

# Alpha CAM

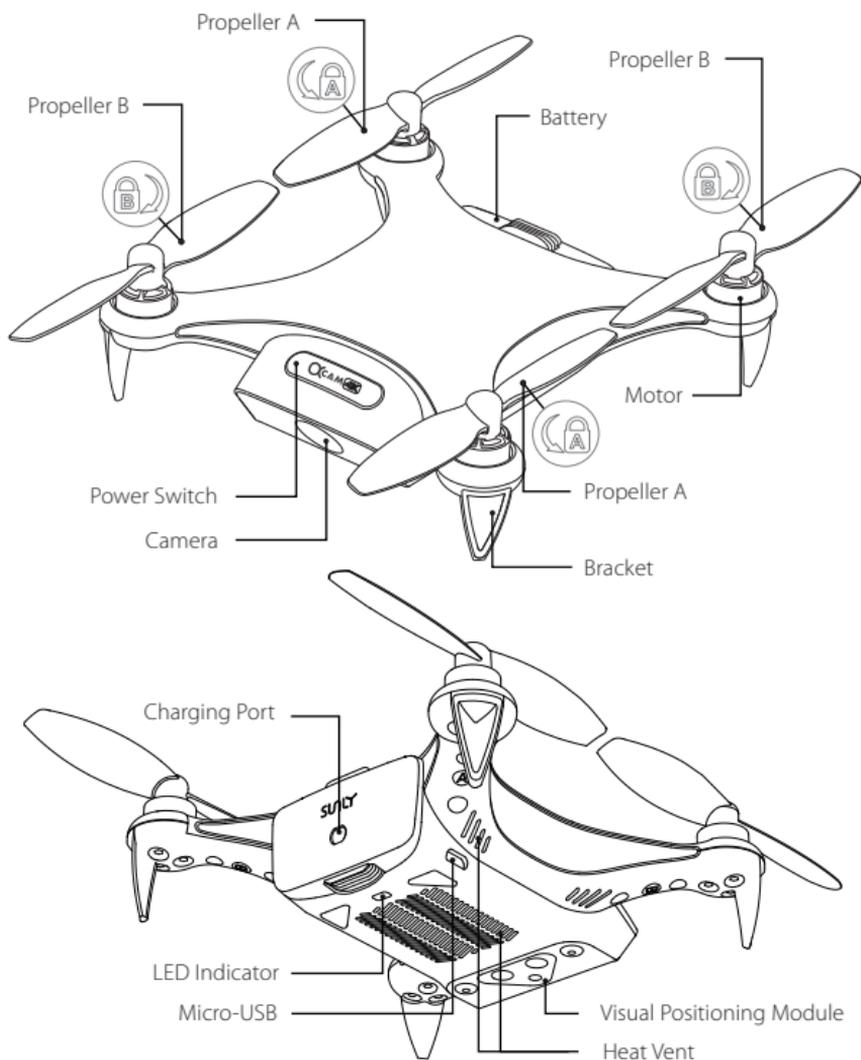
Quick Start Guide

V1.0

## Learn about Your Alpha CAM

The Alpha CAM is SUNLY TECH's portable smart mini drone that has been specially designed for selfie-lovers. It is equipped with a high-definition camera for 4K/@30fps and 1080P/@30fps video recording and 13 million pixels photo shooting. Download SUNLYFLY App (Android /iOS) to control Alpha CAM with your smart phone.

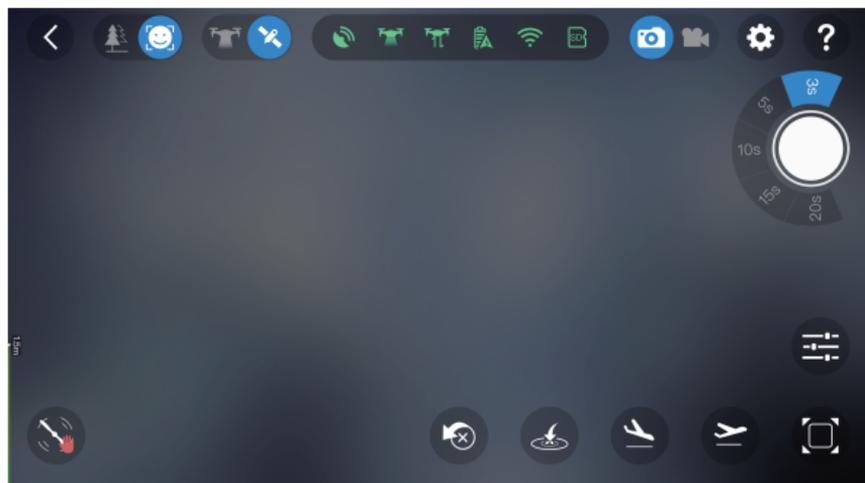
The following is the body structure of Alpha CAM:



## Learn about Your App

SUNLYFLY is a smartphone application developed for Alpha CAM. Users can use the SUNLY FLY App to control the flight and shooting instead of remote controller, and share the pictures directly to the social network.

### SUNLYFLY App Control Interface



	Back		Shooting Mode		Positioning Mode
	GPS		Visual Sensor		Altitude Sensor
	Battery Power		Wi-Fi		Memory Status
	Camera Mode		Settings		Help
	Camera Settings		Shutter/Delay		Video Recording
	Propellers Forced to Stop		Cancel Return/Landing		Return
	Landing		Take Off		Full Screen
	Altitude Status Bar				

For the specific use and meaning of the icons in SUNLYFLY App, please refer to "Alpha CAM User Manual" or the "Help" button on the flight interface of APP.

Visual positioning system is only as the auxiliary system. Bad environment or flying too fast will cause(the visual positioning system)unable to locate, please fly carefully.

## Use Your Alpha CAM

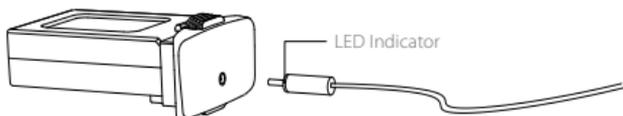
### 1、Download SUNLYFLY App

Before using this product, please go to APP store to download and install SUNLYFLY App.

 SUNLYFLY App requires Android 4.3 or above; iOS 8.0 or above.

### 3、Charging

Insert the original charging cable into the charging port of the battery. The LED indicator keeps on red when charging. It will turn to green when charging is completed. Unplug the cable when the LED turns to green.



### 4、Install Battery

Please note the front and back side of the battery to ensure that the battery is correctly inserted into the fuselage.



 The Logo font on the battery tail up shows battery installed correctly.

 About how to use the battery in a safe way, please see "Alpha CAM Disclaimer and Safety Guidelines".

### 5、Preparing to Take Off

To avoid any danger, please set up the protection ring before the flight.



 The working propellers may cause serious damage to the approaching objects, please keep more than 2 meters distance from the drone to ensure safety.

Before the flight, please place the drone horizontally on the ground and turn the tail of drone to yourself.



 Scenery Mode(default): the head of drone is camera direction; Selfie Mode: the tail of the drone is camera direction. Click  button in the "Shooting Mode" to adjust.

Reading tips:  Instruction  Warning

## A、Switch on/off The Drone

- Long press the power button until the power indicator light flashes to blue . After 15 seconds, the "beep" sound comes out. The drone is switched on successfully.
- Long press the power button until the power indicator light goes out. The drone turns off.

## B、Ready to Fly

Launch the App, click "Enter Device" button, follow the instructions into settings and connect Wi-Fi between the mobile device and the drone, then back to the homepage of App and enter control interface.



Default SSID: AlphaCAM-XXXX, password: sunlytech, it can be changed in Settings.

You can reset the password by click the power button 5 times after the drone is turned on.



The default Wi-Fi Frequency is 5.8GHz. You can switch it to 2.4 GHz by clicking the power button 3times after the drone is turned on.

## C、Compass Calibration

The drone is already calibrated in factory, Before the first flight, suggest to calibrate the compass again; otherwise the drone may not work properly and affect flight safety. Frequent calibration of the compass can improve the reliability of drone.



How to calibrate: Select "Calibration - Compass Calibration" in Settings of the upper right corner of the flight interface, you can start to calibrate referring to the prompts.

## 6、Fly



### Take Off

Click on the "Take Off" button at the bottom of the screen, slide to the right end, the drone will take off and rise to 0.6m altitude and hover.



### Landing

During the flight, click on the "Landing" button and slide to the right end. The drone will land in the place.



### Return

During the flight in GPS mode, click the "Return" button, slide to the right end, the drone will return to the point of departure.



### Propellers Forced to Stop

During the flight, such as in an emergency, you can click on the "Propellers Forced to Stop" button, the drone will force the propeller to stop working. With a certain risk and destructive, please use caution.



The returning drone will rise to the default return altitude of SUNLY FLY App (default return altitude is 10meters), please ensure no obstacle in returning route.



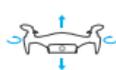
In the implementation of take off or landing or return operation, if the button does not slide to the end, the slider will be automatically hidden, the corresponding operation will be not executed.

## 7、Control Mode

### Touch Mode

Control the drone by clicking the operating button on the screen.

- The up/down button of the left side to control the drone rising/falling. The left/right button to control left/right rotation of the drone to adjust the flight course.
- The up/down button of the right side to control the drone forwards/backwards, and the left/right button to control left/right movement of the drone.

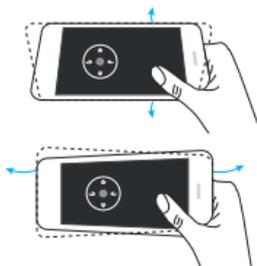


Touch mode is default operating mode, user can adjust the control mode in settings.

### Motion Mode

Use the gravity sensing system of mobile device to control the drone flying.

- Keep pressing on any point on the right side of the screen while tilting the mobile device forwards/backwards/rightwards/leftwards, to control the drone flying to the corresponding direction.
- Click the up/down button of operating lever on the left, to control the drone rising/falling, and the left/right button to control the left/right rotation of the drone to adjust the flight course.

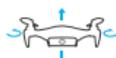


The operation sensitivity is different according to different mobile devices .

### Joystick mode

Control the drone by dragging the two joysticks on the screen.

- Drag the right joystick up/down, to control the drone forwards /backwards, and drag the joystick leftwards/rightwards, to control the left/right movement of drone .
- Drag the left joystick up/down, to control the drone rising/falling, and drag the joystick leftwards/rightwards, to control the left and right rotation of the drone to adjust the flight course.



In joystick mode, user can adjust the joystick function button in "Settings-Custom joystick" interface according to the user's needs.

## 8、 Shooting / Video Recording

Click the "Camera Mode"  button at the flight interface, to switch shooting or video recording.

**Delayed Shooting:** Long press the "delay"  button in the upper right corner of the flight interface to select the delay time.

**Shooting:** Click the "Shutter"  button at the flight interface. Each time you click will take one photo for default. User can modify the photo amount of continuous shooting in "Camera Settings" .

**Video recording:** Click the "Video Recording"  button to start recording. Click the "Stop Video Recording"  button to stop recording.

 To ensure the shooting quality, the rotation speed of the drone will be automatically reduced.

 In the Selfie-Mode, the default delay time is 3 seconds.

## 9、 Appendix Specifications

### Aircraft

Size:	128x128x43mm (Excluding the propellers)
Weight:	220g
Max. Flight duration:	20 minutes
Max. Using Altitude:	3000m
Max. Control Distance:	100m (In the open area without interference)
Wind Resistance Level:	28km/h
Positioning System:	GPS: GPS & GLONASS dual-mode satellite positioning Visual Mode: optical flow + Infrared (illumination > 15lux)
Hover Accuracy:	Vertical: +/-0.1m (Visual positioning); +/-0.5m (GPS) Horizontal: +/-0.3m (Visual positioning); +/-1.0m (GPS)
Wi-Fi Frequency:	2.4GHz; 5GHz (Default frequency)
Operating temperature:	0-45 C

### Camera

Image sensor:	SONY1/3.06 inch CMOS
Effective pixels:	13 Mega Pixels
Camera lens:	FOV90°; F/2.2
Photo Size:	4K
Video recording:	1080p@30fps after EIS on 4K@30fps
ISO range:	100-3200
EV range:	-12; -8; -4; 0; 4; 8; 12
Storage format:	JPEG/MP4
Storage capacity:	16GB (including system file)
USB interface type:	Micro-USB

### Battery

Rated capacity:	2000mAh
Rated energy:	15.2Wh
Nominal voltage:	7.6V
Battery type:	LiPo 2S
Operating temperature (charge & discharge):	5-40 C
Max. limited voltage:	8.7V

 "Alpha CAM Quick Start Guide" only contains basic operations. More functions please see "Alpha CAM User Manual" in the official website.

### App

App name:	SUNLYFLY
Image Transmission Resolution:	VGA
Delay:	160ms (Depends on actual environment and mobile device)
Supported mobile device OS:	Android 4.3 or above; iOS 8.0 or above

The instruction would be periodically updated.  
The latest information please see official website.



[www.sunlytech.com](http://www.sunlytech.com)