





# WHY CHOOSE DRONEEPLANE?

#### Safe

A concern for safety is built into Dronee-PLANE's design. Compared to similr UAVs, this drone is lighter in weight, safer to operate, and its autopilot is preprogrammed in a way that assures the safety of everyone in its operating area. DroneePLANE weighs only 620 grams, and is equipped with a secure pusher motor.

### More Coverage

The drone is able to cover an area up to 1,000 ha without having to recharge or land. DroneePLANE can take pictures of 1.5 cm (0.6in) of pixel density.

### No Piloting

The DroneePLANE enables non-pilots to conduct challenging projects. The drone has a sophisticated design that enables even first time users to utilize the drone effectively. You launch the DroneePLANE simply by throwing it into the air, and then all you have to do is watch as the drone completes its mission and returns to its launch point.

### Everything You Need to Fly

The DroneePLANE kit has everything needed to work with the drone. The kit contains one high-quality RGB camera, a set of batteries, a modem that works on radio frequencies, the DroneeCOCKPIT and state of the art software that will organize and manage the flight process.

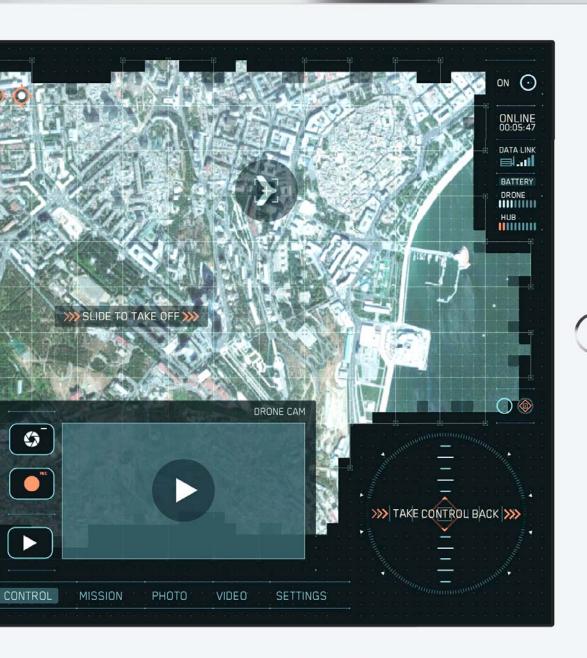
### PLAN

With the DroneePLANE you are able to prearrange the flight and then supervise it in operation, using a robust Dronee Flight Control App that is fully compatible with your iPad.

All you have to do is pick the area you want to inspect. You then indicate the necessary ground resolution, which can be as low as 1.5 cm/ 0.6 in/ pixel, and pick the appropriate image overlap. That's all you have to do. Everything else will be completed in the automatic mode. The DroneeCOCKPIT App will independently determine the most suitable flight pattern on the basis of GPS checkpoints, compute the necessary altitude and then present the final route on the iPad screen.

The drone's flight plan and landing zone can be changed in mid-flight. If an issue should arise, you can order the drone to return home and land immediately. You're always in control.





DroneeCOCKPIT supports Shapefile/K-ML/KMZ format of regions

Multi Flight feature you can even scan even larger area with multiple flights. If the battery finishes during the scan. Dronee lands and memorizes where it left in the next flight.

# OPTIMISED FLIGHT PATH

For windy weather Dronee Flight Management Software has "Route Optimisation" algorithm, it rearranges waypoint orders to give less drift in windy conditions without changing the result of the process.





## FLY SAFE

The Dronee App displays the aircraft's flight parameters in real time on tablet display, allowing you to track your flight. The DroneePLANE autopilot continuously analyses onboard sensors to control and optimise every aspect of the flight.

- Advanced electronics failure detection technology embedded inside the Dronee to notify the pilot before the flight, and doesn't allow pilot to activate the drone unless problem resolved.
- Soft, shock absorber fuselage removes motor vibration from camera to capture high quality images.
- DRONEE plane lands to its curent position in case of GPS signal loss.
- DRONEE automatically lands by itself to pre-programmed landing area when the battery gets below 35%.
- In case weather changes during flight, high wind or rain, pilot can land the drone automatically with emergency "LAND" button from Dronee's app.
- DRONEE use internal sensors data in advanced algoritihims to acuratelly calculate the distance from the ground to avaid collision during landing.
- DRONEE control software allow the execution of acrobatic maneuvers for bird frightening.
- DRONEE control software allows drone to follow terrain.
- DRONEE control software supports the continuation of the flight from the same point of a previous paused.
- Perform linear and circular landing and also has the capacity to adjust the landing route according to the wind direction, even in case of severe wind speed.
- Dronee utilizes the internet mapping 3D visualization in order to create flight mission that allow dronee to follow the terrain.

### CAPTURE

#### User switchable cameras

#### **RGB** Camera

With 1 inch sensor size It captures amazingly sharp aerial RGB images, across a range of light conditions, allowing you to produce highly detailed, orthomosaics and highly precise digital surface models.

Multispectral Camera DroneePLANE fully supports multispectral camera for agriculture applications.

#### Technical features

Resolution: 21.0 MP

Sensor size: 1.0-type (13.2mm x 8.8mm)

Exmor RS™ CMOS sensor

Aspect ratio: 3:2 Image format: JPEG

#### Technical features

- 16 MP RGB camera

- 4 SEPARATE BANDS

\*Green (550 BP 40)

\* Red (660 BP 40)

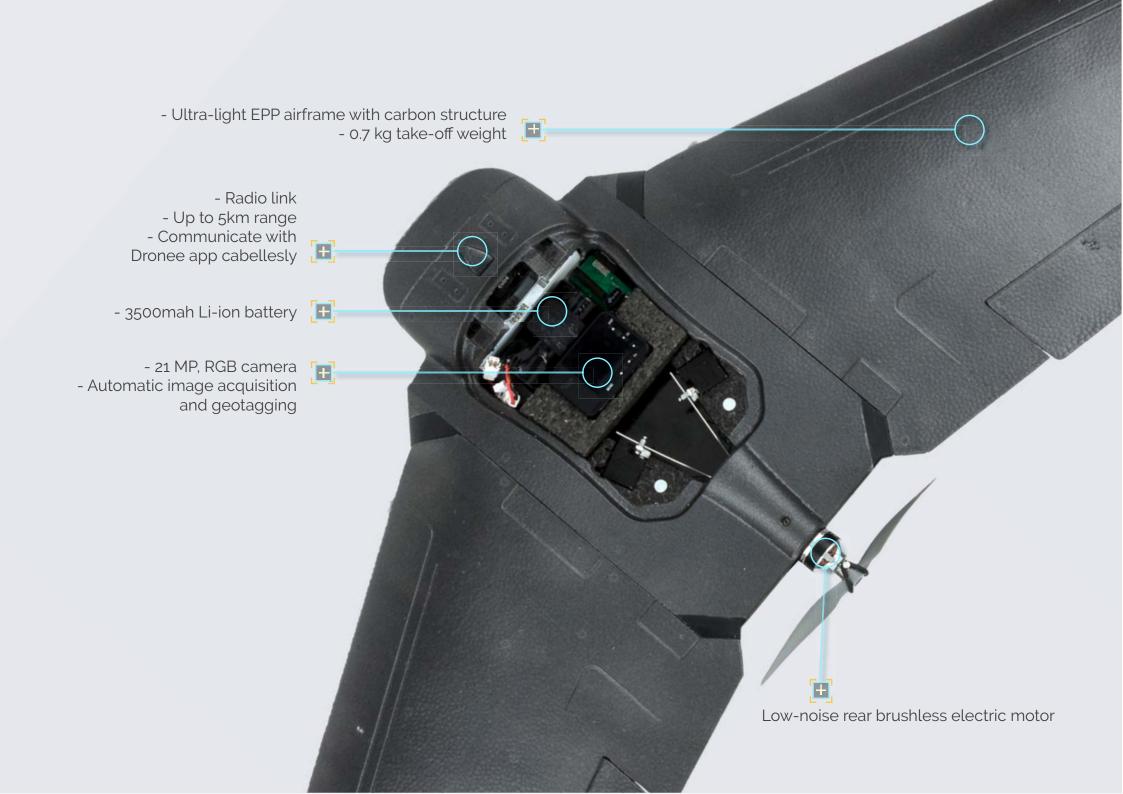
\* Red Edge (735 BP 10)

\* Near infrared (790 BP 40)

- 1 Multispectral sensor

- 1 Sunshine sensor

- 1 Calibration Target



### TECHNICAL SPECIFICATIONS

Weight: 0.5kg

Payload capacity: 0.18 kg

Wingspan: 90cm

Material: EPP foam and carbon structure

Detachable wings: YES

Propulsion: low-noise brushless electric motor

Carry case dimension: 40 x 43 x 30 cm

Camera: RGB (21 MP), multispectral and thermal optional

Battery: 3500 mah Lithium battery

### SOFTWARE

Flight planning & control software: DroneeCockpit

Image processing software (optional): Agisoft, Pix4Dmapper, DroneDeploy

Built-in air speed sensor type Pitot (software calculated)

Internal INS (internal navigation system)

## FLIGHT CHARACTERISTICS

Maximum flight time: 55 min, in ideal conditions <5m/s wind

Optimal Cruise speed: 40km/h - 110km/h

Radio link range: Up to 5km

Maximum coverage in single flight: 10km2 (1000ha)

Wind resistance: up to 12m/s(45 km/h)

Landing accuracy: +- 5m

Absolute horizontal/vertical accuracy (with RTK/PPK): down to 2.5 cm



# PACKAGE INCLUDES

- DroneePlane, complete drone
- Two lithium-ion battery packs for plane
- One lithium-ion battery packs for HUB
- Two Spare Propeller
- Charger
- Carry case with foam protection
- User manual
- DroneeCockpit App accessible via Apple Store



DRON.EE