



## ***RUNNER 250***



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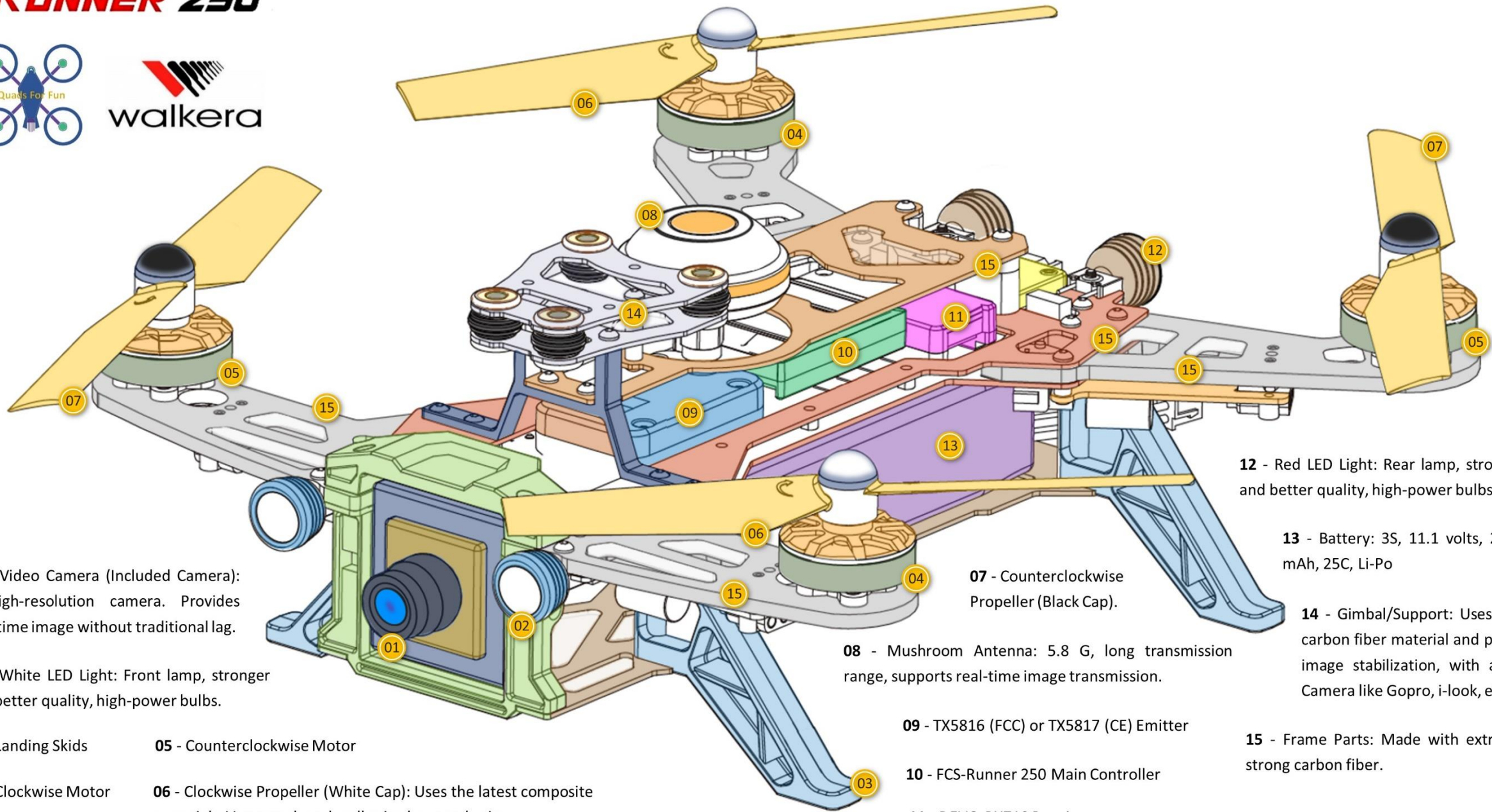
## ***RUNNER 250 ADVANCE***



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# RUNNER 250



**01 - Video Camera (Included Camera):**  
A high-resolution camera. Provides real-time image without traditional lag.

**02 - White LED Light:** Front lamp, stronger and better quality, high-power bulbs.

**03 - Landing Skids**

**04 - Clockwise Motor**

**05 - Counterclockwise Motor**

**06 - Clockwise Propeller (White Cap):** Uses the latest composite materials. Very tough and well suited to aerobatics.

**08 - Mushroom Antenna:** 5.8 G, long transmission range, supports real-time image transmission.

**09 - TX5816 (FCC) or TX5817 (CE) Emitter**

**10 - FCS-Runner 250 Main Controller**

**11 - DEVO-RX710 Receiver**

**12 - Red LED Light:** Rear lamp, stronger and better quality, high-power bulbs.

**13 - Battery:** 3S, 11.1 volts, 2200 mAh, 25C, Li-Po

**14 - Gimbal/Support:** Uses strong carbon fiber material and provides image stabilization, with a Sport Camera like Gopro, i-look, etc.

**15 - Frame Parts:** Made with extremely strong carbon fiber.

### **Walkera Runner 250**



Specifically designed for the FPV Racing fraternity.

The modular design of the Walkera Runner 250 allows the Pilot to change out race damaged components in a matter of minutes as you'll see at QuadsForFun Homepage.

The Speed controllers, flight controller, FPV Transmitter, receiver, OSD and LED Lights are designed to literally plug straight into the integrated printed distribution board meaning no soldering is required, making the Runner 250 super easy to build and repair.

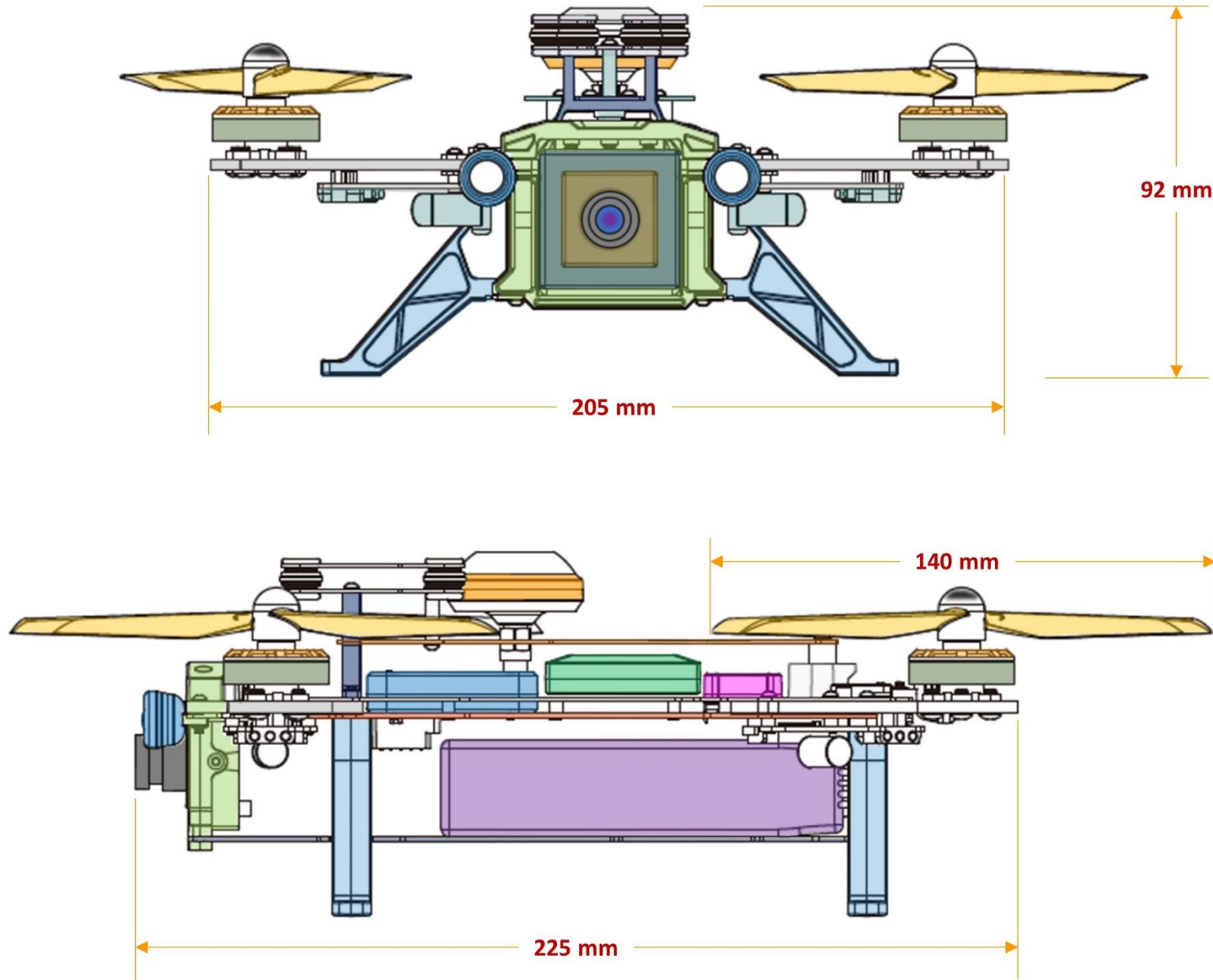
The full carbon fiber main frame of the Walkera Runner 250 is super compact and tough and can easily handle those inevitable collisions while the built in forward and rear LED lights help the Pilot with orientation when flying the Runner 250.

The onboard OSD module overlays the Pilot flight footage with available telemetry such as battery voltage and the Runner 250's tilt angle.

#### **FEATURES (Walkera Runner 250):**

- Built-in 5.8Ghz FPV Video transmitter;
- Built-in OSD Module (on screen display) to show to the Pilot, real-time flight data; Factory assembled, charge the battery and fly;
- Modular design for easy build and repair;
- Self tightening toughened composite propellers;
- Compact and strong carbon fiber main frame;
- Dampened camera mount platform;
- Front and rear LED lights (high-power bulbs);
- 12-14 mins flight time.

# RUNNER 250



## SPECIFICATIONS (Walkera Runner 250):

- Brand name: Walkera;
- Model NO.: Runner 250;
- Item type: Quadcopter;
- Material: Carbon Fiber;
- Controller mode: Mode 2;
- Channels: 7 Channels;
- Remote control frequency: 2.4GHz;
- Remote distance: 1000 meters;
- Suitable ages: Above 14 Years old;
- Main Rotor Diameter: 140 mm;
- Transmitter: DEVO F7/DEVO 7;
- Receiver: DEVO-RX710;
- Main Controller: FCS-RUNNER 250;
- Transmitter: TX5816(FCC)/TX5817(CE);
- Brushless Motor: WK-WS-28-014(CW/CCW);
- Brushless ESC: RUNNER 250;
- Battery: 11.1V 2200mAh 25C 3S Li-Po;
- Charging voltage: 110-240V;
- Charging time: About 120 minutes;
- Flight Time: 12 - 14 minutes;
- Item weight: 530 grams.



**RUNNER 250**



**RUNNER 250 VERSIONS (by Walkera)**

BNF (DIY)	MOTOR	ESC	RECEIVER	MAIN CONTROL	BOARD				
BASIC 1	RUNNER 250	DEVO 7	CHARGER	BATTERY					
BASIC 2	RUNNER 250	DEVO 7	CHARGER	BATTERY	IMAGE TRANSMISSION MODULE	CAMERA			
BASIC 3	RUNNER 250	DEVO 7	CHARGER	BATTERY	IMAGE TRANSMISSION MODULE	CAMERA	OSD		
FPV VERSION (RTF)	RUNNER 250	DEVO 7	CHARGER	BATTERY	IMAGE TRANSMISSION MODULE	OSD	Google 2	CAMERA	

SOURCE: [QuadsForFun Homepage](#)

THE PRODUCT ITEMS MAY VARY ACCORDING THE SUPPLIER BRAND. VERSIONS ABOVE ARE AVAILABLE AT WALKERA STORE

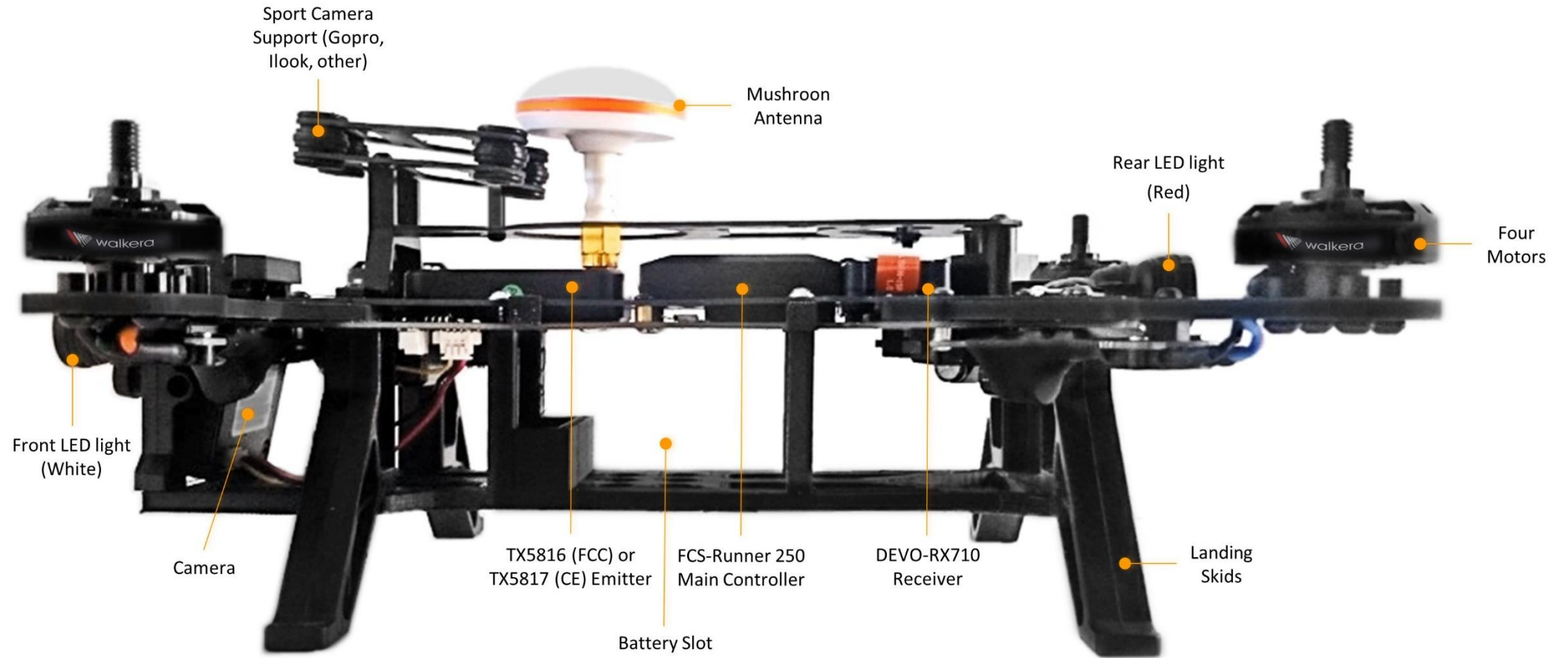
Front



Back



## Walkera Runner 250 (Lateral View)



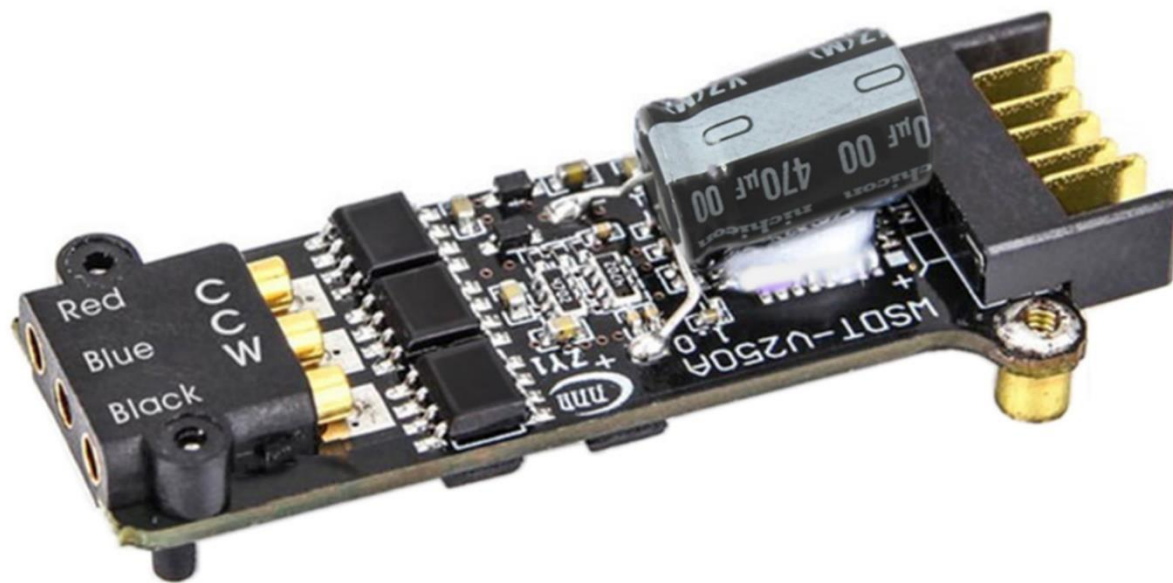
**RUNNER 250**







**ESC - Electronic Speed Controller (CCW/CW)**  
(Walkera Runner 250)



**CCW RUNNER 250-Z-16 & CCW RUNNER 250-Z-17**

**HD Mini Camera**  
(Walkera Runner 250)



Resolution: 800TVL (~720p HD)  
System Mode: PAL or NTSC  
Video Output: 1.0v-p/75Ω  
Power Input: DC 12V



**HM-RUNNER-250-Z-24**

**Mushroom Antenna**  
(Walkera Runner 250)



**Transmitter TX5816 5.8G 4CH**



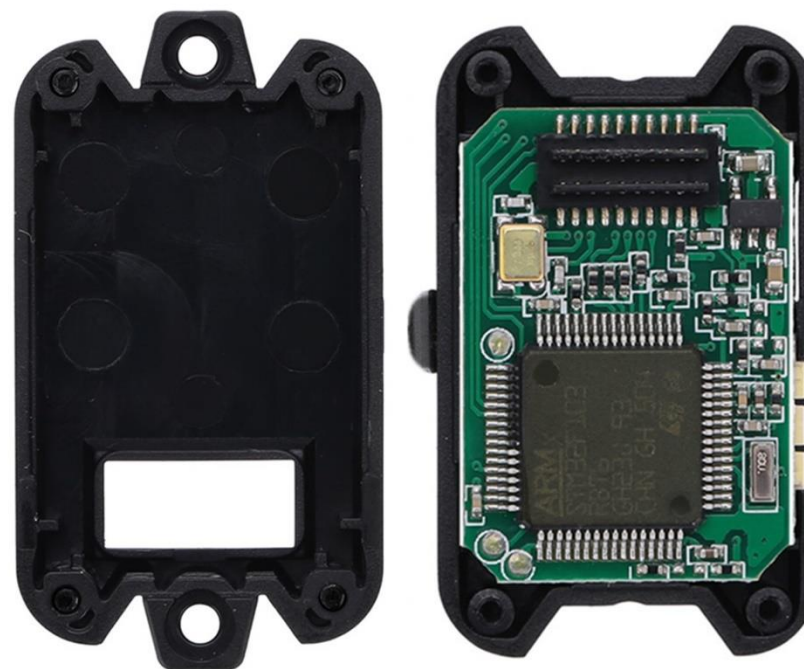
**RUNNER 250-Z-20**

**Transmitter TX5817 5.8G 8CH**



**RUNNER 250-Z-21**

**OSD Module**  
(Walkera Runner 250)



**RUNNER 250-Z-25**



**Brushless Motor 2100 kv**  
(Walkera Runner 250)



**RUNNER 250-Z-14 (CW) or RUNNER 250-Z-15 (CCW)**

**DEVO-RX710 Receiver**



**RUNNER 250-Z-18**

**Main Controller (Board)**



**RUNNER 250-Z-19**

**LED Lights**  
(Walkera Runner 250)



White LED Light



Red LED Light RUNNER 250-Z-22

White LED: RUNNER 250-Z-32

**Propeller Set CW & CCW (Blades)**



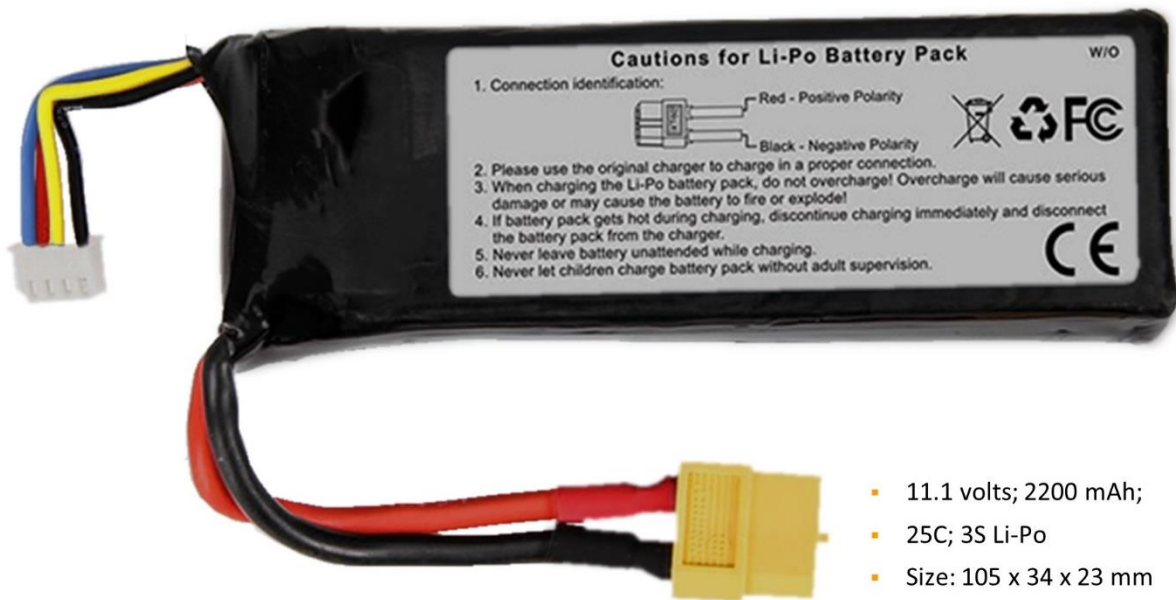
RUNNER 250-Z-01

**Buzzer**



RUNNER 250-Z-31

### Battery (Walkera Runner 250)



- 11.1 volts; 2200 mAh;
- 25C; 3S Li-Po
- Size: 105 x 34 x 23 mm

RUNNER 250-Z-26

### Damping Ball FPV Set



RUNNER 250-Z-08

### Power Board



RUNNER 250-Z-23

**Landing Skids (04 pieces)**  
(Walkera Runner 250)



**RUNNER 250-Z-09**

**Support Block**



**RUNNER-250-Z-10**

**Support Frame**  
(Walkera Runner 250)



**RUNNER 250-Z-12**

**Bottom Main Board**



**RUNNER 250-Z-03**

**Front Motor Fixed Plate**



**RUNNER 250-Z-04**

**Upper Main Board**



**RUNNER 250-Z-02**

**Fixed Block**  
(Walkera Runner 250)



**RUNNER 250-Z-11**

**Antenna Fixing Mount**



**RUNNER 250-Z-29**



**Velcro Strap**  
(Walkera Runner 250)



RUNNER 250-Z-27

**Battery Charger**  
(Walkera GA-005, 7.4V or 11.1V 2S / 3S)



HM-05#4-Z-23

**Battery Charger Connections**

**ESPECIFICATIONS:**

Walkera GA-005;  
For Li-ion/ Li-po battery: 2-3 cells;  
Input: 15.0 - 18.0 volts (1A);  
Output: 0.80A



Battery  
Charger



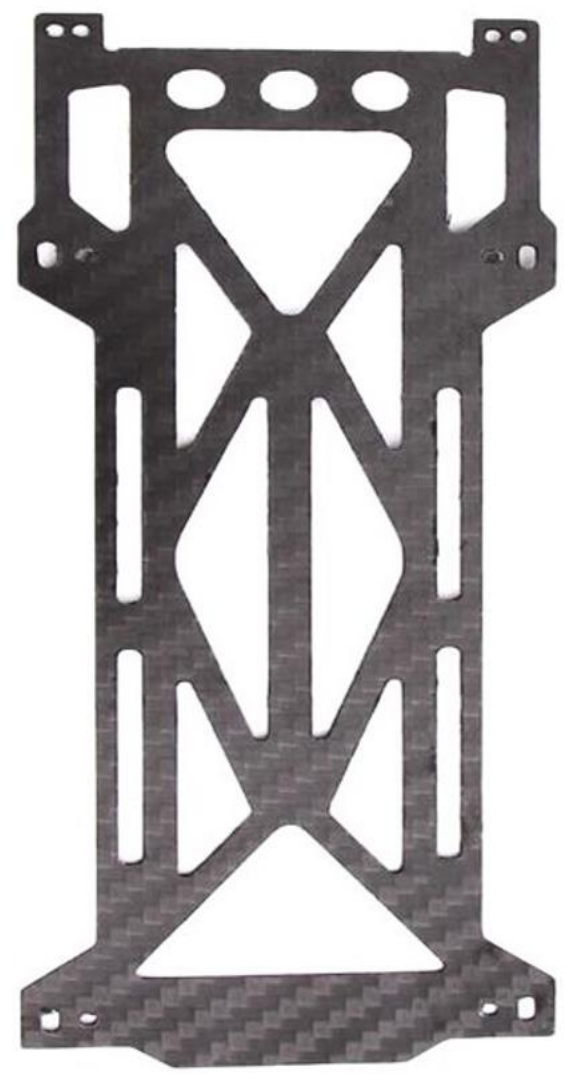
Battery

**Camera Fixed Plate (2 pieces)**  
(Walkera Runner 250)



**RUNNER 250-Z-07**

**Battery Fixed Plate**



**RUNNER 250-Z-06**

**Bottom Main Board**



**RUNNER 250-Z-03**

Screw Set



RUNNER 250-Z-13

Rear Motor Fixed Plate



RUNNER 250-Z-05

**RUNNER 250**

walkera



## DEVO-7

### DEVO 7 SPECIFICATION:

- Encoder: ARM micro computer system;
- Frequency: 2.4Ghz;
- Output Power: -5 dBm ~ 20 dBm;
- Battery: 1.2 Vx8 NiCard or 1.5 Vx8 AA Dry Batteries;
- Current Drain: ≤ 170 mA.

### DEVO 7 FEATURES:

- Quad-bearing Design: Improved quad-bearing design of the Radio sticks makes the control silky smooth;
- Adopts Core DEVO 12 Technology: Versatile functions and high performance;
- Two Model Types: Compatible with helicopters, planes and multirotors;
- Improved Programming: more mixes and better interface program MIX, MIX to Throttle;
- Long range;
- Seven-point Throttle Curve: For outstanding feel, control and reliability;
- Fifteen programmable model memory;
- Online Updatable Software: Enjoying the versatility keeping the transmitter updated and the convenience of copying model data online.

## Walkera Devention Goggle 2 FPV Glasses

(Also for Walkera Runner 250)



### FEATURES:

- 5.8G section channel receiver built in;
- Supports standard 0.7 Vp-p Video signal (compatible NTSC/PAL) input and output;
- Support VGA signal input, output;
- Support stereo audio signal input and output;
- Built-in head tracking;
- Image brightness and contrast can be adjusted;
- High-tech precision optical components, prevent visual fatigue;
- Human body engineering design: light and easy to carry and comfortable to wear.

### INCLUDED ITEMS:

- 1 x Google 2 glasses;
- 1 x Battery Box;
- 1 x Antenna;
- 1 x Mushroom Antenna;
- 1 x AV Wire;
- 1 x User Manual;
- 3 x Data Line (3 pieces)
- Secure Pack Box.



### INSERT HEAD TRACKING SYSTEM:

Press channel toggle switch vertically, move goggle 2 in horizontal, superior-inferior and left-right direction. Gimbal will follow these action accordingly.

### SPECIFICATIONS:

- Resolution: active array 3 x 640 x 480 pixels;
- Pixel Size: 14.1  $\mu\text{m}$  x 14.1  $\mu\text{m}$  (Color Dot Pitch);
- Project Size Display: 9.0 x 6.8 mm (Diagonal 1.12 mm);
- Virtual Image Size: 1.83 m (72 inch) far away;
- Field Angle (FOV): 32 degrees;

- Distance of the Exit Pupil: 30 mm;
- Adaptable Power Range: DC 7 to 12 volts;
- Size: 170.0 x 44.0 mm;
- Weight: 165 grams;
- Working Environment: 0° to 45°C;
- Storage Environment: -20° to 70 °C.



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RUNNER 250-Z-02 (Page 14)



RUNNER 250-Z-03 (Page 17)



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RUNNER 250-Z-14 CW (Page 10)



RUNNER 250-Z-15 CCW (Page 10)



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RUNNER 250-Z-17 CCW (Page 08)



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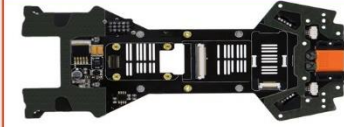
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Battery Anti-Slip Mat  
RUNNER 250-Z-30



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RUNNER 250-Z-32 (Page 11)



BACKPACK  
RUNNER 250-Z-32



WALKERA DEVENTION  
GOGGLE 2 FPV GLASSES



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RUNNER 250  
REVIEW SOURCE

<http://quadsforfun.wix.com/quadsforfun>

## **Runner 250 Advance**



**Walkera Runner 250 Advance**, as the name suggest, is the new version of Runner 250. It incorporates the use of GPS by market request, and yet retain the backpack quadcopter size of 250 mm. Adding GPS features to a racing quadcopter it looks maybe somehow inappropriate but, taking into consideration that the Walkera Runner 250 Advance has about 1000 meters flight range it is very nice to have a security tool in case the pilot can't find the way back.

It introduces the latest Walkera modular component design to make assembly fast, easy and upgradable. Something familiar for pilots, it brings functions such as Return to Home and GPS Altitude Hold. Upon Return to Home, the Runner will ascend to 15 meters from the ground to avoid hitting obstacles or maintain the same altitude if it is already above 15 meters.

Another highlight is the camera, capable handling low-light performance during sunsets or just street lights, which allows the Pilot to enjoy easy night flights. With the help of colorful LEDs and Turn lights indicators, night flying will be easier as never was!

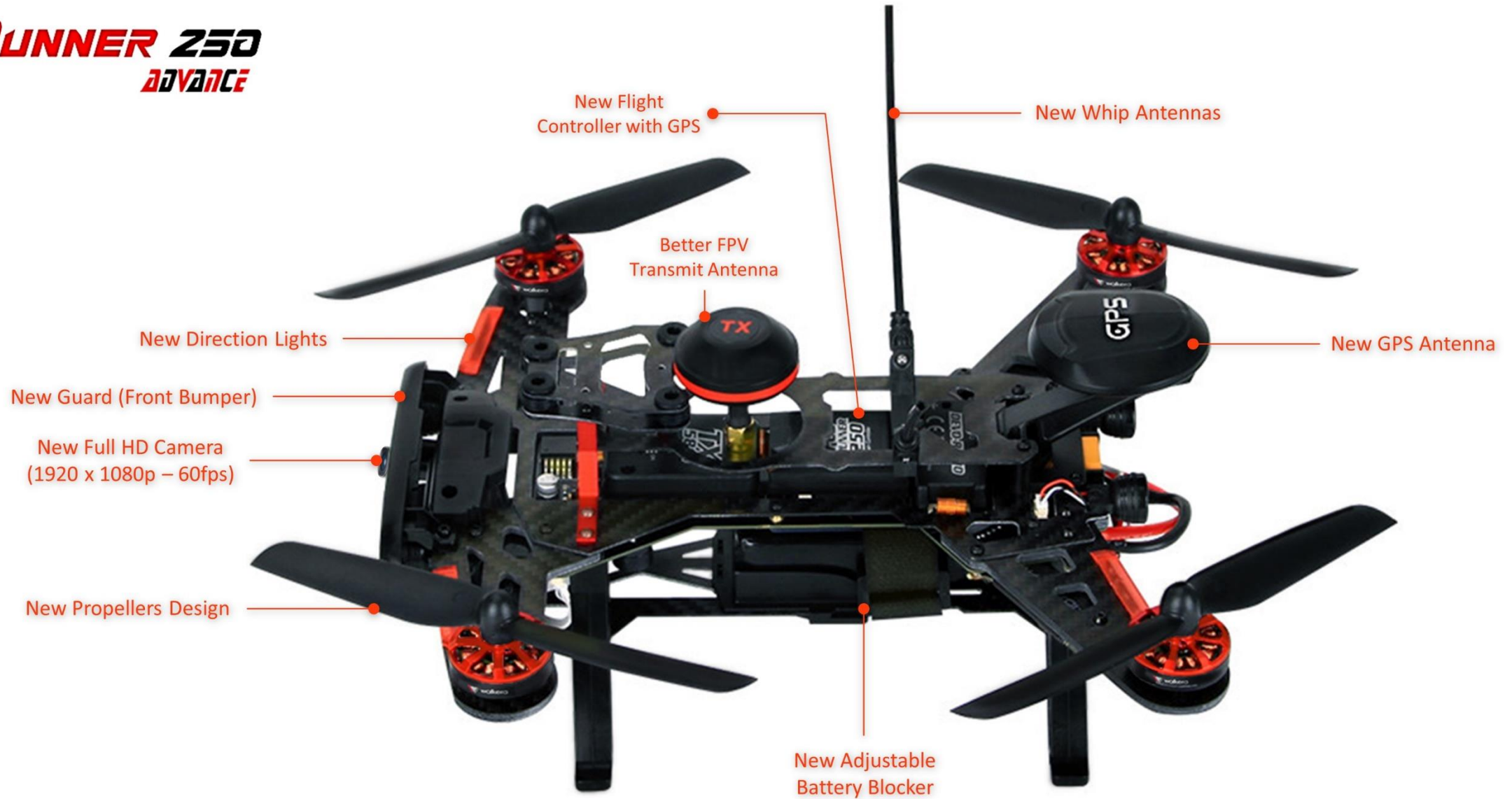
The specification of the camera is 12 million pixel, 1080p, 60fps.

The version with the telemetry data, the OSD displays flight modes, the Pilot position, home direction, yaw angle, battery status...to name a few.

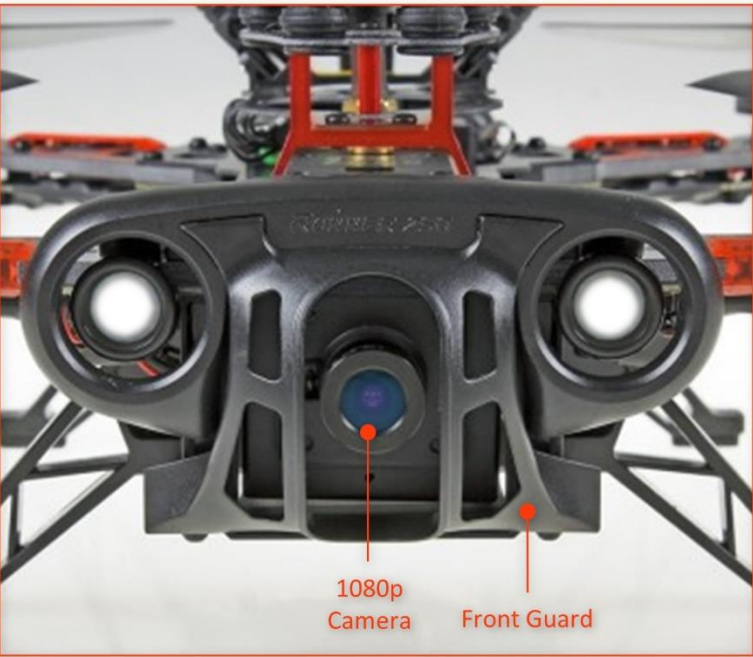
Carefully designed to the last detail, a buzzer alarm will sound if you lose a signal and it will assist the Pilot to locate the quadcopter.

What's New on Walkera Runner 250 Advance?

**RUNNER 250**  
**ADVANCE**







Quads For Fun

<http://quadsforfun.wix.com/quadsforfun>

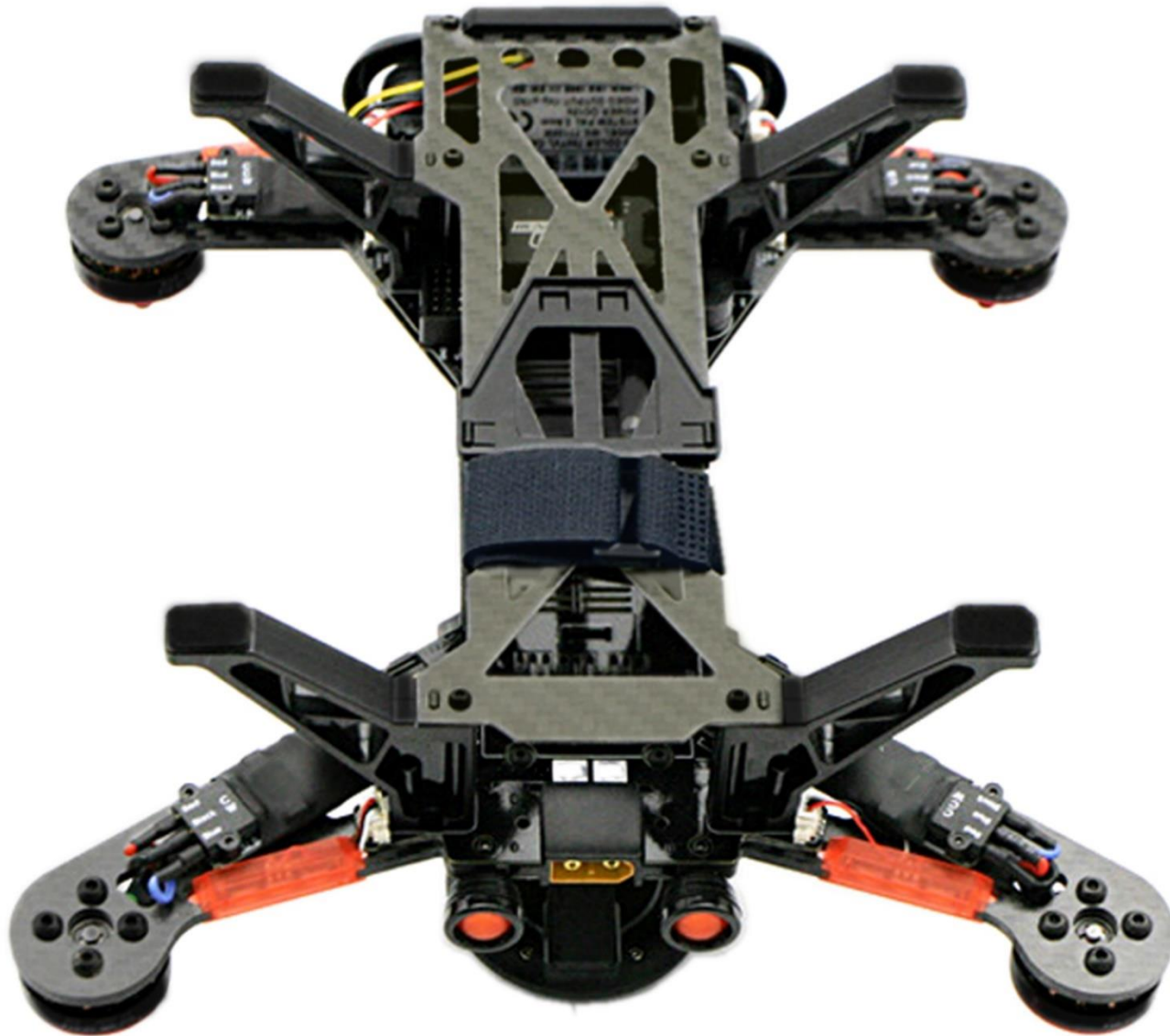
**RUNNER 250 ADVANCE**

# **Runner 250 Advance**

## **FEATURES:**

- Easy to upgrade and maintain modular design;
- Strong carbon fiber airframe;
- 5.8GHZ real-time image transmission;
- Telemetry – real time flight data transmission (battery level, flying altitude, etc.);
- Dual GPS positioning for high accuracy (GPS & CLONNAS);
- One key return to home;
- Easy to control even on high speeds;
- Intelligent direction lights;
- Loud alarm when the aircraft is out of the transmitter's range.





## Walkera Runner 250 Advance

### SPECIFICATIONS:

- Main Rotor Diameter: 143 mm;
- Overall (L x W x H): 236.0 x 205.0 x 102.0 mm;
- Weight: 446 grams (battery excluded);
- Remote Controller: DEVO F7 or DEVO 7;
- Receiver: DEVO-RX710 (R);
- Main Controller: FCS-RUNNER 250(R);
- Emitter: TX5816 (FCC) / TX581 (CE);
- OSD: Runner 250 OSD(R);
- Brushless Motor: WK-WS-28-014(CW/CCW);
- Brushless ESC: RUNNER 250
- Battery: 11.1V, 2200mAh, 25C, 3S, Li-Po;
- Flight Time: up to 11 minutes;
- Working Temperature: -10°C to +40°C.

**Attention:** Runner 250 Advance has different specifications when comparing to his brother Runner 250. Pay Attention.

***RUNNER 250 ADVANCE***

# ***RUNNER 250 ADVANCE***

**Walkera Runner 250 Advance**



## **CAMERA (1080p)**

- Video Resolution: 1920 x 1080, Full HD, 60 Fps;
- Micro SD Card: Max 64G;
- Video Format: MOV;
- Photo: 4000 x 3000 Pixels;
- Photo Format: JPG
- Power Input: DC 5V

**Walkera Runner 250**



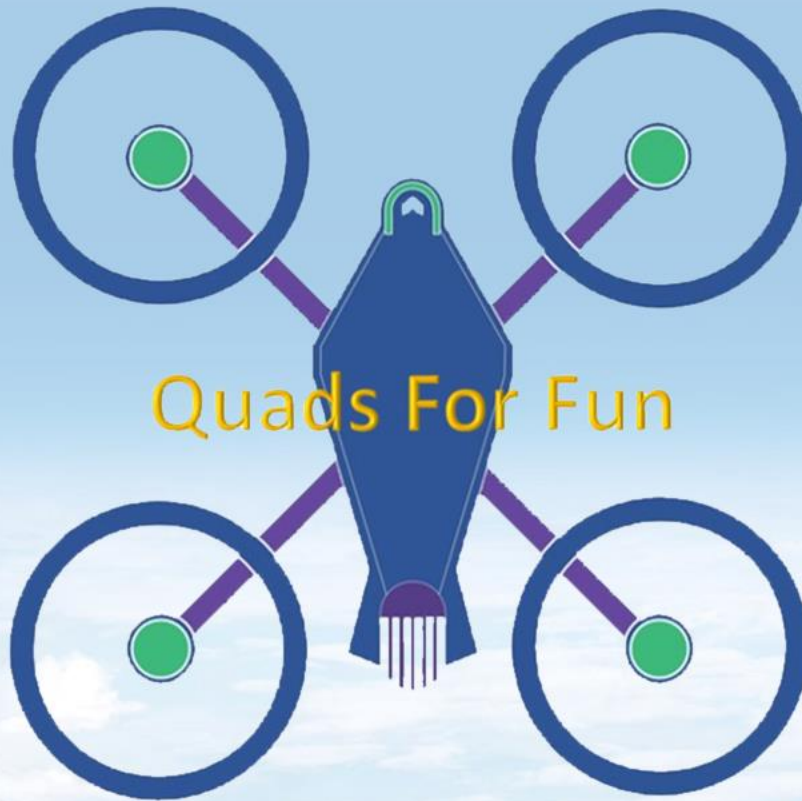
## **CAMERA (800 TVL)**

- Horizontal Resolution: 800 TVL;
- Resolution close to 720p HD;
- System Committee: PAL/NSTC;
- Video Output: 1.0 Vp-p/75  $\Omega$ ;
- Power Input: DC 12V.

***RUNNER 250***



***RUNNER 250 advance***



**Quads For Fun**

Walkera USA:

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

Walkera China:

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

(English Version Available)

QuadsForFun:

<http://quadsforfun.wix.com/quadsforfun>