APOLLO

IDEAFLY

IdeaFly Apollo A1
(Generation 2)

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Front View

Without
Landing Gear
Pad

With Foam
Landing Gear Pad

Side View

Battery Housing

View from Behind

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IdeaFly Apollo Dimensions

FEATURES (IdeaFly Apollo):

- Cool Appearance and Convenient for Carrying: the portable, streamlined design reflects the aesthetics of its industrial design, while also allowing the Pilot to easily pack it into a backpack for transport.
- **Precise Hovering and Self-leveling with GPS:** IdeaFly Apollo has an integrated flight control system including compass and GPS that provide precise position hold, fail safe and semi-autopilot. The aircraft flies stably under the control of iFly, barometer and GPS.
- **Fail-Safe Mode:** If the Apollo loses the signal from the controller for any reason or reaches preset 100 meter high or 300 meter distance limits, the return to home feature will initialize. The aircraft will ascend to 18 meters, then make a straight-line course back to the home position specified during GPS calibration. Once home the Quadcopter will safely descend to the ground and power itself off.
- **2 Axis Stabilization Gimbal:** IdeaFly Apollo has an external adjustable gimbal designed for Boscam and GoPro cameras. Other similar light weight camera can also be mounted on the gimbal. Compared to those simple camera mounts that come with the kits made by other manufacturers, the gimbal on Apollo is controlled by the flight controller system and is self-leveling. A pilot can also tilt the camera to look up and down by turning the position on the transmitter. The Pilot conveniently capture flight footage for exciting POV shots.
- **2.4GHz Transmitter included:** IdeaFly Apollo contains a remote controller and receiver, which help the Pilot avoid the inconvenience of purchasing such things. The only thing needed to do is to add TX batteries (8 x AA dry cell or NiMH).
- **Stabilized Manual, Auto Hover, and Return to Home Modes:** The IdeaFly Apollo quadcopter has three different flight modes. The stabilized manual mode is semi-autopilot and a pilot has more control than other modes. In auto hover mode the quadcopter will stop as soon as you release the controls, and will stay hovering at a fixed horizontal and vertical position. This setting is the easiest to fly and is generally preferred for shooting video as the Quadcopter won't drift or be as susceptible to wind gusts. If return to home mode is trigged the aircraft will return the takeoff position automatically. To work Return to Home requires proper calibration and connection to more than four GPS satellites.
- **Low Voltage Protection :** The IdeaFly Apollo offers two levels of low voltage protection, a function of the iFly autopilot system. It prevents your multi-rotor from crashing or other harmful consequences caused by low battery voltage. In the first level of protection, the LED indicator blinks red to warn the Pilot. In the second level protection the system will trigger the aircraft to land automatically.
- **High-Intensity LED Indicators:** LED status light on quadcopter provides with various kinds of feedback and warnings. Colors alternate between red, blue and purple and can either be flashing or solid. These messages give to the Pilot valuable information such as whether the GPS is properly calibrated.
- **Battery Supports** 10 to 12 Minutes of Flight Time: With a Glacier 30C 2200mAh 3S Li-po Apollo can achieve a flying time of 10 to 12 minutes, which will gives to the Pilot a more extensive flight experience and longer recording sessions.
- **Free Software:** The product comes with a mini DVD that contains flight controller setup software, product manuals and introduction videos.

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Front View highlighting the **Gimbal** at the Bottom (Belly).
See details on next page.

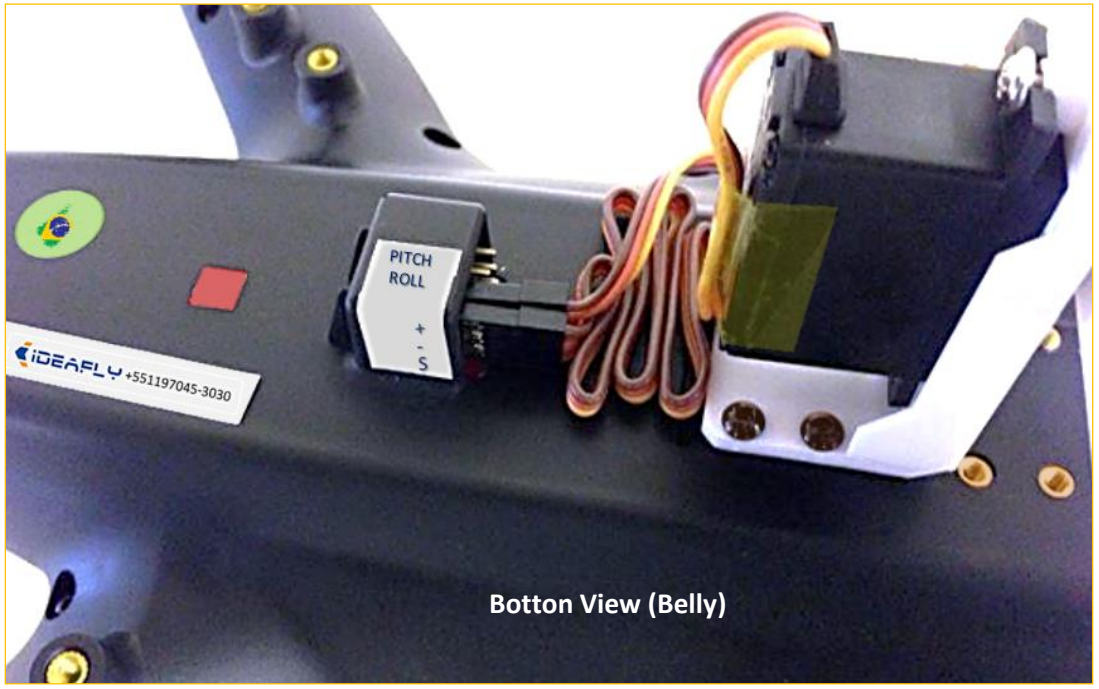
FEATURES (IdeaFly Apollo):

- Ready to Fly quadcopter. Install Landing Gears and battery.
- Equipped with IFLY-C6W controller and USB interface.
- Precise Hovering and Self-leveling guided by onboard GPS.
- Integrated 5.8G Wireless Image technology on top version.
- Two-Axis Stabilization Gimbal GoPro cameras (top version).
- Highlighted LEDs for night flights.
- The IdeaFly Apollo quadcopter it is equipped with four low noise and high performance brushless motors.
- Failsafe with auto-return and Back Home landing.
- Low Voltage battery protection.

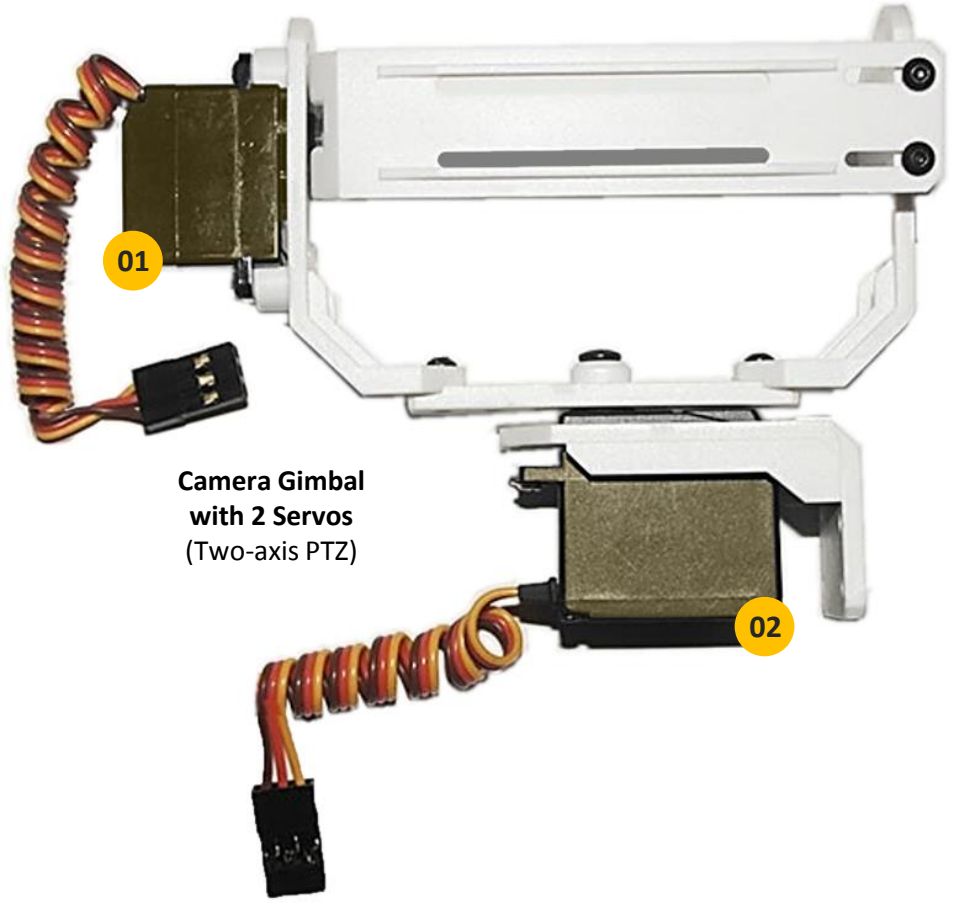
SPECIFICATIONS (IdeaFly Apollo):

- Dimensions: 28.0 cm x 31.0 cm.
- Motor to motor distance: 35.0 cm.
- Takeoff weight: lower than 1200 grams.
- GPS hovering: Vertical: ± 0.8 meter and Horizontal: ± 2.5 meters.
- Max Yaw angular velocity: 300 Degrees per second.
- Max tilt angle: 45 Degrees.
- Ascent/Descent speed: about 4 m/s.
- Max flight velocity: 5 m/s.
- Transmitter working frequency: 2.4 GHz.
- Live Video Transmitter frequency: 5.8 GHz.

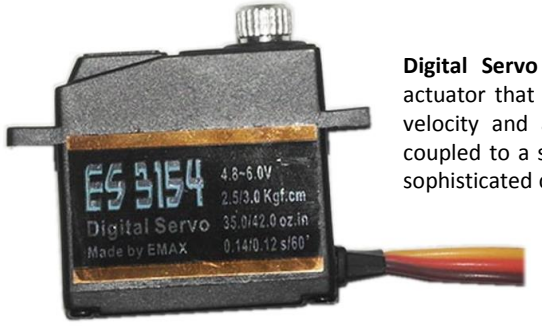
Front Left View



Botton View (Belly)



Camera Gimbal with 2 Servos
(Two-axis PTZ)



Digital Servo (IdeaFly Apollo): A servomotor is a rotary actuator that allows for precise control of angular position, velocity and acceleration. It consists of a suitable motor coupled to a sensor for position feedback. It also requires a sophisticated controller, often a dedicated module.

Servomotors are not a specific class of motor although the term servomotor is often used to refer to a motor suitable for use in a closed-loop control system.

Charger: Imax RC B3 Compact
Input voltage: AC 110V - 240V
Balance charge current: 850 mAh
Display: Green & Red LED
Max charge power: 10 Watts

Battery: IdeaFly 2200 mAh
11.1 Volts, 25C / 30C

Orientation LEDs

Back Lights

Front Lights

LEDs placed in the Drone's Arm

Motor: 980 Kv IdeaFly Apollo

IdeaFly Apollo Propulsion System

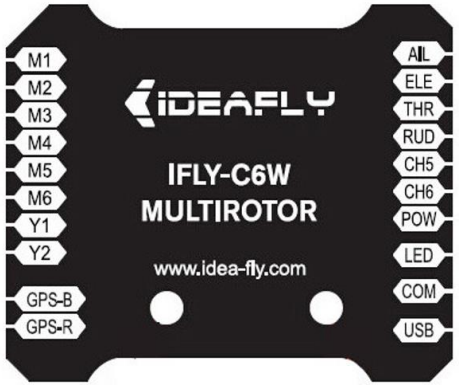
IdeaFly Apollo Landing Gear Foam Pad

Normal Height

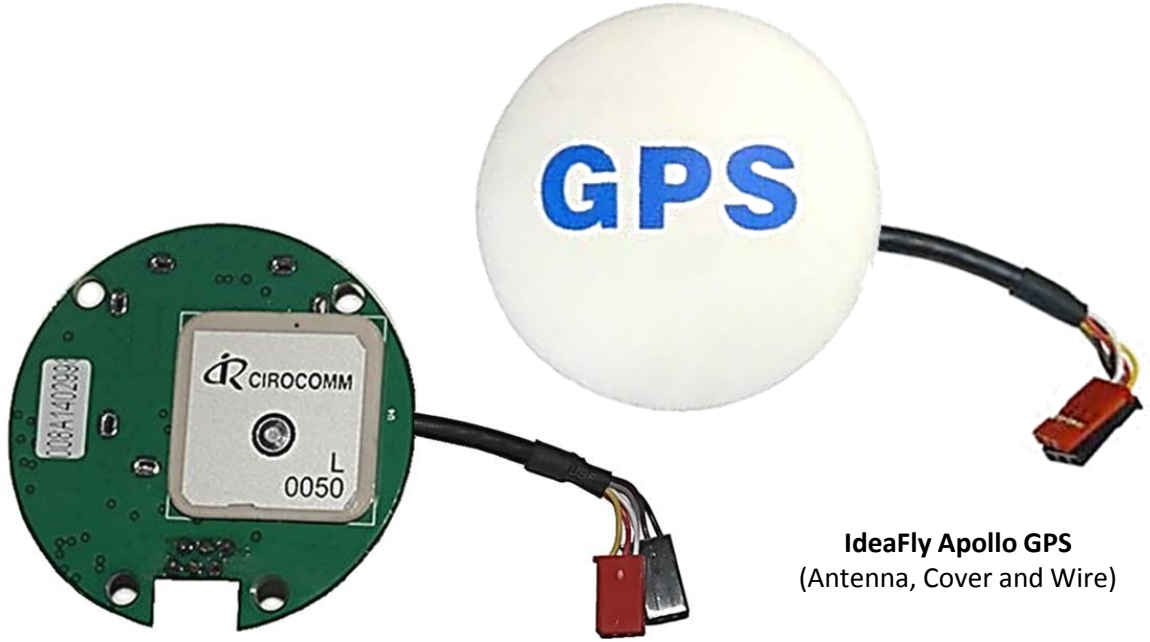
Extended Height

IdeaFly Apollo Reinforced Propellers

C6W Flight Control System
(AdeaFly Apollo)

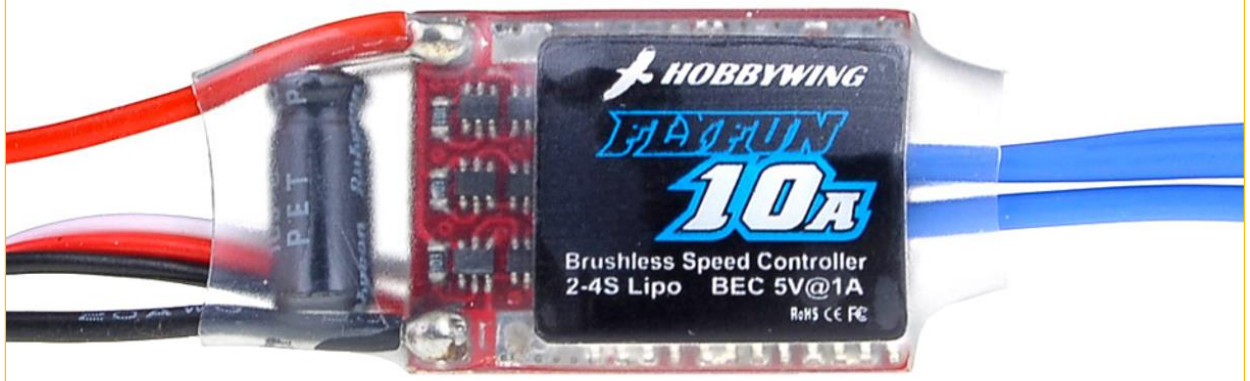


Receiver (IdeaFly Apollo)



IdeaFly Apollo GPS
(Antenna, Cover and Wire)

ESC – Electronic Speed Controller
IdeaFly Apollo



IdeaFly Apollo A1 Transmitter

(Generation 2)