

TOP CAMERA DRONES

Best buys for aerial
videography
and photography

BY TEAM PHOTODRONE

From the very start, the combination of digital camera and rotor drones has been a match made in heaven. For years, people have been trying to get bird's-eye views with their sports cameras, and now, it's easier than ever to get those high-quality, one-of-a-kind airborne shots. Our editors have reviewed many rotor-drone products, and these top 10 camera drones have a lot to offer. Whether you shoot video or are looking for unique digital stills, you'll get professional results with one of these picks.

Blade 350 QX3 AP Combo

The Blade 350 QX3 AP Combo is a combination of high-end, high-quality construction, with enhanced flight modes and SAFE technology, all decked out with the included underslung CGO2 GB three-axis stabilization gimbal. The included Spektrum DX4 2.4GHz transmitter is a full-range DSMX compatible radio system. The DX4 features spring-loaded control sticks (including throttle control) to make controlling the 350 QX3 incredibly pilot-friendly.

You don't have to hunt for the proper power setting to establish a stable hover: Just move the spring-loaded throttle stick forward to climb or pull it back to descend. When the throttle stick is released, it snaps back to neutral and the 350 QX3 automatically holds altitude. The same goes for the stick control right. Once you position the quadcopter where you want it, just let go of the sticks, the SAFE (Sensor Assisted Flight Envelope) stabilizing system makes the 350 QX3 hold its position until you want to fly it somewhere else. It comes with spare rotor blades, a 3000mAh LiPo flight battery, and a charger with an AC adapter.

The Blade 350 QX3 AP Combo provides several flight modes as well as self-leveling, GPS navigation, and built-in sensors to precisely control the quad's hover position, and a return-home mode. bladehells.com

WE LIKE:

- Complete packaging
- Excellent flight stability and response
- Easy to set up and operate

This 355mm quadcopter weighs in at 33.7 oz. and comes with everything you need to get airborne. With an impressive list of features and a price tag of \$799.99, the 350 QX3 AP Combo is an excellent value.



Blade Chroma 4K Camera Drone

The Chroma 4K is a great way to get into true high-def aerial photography. With its 4K capable CGO3 camera, the Blade Chroma 4K camera drone offers excellent flight and camera control in an all-in-one package. Replacing the older CGO2 1080p/60 camera, the CGO3 4K/30fps ultra HD video camera, which can also record in 1080p/120fps slow-motion video, is equipped with a no-distortion lens. The camera can shoot 12-megapixel still images, and combined with the three-axis stabilization gimbal into a single unit, the CGO3 camera makes all the difference for capturing rock-steady aerial video and still photos with fine professional-grade detail. And all the camera controls are incorporated within the included ST-10+ controller/transmitter.

The Chroma 4K provides about 30 minutes of flight duration and its Advanced SAFE Plus technology makes the Chroma 4K very easy to fly and to hover. There are several flight settings including Smart mode for beginners, AP mode for experienced pilots, Autonomous Follow Me and Tracking modes, and a Return Home function. All are guided with the built-in GPS tracking. horizonhobby.com

WE LIKE:

- Easy setup
- Great flight stability
- Easy to control
- Excellent 4K video and photo quality

Weighing 45.9 oz., this 400mm quadcopter is a top-of-the-line camera drone and provides pro-level still photos and video. Priced at \$799.99, it provides a lot in a complete, easy-to-use package.





This impressive, cutting-edge 600mm quadcopter weighs 6.6 pounds and is very easy to use with intuitive controls. Priced at \$2,899.00, it is perfect for the serious user looking for professional results.

DJI Inspire 1

The Inspire 1 by DJI represents the next in a series of accessible all-in-one aerial video-production platforms. It comes with just about everything you need in a well-thought-out hard-shell carrying case, which has foam cutouts for all the items included and room for spares, like extra batteries. Unique to the DJI Inspire 1 is its vertical frame and landing-gear mounted propellers. The motors are mounted on the ends of the landing gear using an H-style configuration. Once you activate the landing gear, the landing gear are slowly pulled up with a jackscrew mechanism well out of the camera's line of sight. The propellers are color coded with silver and black tips so that you'll know which one fits on which motor.

The proprietary 4K camera and gimbal unit are capable of capturing stunning 30fps in 4K or up to 60fps footage in HD. The DJI Pilot App can have a bit of a lag especially in some Wi-Fi-saturated areas.

The transmitter's DJI Lightbridge telemetry and HD wireless transmission system provide HDMI ports to view video on an external monitor, and USB ports allow you to connect your compatible handheld device for video and telemetry viewing. dji.com

WE LIKE:

- Capable 4K camera and gimbal
- Newest-generation stabilization system
- 15-minute flight times



The Phantom 3 is a complete package and includes everything you need. The 590mm quadcopter weighs 45.15 oz. and is priced at \$999.00 for the Advanced version. A Pro version is available for \$1,259.00.

DJI Phantom 3

Available in Advanced and Pro versions, the key difference is the quality of camera resolution: The Advanced shoots at 1080p and the Pro shoots at 4K. The Phantom 3 comes completely assembled and just requires charging the batteries and attaching the props. The GPS positioning is very solid, and if you fly into a GPS-free area (indoors), a vision-positioning system underneath the aircraft uses both visual and ultrasonic sensors to maintain its position. Flying from inside to outside is seamless, and you can even set up a GPS-enabled "Geo-fence" that keeps the aircraft flying within a given distance and altitude.

The included Sony Exmor camera is attached to a three-axis gimbal that provides great video stabilization and can be vertically adjusted by the transmitter. Live HD real-time viewing is possible with a tablet or smartphone attached to the transmitter using DJI's built-in Lightbridge technology. A downloadable app also provides easy-to-use controls for the camera and quad. The transmitter has all the controls needed for operating the quad and camera without the tablet or smartphone (but your flight experience and control is enhanced with them). A flight-modes switch, camera-control buttons and dials, along with customizable buttons allow you to make the transmitter intuitive and user-friendly. dji.com

WE LIKE:

- Ready to fly
- Comes with high-quality camera/gimbal installed
- Easy to fly and control
- Full camera control from the pilot app

DJI Phantom 4

As with its predecessor, the Phantom 4 features highly optimized electronics at its core and a fully integrated camera system. It comes preassembled and, after a summary firmware update and system check, will fly right out of the box. Although it is intended for intermediate to professional pilots, anybody could fly the Phantom 4 with ease. It comes with a radio, a single battery and charger, two sets of propellers, a 16GB micro-SD memory card, and accessories. DJI's premium kit comes with two extra batteries and a backpack. The included lens-cap/gimbal-holder clip is both useful and practical.

The Phantom 4 comes in a compact, reusable, stiff foam package with a handle and a latch that serves as a practical carrying case, large enough to carry the aircraft with three batteries, the radio, and a few spare propellers and accessories. You will need an Android or Apple phone or tablet to display the video (FPV) with on-screen display. This screen is required for every aspect of the drone's configuration and calibration. Check that your device has enough computing muscle to handle the Lightbridge digital HD video feed. A list of recommended phones and tablets are on the DJI website. dji.com

WE LIKE:

- Unprecedented smooth flying
- "Sport" mode
- Long flight times
- One-tap automatic follow mode



Able to automatically avoid obstacles, the Phantom 4 is a complete package, including everything you need. The 590mm quadcopter weighs 49.3 oz. The basic version costs \$1,399.00, and the premium (which includes two extra batteries and a backpack) is \$2,066.00.

3D Robotics Solo

The 3D Robotics Solo is a 450-class quadcopter designed around the GoPro HERO4 action camera. It has a distinctive and durable molded plastic body and features a live HD video stream to a mobile device mounted on the controller. The 1GHz computers in both the copter and transmitter work with the flight controller to make the Solo smooth and easy to fly for everyone, from beginners to accomplished pilots.

The Solo comes fully assembled, with everything needed for flight. A GoPro Frame camera mount comes installed. The only assembly required is to screw the propellers onto the motors and mount a GoPro camera. After installing the Solo app, mount an iOS or Android phone or small tablet into the mount on the controller, charge and install the battery, and you're good to go.

The controller is well designed and comfortable to hold. It has a bright, colorful display for in-flight data and camera information, with two gimbal controls on the top corners. Below the joysticks, a row of buttons includes the user-definable A/B buttons, power on/off, the auto takeoff and land "fly" button, a return-to-home button, and a pause button. The Solo app is available on both Google Play for Android and at the iOS App Store. 3dr.com

WE LIKE:

- Durable design
- In-flight GoPro control
- Smart Shots
- Outstanding customer support



A 415mm modern-looking quadcopter, the Solo weighs 63 oz. with the camera and gimbal. Powered by 880Kv motors, the Solo is priced at \$1,399.00 (with three-axis gimbal) and \$999.95 (with GoPro Frame mount).



This impressive 650mm quadcopter weighs 8.1 lb. and features retractable landing skids. Ideal for intermediate to expert pilots, it comes with a power system (\$999.00) or without (\$699.00).

TTRobotix Super Hornet X650

This larger quad is perfectly suited for video photography. Its large carbon-fiber booms coupled with its sizable frame plate can accommodate a number of add-on components. Designed for intermediate to expert pilots, it requires some assembly: the motors, speed controls, arms, and retractable landing gear will all need to be attached and soldered to the frame plate. The TTRobotix website has a number of videos showing how to assemble the Super Hornet. This test/review used the Eagle Tree Systems Vector flight controller and the Morpheus three-axis camera gimbal. The motors, speed controls, and lights have to be assembled in each of the arms/booms before attaching them to the main frame. There is a fair amount of soldering involved with the main board.

The Super Hornet X650 is plenty big enough for add-on FPV, on-screen display equipment, receiver, GPS, and telemetry equipment installed on the main plate. ttrobotix.com

WE LIKE:

- Solid, well-designed frame
- Easy to customize
- Very smooth flight characteristics



This easy-to-fly 565mm quadcopter weighs 60 oz. and comes with two flight battery packs. The 4K camera provides professional results and is controlled with a smartphone app. The base price is \$1,299.00 and \$1,499.00 with aluminum case and extra battery.

Yuneec Typhoon Q500 4K

Based on the original Yuneec Typhoon Q500, the new Typhoon Q500 4K is an extremely nice-flying platform for pilots wanting to get into aerial videography. It comes completely assembled and includes two sets of blades, the CG03 4K three-axis gimbal camera, two battery packs, a flight case to hold everything, a ground station controller with touchscreen, a charger, and a SteadyGrip for handheld videos. Just charge the flight-pack and the ground-station batteries, spin on and hand-tighten the props, and you are good to go.

The linkup between the Typhoon and ground station is about the same as the original, but the relay image sent back to the ground station is of higher resolution. The screen is easy to see in the daylight without the use of the included sun shield. All the camera controls are done on the ground-station touchscreen, and the overlay display works well and seems to disappear from the screen during flight. The Wi-Fi delay is nominal, and the menu is intuitive and easy to follow. The flight time (20–25 minutes) per battery is great and gives the pilot time to acclimate to the flying area. yuneec.com

WE LIKE:

- Easy to fly
- 4K-resolution camera
- 20- to 25-minute flight times
- CG03 smartphone app

Yuneec Typhoon H

The Typhoon H from Yuneec requires minimal assembly time, most of the waiting time in the beginning is spent charging the battery pack (the flight pack and a spare are included). Everything you need to operate and get this bird ready to fly is included in the package. With the arms folded down, the Typhoon H is truly compact. Just click up the six arms into flying position and then attach the six props (they can only go on the correct motors). Finally, click the battery pack into place. Everything that needs to be installed for flight produces an audible click when locked in correctly. The body construction has a solid feel, and the foldable arms' locking mechanisms are rugged and well designed. The wire leads that snake through the arms are wrapped to prevent any damage and to increase durability.

The CG03+ 12-megapixel camera comes mounted on a three-axis, anti-vibration gimbal and provides stable 4K resolution video. With its no-distortion lens, the camera also produces full HD 1080p with slow motion. Everything, including the camera, is operated (while in flight) from the ST16 controller. Once the gear legs are retracted, the Typhoon H offers a full 360-degree view. yuneec.com

WE LIKE:

- Solid flight performance
- A ton of automated flight modes
- Great price for the quality
- Easy-to-understand menu system



This 520mm multirotor has brushless motors, propellers mounted on foldable booms, and retractable landing skids, and it weighs in at 4 lb. Priced at \$1,299.00, it comes with everything needed to fly, including CG03+ 12mp camera and the ST16 controller/transmitter.

Hubsan X4 Pro

The X4 Pro is a solidly constructed aircraft that comes completely assembled. The package includes everything you need to get this bird in the air. Everything comes assembled, including having the camera and gimbal attached. Also included are a 3-cell 7000mAh LiPo battery, along with a charger that works on the battery and transceiver, and the Hubsan touchscreen transceiver is easy to use. The included manuals give pilots all the preflight information needed. All you have to do is attach the props and charge the batteries.

The transceiver uses an Android operating system with a 7-inch touchscreen. A video jack allows for FPV goggles (not included). The dual-redundancy telemetry is displayed on an OLED screen, which is easy to navigate and use. Functions available include GPS coordinates, power and transmitter battery voltage, speed, distance from ground station, altitude, and receiver and video-feed signal strengths. GPS functions include waypoints, return-to-home, and position-hold functions. All the programming is compatible with Google maps, and you can save up to 32 separate waypoints, which are each adjustable. The X4 Pro will automatically return to home and land if the transmitter signal is lost or the voltage drops too low. hubsanx4pro.com

WE LIKE:

- Easy to fly
- Touchscreen transceiver (ground station)
- 1080p HD camera included and mounted
- Long flight times



This easy-to-fly 370mm quadcopter weighs in at 2.3 lb. and is loaded with features. Its controller includes a 7-inch touchscreen. Priced at \$1,499.99, it's compatible with Google Maps for waypoint navigation.