

Name
slogan
Overview
Icon
1
2
3
Headline

1

2

3

4

**DUAL CA**

Overview

1

2

3

4

5

6

Overview

1

2

3

Overview

Overview

Overview

Headline

1

2

3

4

6

7

Overview

Overview

Overview

Weight (with propeller and battery)

Size

Max flight time

Operating temperature range

Wind Resistance

Hovering accuracy

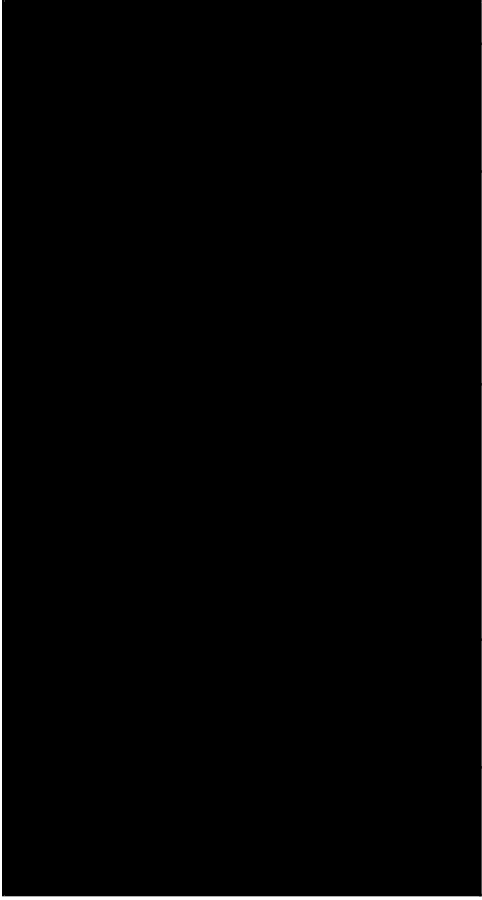
Single frequency high sensitivity  
GNSS

Multi-frequency multi-system  
high-precision RTK GNSS

Max Transmission Distance  
(unobstructed, free of  
interference)

Display screen

Operating time
Charging time
Internal Storage
Sensor
Lens
ISO range
Zoom
Maximum photo size
Photo mode





英文

## EVO II RTK Series V3

Unrivalled Accuracy and Control

### CENTIMETER-LEVEL POSITIONING

The EVO II RTK Series V3 integrates an entirely new RTK module for 2022, which provides real-time centimeter-level positioning data in three minutes and supports Post-Processing Kinematic (PPK). The aircraft can record the original satellite observation data, camera exposure parameters and more. The positioning system supports RTK base station and NTRIP RTK network, which helps to achieve accurate and stable data acquisition in complex operation environments.

- RTK Horizontal Positioning Accuracy: 1cm+1ppm
  - RTK Vertical Positioning Accuracy: 1.5cm+1ppm
  - 5cm\* absolute horizontal accuracy of photogrammetric models
- \*2.74 cm GSD when flying at 100 m height, Inertial Explorer for post processing

### No GCP Required

EVO II RTK Series V3 connects to NTRIP network and does not need GCPs to provide centimeter grade accuracy.

### 3rd Party Base Station Support

EVO II RTK Series V3 supports all NTRIP compatible base stations.

### Robust Partnerships

Pix4d  
DroneDeploy  
Propeller  
Skyebrowse  
SkyLine

### Autel Explorer for Mapping

### Advanced Feature Sets

- Create Rectangular or Polygon Missions
- Supports Double grid mapping for additional angles
- Non stop turning on corners saves time and battery life
- Customizable course headings to meet all user flight orientation requirements
- Have complete manual control over camera settings

### **Multi-NTRIP Profile Saving**

The Explorer app allows the user to create and save multiple NTRIP profiles for different locations without having to manually input account info every travel.

### **Multi-Battery Missions**

The EVO II RTK Series V3 returns to where it left off in multi-battery missions without starting from the beginning.

### **Photo Replication**

For repeatable data acquisition missions, you can record the drone's previous shooting positions. All the gimbals, camera, and aircraft movements will be replicated, thus producing a full record of the entire mission.

Replication 3

Replication 2

Replication 1

First shot

## **MERAS, ACCURATE TEMPERATURE MEASUREMENT**

The EVO II Dual 640T RTK V3 is equipped with a high-resolution thermal imaging camera and an all new Sony .8" 50 megapixel RYYB sensor.

### **High-Resolution Thermal Imaging Sensor**

The sensor features an industry leading 640\*512 high-definition thermal imaging resolution of 30hz.

### **Precise Temperature Measurement**

EVO II Dual 640T RTK V3 can accurately detect heat sources within a distance of 2-20 meters. By leveraging the compensation algorithm of infrared temperature measurement, the 640T RTK can regulate temperature deviations within 3 degrees Celsius.

### **New Image Processing Algorithm**

The V3 system uses a brand new image processing algorithm, making thermal imaging details sharper and more discernible than competition with the similar resolution and hardware.

### **30hz refreshrate for videogrammetry**

EVO II Dual 640T RTK V3 provides high refreshrates for accurate and detailed 3D thermal maps.

### **Zoom in for the Details**

Zoom in on critical areas with EVO II RTK 16x digital zoom that supports 4x lossless zoom.

### **Multiple Color Palettes**

White Hot | Cold and Hot | Rainbow | Enhanced Rainbow | Iron bow | Lava | Arctic | Searing | Gradation | Heat Detection

### **CAPTURE EVERY DETAIL**

EVO II Pro RTK V3 has high dynamic range and powerful low light performance, enabling users to capture clear detail sets with minimal distortion and noise.

### **1-inch Ultra-Sensitive Sensor**

EVO II Pro RTK V3 comes with a NEW updated 1-inch 6K CMOS image sensor with a maximum of 20 megapixels. Thanks to the ultra-sensitive algorithm, you can still shoot clean, detailed, low-noise data sets under twilight or night conditions.

### **F2.8~F11 Adjustable Aperture**

Adapt to lighting changes by adjusting the lens aperture size, giving the pilot more shutter speed control.

### **Optimized for Software Image Correction**

EVO II Pro RTK V3 has optimized its datasets to be easily adjusted with post processing software applications.

### **SkyLink 2.0 Video Transmission**

EVO II RTK Series V3 is upgraded with Autel's all new SkyLink 2.0 Video Transmission technology.

15KM: Fly farther with HD video transmission up to 15km.

QHD: Obtain critical details with QHD video within 1km.

2.4G/5.8G/900MHz: Support tri-band communication and can automatically frequency hop for maximum anti-interference capability

\*900MHz is only applicable for FCC contries.

### **360° Obstacle Avoidance**

Equipped with 19 groups of sensors including 12 visual sensors, the main camera, ultrasound, IMUs and other sensors enable building of three-dimensional maps and path planning in real time.

\*Please refer to the manual for details on obstacle avoidance and its limitations, which may or may not work in limited lighting environments, under direct strong sunlight, or across thin tree branches or wires.

### **Portable, Safe and Sturdy**

#### **Compact Design**

The EVO II RTK Series V3 folds up for ease of transport and deployment.

### **Trouble Free Daily Workflows**

The EVO II RTK Series V3 takes 45 seconds from launch to takeoff without fuss.

### **Lv 8 Wind Resistance**

EVO II RTK Series V3 's Smaller Cross Section and powerful motors allows greater stability and control in all windy conditions.

### **38 Minutes Flight Time**

Enjoy up to 38 minutes of flight time -- 20%~30% more than the next leading competitor for more area coverage and longer missions.

/

### **No Fly Zones**

EVO II RTK Series V3 does not have any no fly zones and will not prevent the pilot from taking off\*.

\*Please fly safely and consult your local laws and regulations. Autel Robotics is not liable for any unauthorized flights.

### **No Forced Updates**

EVO II RTK Series V3 does not need to be on the latest hardware or app version in order to take off unlike other competitors.

\* Understand that the warranty does not apply if the pilot is not on the latest app and firmware updates. APP and Firmware updates provide the latest feature and safety benefits to the pilot, fly at your own risk.

### **Autel Smart Controller V3**

Smart Controller V3's 7.9-inch, 2000nit high-brightness screen is clearly visible even under direct sunlight. SkyLink 2.0 Transmission technology guarantees long-distance operations from up to 15km away and enhances anti-interference abilities with triple band frequency hopping. The customized Android system allows for additional flexibility with 3rd party apps and an IP43 rating ensures all weather performance.

7.9-inch HD Touch Screen, 2000nit Maximum Brightness, 4.5-Hour Long Battery Life, -20°C to 40°C Operating Temperature, IP43 Resistance

### **Broadcast with Live Deck 2**

Broadcast live mission intel to other personnel in the operation for enhanced situational awareness and critical decision making. The EVO II Dual 640T V3 is compatible with Live Deck 2, which offers multiport streaming to monitors and Wifi support for multiple smart phones.

1080P/60FPS Video Stream; Three Auto-Switch Bands; 12km Transmission Range; 5-hr Battery Life; IP43 Resistance

### **Applications**

Powerline Inspection, Firefighting, Law Enforcement, Photogrammetry

### **Specifications**

#### **Aircraft**

2.73 lbs (1237g) EVO II PRO RTK V3

230\*130\*143mm (folded)

260\*355\*143mm (unfolded)

36 min (Windless environment)

14-104°F (-10-40°C)

Force 8 wind

When RTK is enabled and RTK works normally:

Vertical:  $\pm 0.1\text{m}$

Horizontal:  $\pm 0.1\text{m}$

RTK is not enabled:

Vertical:

$\pm 0.1\text{m}$  (with visual positioning in normal operation)

$\pm 0.5\text{m}$  (with GNSS in normal operation)

Horizontal:

$\pm 0.3\text{m}$  (with visual positioning in normal operation)

$\pm 1.5\text{m}$  (with GNSS in normal operation)

### **GNSS**

GPS + BeiDou+Galileo (Asian Region)

GPS + GLONASS + Galileo (Other Region)

Frequency points used:

GPS: L1/L2

GLONASS: L1/L2

BeiDou: B1/B2

Galileo:E1/E5

First positioning time: <50s

Positioning accuracy:

Vertical:  $1.5\text{cm} + 1\text{ppm}^*$  (RMS)

Horizontal:  $1\text{cm} + 1\text{ppm}$  (RMS)

\*1ppm means that the error increases by 1mm for every 1km of the aircraft moving

### **RC and Image Transmission**

FCC: 15km

CE: 8km

2048x1536 60fps

~3 hours (Max. Brightness)  
~4.5 hours (50% Brightness)

120 minutes

ROM 128GB

**EVO II Pro RTK V3 Camera**

1 inch CMOS; 20M pixels

FOV: 82°

35 mm format equivalent focal length: 29 mm

Aperture: f/2.8 - f/11

Focus range: 0.5 m to infinity

Video: 100-44000

Photo: 100-6400

1-16x (up to 3x lossless zoom)

5472\*3648 (3:2)

5472\*3076 (16:9)

3840\*2160 (16:9)

5472x3076P30/P25/P24

3840x2160P60/P50/P48/P30/P25/P24

2720x1528P60/P50/P48/P30/P25/P24

1920x1080P60/P50/P48/P30/P25/P24

