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EVO II RTK Series V3

Unrivaled Accuracy and Control



Centimeter-Level Positioning

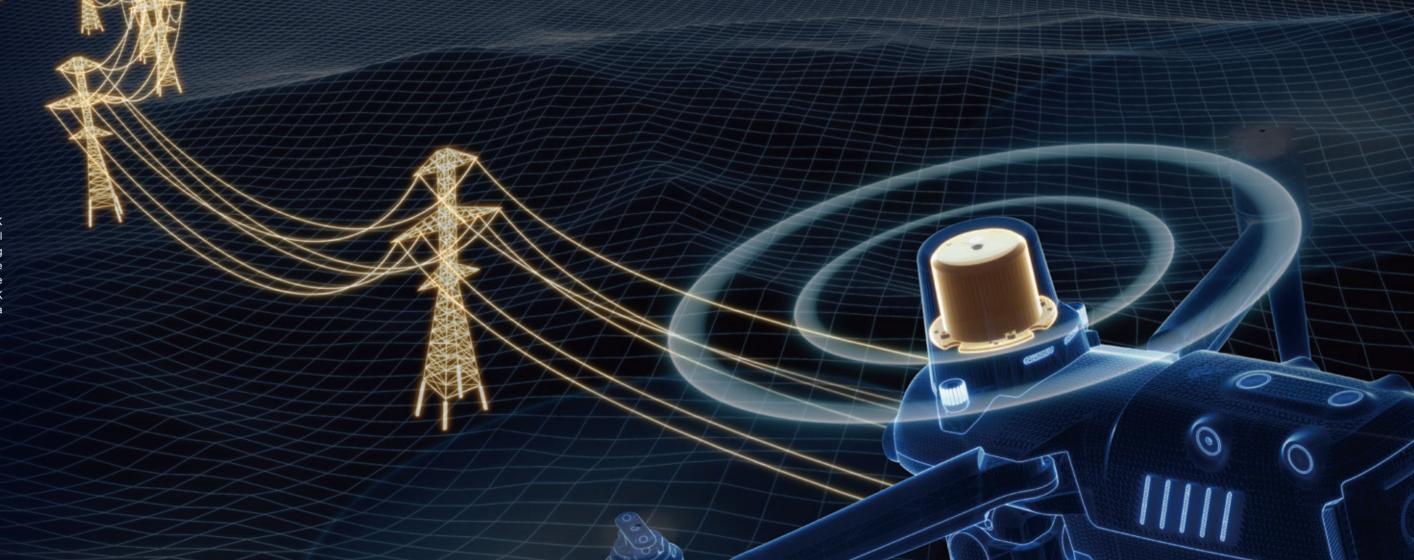
The EVO II RTK Series V3 integrates an entirely new RTK module for 2022, which provides real-time centimeter-level positioning data in three minutes and supports Post-Processing Kinematic (PPK). The aircraft can record the original satellite observation data, camera exposure parameters and more. The 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

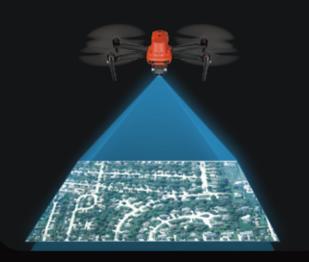


RTK Vertical Positioning
Accuracy: 1.5cm+1ppm



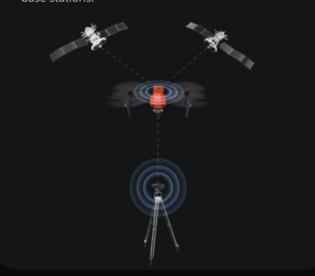
No GCP Required

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



3rd Party Base Station Support

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



Robust Partnerships











Autel Explorer for Mapping



Multi-NTRIP Profile Saving

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.



Multi-Battery Missions

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.



Advanced Feature Sets



Create Rectangular or Polygon Missions



Supports Double grid mapping for additional angles



Have complete manual control over camera settings



Non stop turning on corners saves time and battery life



Customizable course headings to meet orientation requirments







EVO II Pro RTK V3

Capture Every Detail

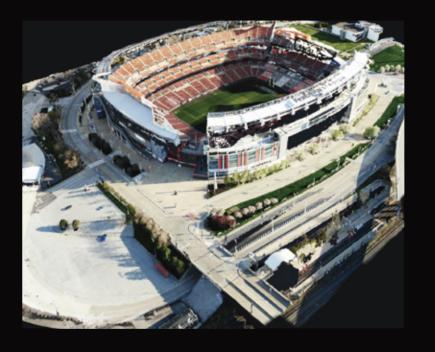
EVO II Pro RTK V3 has high dynamic range and powerful low light performance, enabling users to capture clear detail sets with minimal distortion and noise.

1-Inch Ultra-Sensitive Sensor

The 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.





Optomized for Software Image Correction

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

Zoom in for the Details

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

EVO II Dual 640T RTK V3

Dual Cameras, 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.

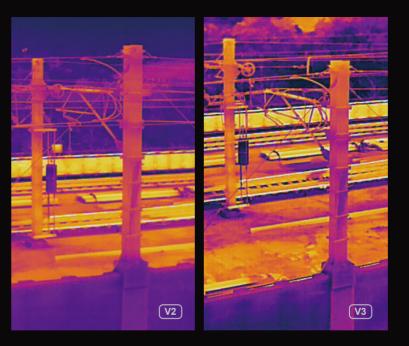
High-Resolution Thermal Imaging Sensor

The 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.

Precise Temperature Measurement

The 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.

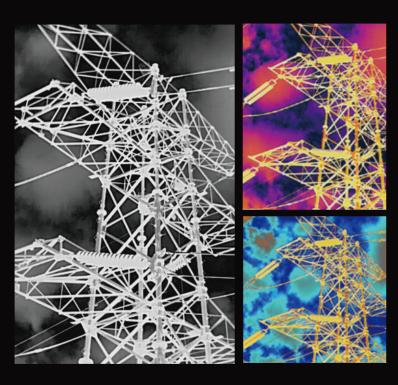
30hz Refreshrate for Videogrammetry

The EVO II RTK Dual 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



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 and Easy to Use



Compact Design

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



Trouble Free Daily Workflows

The EVO II 640T V3 takes 45 seconds from launch to takeoff without fuss.



Safe and Sturdy





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.



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.

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.



15km Transmission Range



Maximum 2000nit Brightness



4.5 Operating Hour

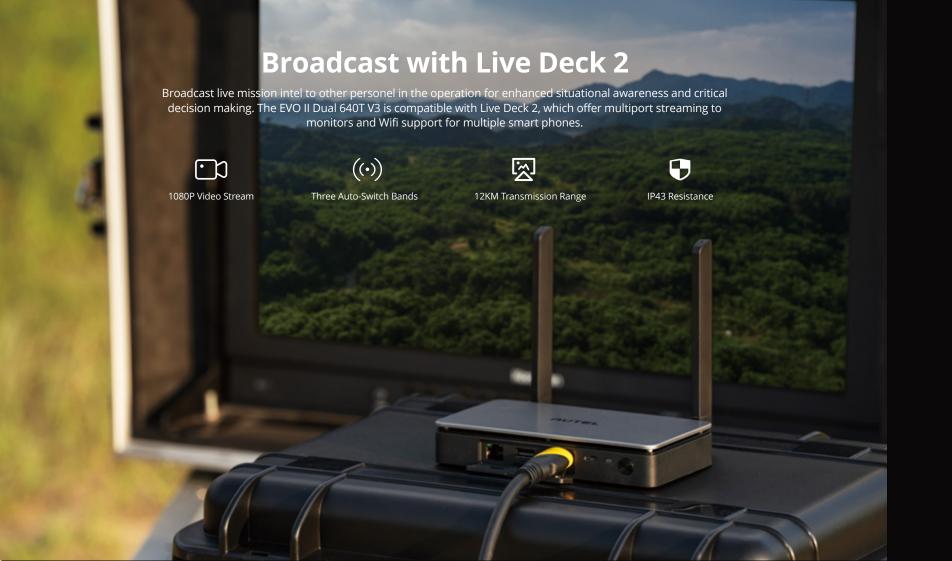


IP43 Resistance



^{**}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.





Applications









Specifications

Aircraft			
Weight (With Propeller and Battery)	2.75 lbs (1250g) EVO II DUAL 640T RTK V3 2.73 lbs (1237g) EVO II PRO RTK V3		
Size	230*130*143 mm (folded) 260*355*143 mm (unfolded)		
Max Flight Time	36 min		
Operating Tempera- ture Range	14-104°F (-10-40°C)		
Wind Resistance	Level 8		
	When RTK is enabled and works normally: Vertical: ± 0.1 m, Horizontal: ± 0.1 m RTK is not enabled: Vertical:		
Hovering Accuracy	±0.1 m (visual positioning), ±0.5 m (GNSS) Horizontal: ±0.3 m (visual positioning), ±1.5 m (GNSS)		
GNSS	GPS+BeiDou+Galileo (Asian Region) GPS+GLONASS+Galileo (Other Region)		

EVO II Dual 640T RTK V3 Visual Camera		
Sensor	1/1.28"(0.8") CMOS; 50M effective pixels	
Lens	FOV: 85° 35 mm format equivalent focal length: 23 mm Aperture: f/1.9 Focus range: 0.5 m to infinity (with auto focus)	
Zoom	1-16x (up to 4x lossless zoom)	

EVO II Dual 640T RTK V3 Thermal Camera		
Lens	FOV H33°V26°	
	Focal length 13mm	
Zoom	1-16x	
Wavelength Range	8~14µm	
Temperature Measurement Accuracy	±3°C or ±3% of reading (whichever is greater) @Environmental temperature-20°C~60°C	

EVO II Pro RTK V3 Camera		
Sensor	1 inch CMOS; 20M pixels	
Lens	Fov: 82° 35 mm format equivalent focal length: 29 mm Aperture: F/2.8 - F/11 Focus Range: 0.5 m To Infinity	
ISO Range	Video: 100-44000 Photo: 100-6400	
Zoom	1-16x (up to 3x lossless zoom)	

RC and Image Transmission			
Max Transmission Distance (Unobstructed, Free of Interference)	FCC: 15km CE: 8km		
Display Screen	2048x1536 60fps		
Operating Time	~2 hours (max. brightness) ~4 hours (50% brightness)		
Charging Time	120 minutes		
Internal Storage	ROM 128GB		