**AUTEL**
ROBOTICS

**EVO II** RTK Series V3

Unrivaled Accuracy And Control

**AUTEL**
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www.autelrobotics.com

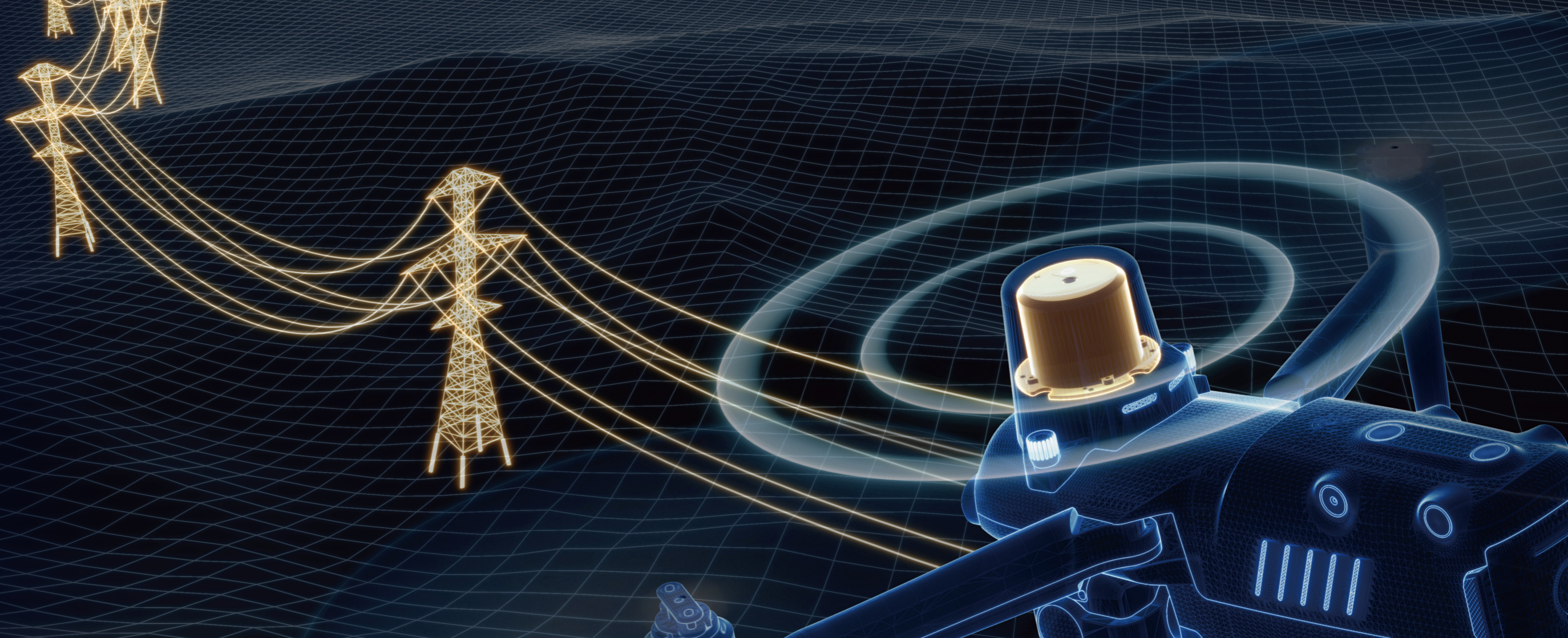# Centimeter-Level Positioning

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 centimeter grade accuracy.

## 3rd Party Base Station Support

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

### Robust Partnerships

PIX4D

DroneDeploy

propeller

Skyline

SkyeBrowse

# Autel Explorer For Mapping
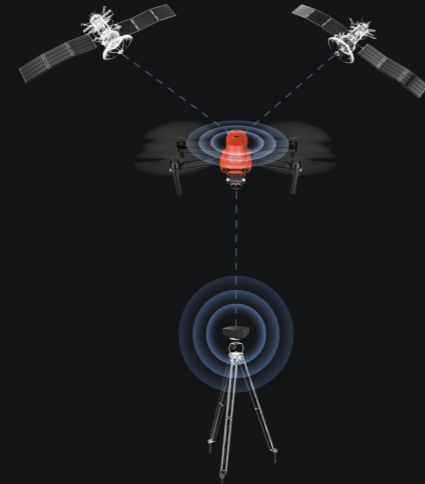
### Multi-NTRIP Profile Saving

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.
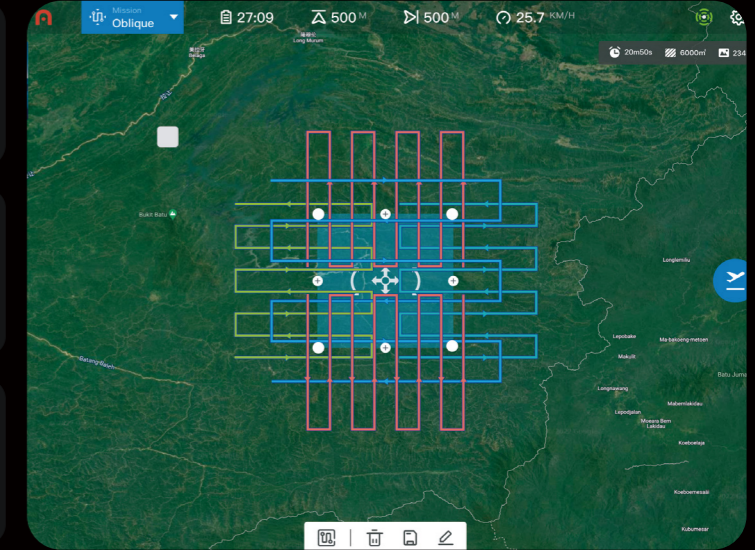
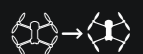### Advanced Feature Sets

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 requirements

# 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.

6K

EQV 29mm F/2.8

1" sensor

6K ULTRA HD



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

### 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.

Radiometric



## 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.
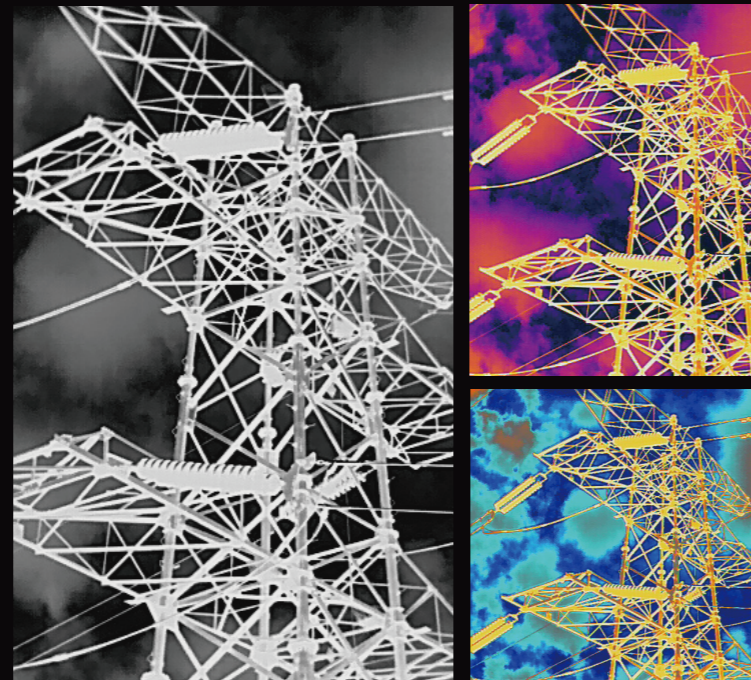


## 30hz Refresh Rate For Videogrammetry

The EVO II RTK Dual V3 provides high refresh rates for accurate and detailed 3D thermal maps.

## Zoom In For The Details

Zoom in on critical areas with EVO II RTK V3 16x digital zoom that supports 4x lossless zoom.

## Multiple Color Palettes

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

# 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 automatically frequency hop for maximum anti-interference capability.

*900MHz is only applicable for FCC countries.

# 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 RTK Series V3 takes 45 seconds from launch to takeoff without fuss.

# Safe And Sturdy

**27mph Max Wind Resistance**

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

**36 Minutes Flight Time**

Enjoy up to 36 minutes of flight time - 20%~30% more than the next leading competitor for more area coverage and longer missions.

**No Fly Zones***

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

**No Forced Updates****

** It's required to update the latest firmware and app to enjoy comprehensive warranty. More information please refer to warranty policy.

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

# Autel Smart Controller V3

Smart Controller V3's 7.9-inch, 2000nits 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 2000nits Brightness

4.5 Operating Hours

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 Video Stream
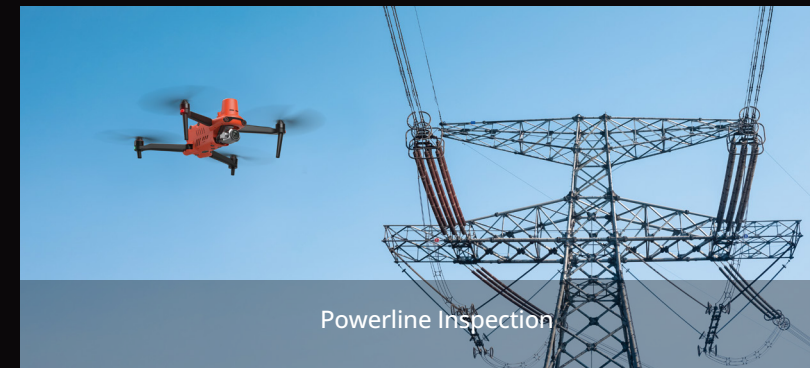
Three Auto-Switch Bands

12KM Transmission Range

IP43 Resistance

# Applications

Powerline Inspection

Photogrammetry

Law Enforcement

Firefighting

# Specifications

| Aircraft | |
|---|---|
| Weight (With Propeller and Battery) | 2.75 lbs (1250g) EVO II DUAL 640T RTK V3<br>2.73 lbs (1237g) EVO II PRO RTK V3 |
| Size | 230x130x143 mm (folded)<br>457x558x143 mm (extended) |
| Max Flight Time | 36 min |
| Operating Temperature Range | 14-104°F (-10-40℃) |
| Wind Resistance | 27mph, 12 m/s (Take-off and landing) |
| Hovering Accuracy | When RTK is enabled and works normally:<br>Vertical: ± 0.1 m, Horizontal: ± 0.1 m<br>RTK is not enabled:<br>Vertical:<br>±0.1 m (visual positioning), ±0.5 m (GNSS)<br>Horizontal:<br>±0.3 m (visual positioning), ±1.5 m (GNSS) |
| GNSS | GPS+BeiDou+Galileo (Asian Region)<br>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°<br>35 mm format equivalent focal length: 23 mm<br>Aperture: f/1.9<br>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℃ or ±3% of reading (whichever is greater)<br>@Environmental temperature-20℃~60℃ |

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

| RC and Image Transmission | |
|---|---|
| Max Transmission Distance (Unobstructed, Free of Interference) | FCC: 15km<br>CE: 8km |
| Display Screen | 2048x1536 60fps |
| Operating Time | ~2 hours (max. brightness)<br>~4 hours (50% brightness) |
| Charging Time | 90 minutes |
| Internal Storage | ROM 128GB |