	RedEdge-M, Sequoia+, Flir Vue Pro, others	RedEdge-M, Sequoia+, Flir Vue Pro, other	
CONNECTIVITY RANGE			
Radio link	2 km	2 km	
GSM/3G/LTE	unlimited	unlimited	

### **BIRDIE – THE EFFICIENT SURVEYOR**

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Model	Focal Length	Flight altitude [m]	Terrain resolution [cm]	Maximum flight area [km²]
BIRDIE GEO	-	535	10	9,0
		270	5	4,5
	21	215	4	3,6
		160	3	2,7
	_	105	2	1,8
BIRDIE GEO		510	5	4,5
	40	310	3	2,7
	_	200	2	1,8
BIRDIE GEO+	35 	540	7	8,3
		385	5	5,9
		270	3,5	4,1
		155	2	2,4
		120	1,5	1,8

NOTE: SIDE AND FORWARD OVERLAP 70%, FLIGHT SPEED 20 m/s, FLIGHT TIME 50 min

### MISSION MANAGER LITE AND FLIGHT CONTROLLER

Easily plan and manage your flight. Prepare the UAV with a transparent step-by-step checklist. Check the weather forecast, control flight zones and ATC (Air Traffic Control) restrictions.



- Author's design of a flight controller, tested by experienced UAV operators
- Telemetry and RC connection with a plane
- Automated/semi-automated photogrammetric flights on set area
- Autonomous take-off, flight and landing

- AGL or ASL elevation mode
- Available weather forecas
- Integrated with DroneRadar App, enables non-verbal communication with ATC services
- UAV BIRDIE battery's parameters (charge status, temperature, voltage) read directly from the app

### **COMPLEMENTARY PRODUCTS**







### **PLAN**

## Flight management software to plan and manage a flight

Plan your flight in details before starting a new mission. Follow flight procedure: checkweather conditions, set route, complete a checklist.

### **FLY**

### **Ground Control Station**

Manage your flight with the intuitive panel. It's up to you whether to conduct an automated flight or to use semiautomated mode.

### **CREATE**

### Photogrammetric Software

Proceed collected data with the professional mapping and aerial image programme. Choose between a vast array of a specialized software: 3D survey, Agisoft Photoscan, Pix4D.

### **TECHNICAL SUPPORT**



### **WARRANTY**

All our products are covered by producer's warranty. If you need to expand a standard warranty services, just contact our consultant.

### **TECHNICAL SERVICES**

Coming across a technical issue? Our service technicians will fast and effectively help you to solve occurring problems. Also, if your UAV requires servicing, we will ensure proper help.

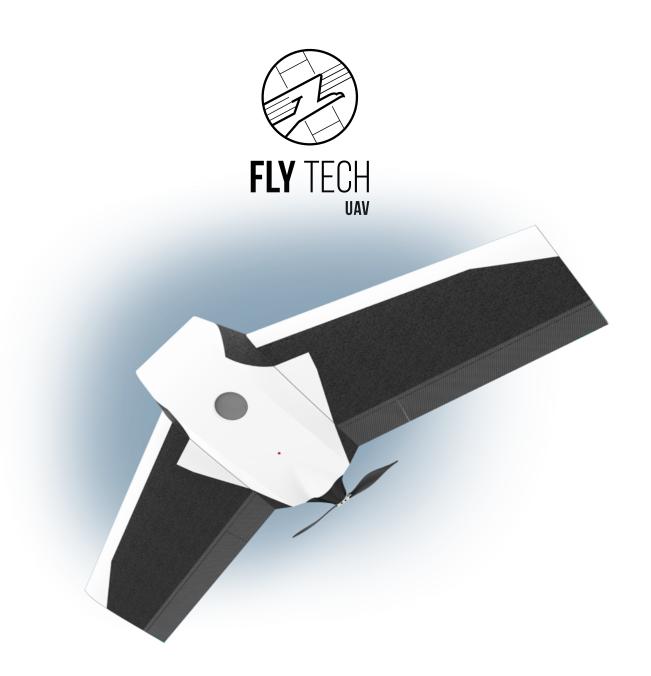




### **AFTER-SALES SUPPORT**

Our consultants will answer your questions concerning exploitation of UAV and will provide you with additional training/training materials as needed.





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