Autel EVO II Pro RTK

Carlson
BREAK NEW GROUND

Advanced Aerial Platform

The Autel Robotics EVO II Pro RTK is an advanced, proven aerial platform used for high accuracy imagery gathering in the surveying, construction, engineering, mining, quarry, land development, and related industries.

Key Features

- **FAA Remote ID Compliant**
- **RTK module for accuracy**
- **36 minute flight time**
- **Level 8 wind resistance (39-46mph/62-74kph)**
- **20mp 1" sensor camera on gimbal**
- **Smart controller with 7.9" screen**
- **Built-in mission planning software**
- **Compact, folding design for easy transport**

What's Included

Carlson's Autel EVO II Pro RTK packages include:

- Aircraft with RTK module, battery, propellers, gimbal cover
- 7.9" Smart Controller
- 2 spare batteries
- Spare propellers (pair)
- AC battery charger, car charger, and multicharger
- Smart controller charger (USB-C)
- Spare controller sticks
- Controller neck strap
- Hard case for all of the above

The Carlson Software Advantage

Bundled with the power of **Carlson PhotoCapture** for the creation of surfaces, point clouds, orthoimages, and more and **Carlson Point Cloud Advanced** for further manipulation including bare earth filtering and feature extraction directly to CAD, the Autel EVO II Pro RTK becomes a powerful companion to traditional instruments and methods. All backed by the best unlimited, free tech support in the industry.

AUTEL ROBOTICS

Autel EVO II Pro RTK - Specifications

Aircraft Specifications

Weight (with propeller and battery):	1237g
Wheelbase:	397mm
Maximum service ceiling altitude:	6000m
Max ascent speed:	5 m/s (automatic flight) 8 m/s (manual control)
Max descent speed:	4 m/s
Max horizontal flight speed:	72km/h (45mph)
Max flight time:	36 min
Operating temperature range:	-10° ~ 40° (14 ~ 104F)
Maximum wind resistance:	Level 8 (39-46mph/62-74kph)
Operating frequency:	2.4 GHz – 2.4835 GHz;5.65 – 5.755 GHz
Hovering accuracy:	±0.1m horizontal and vertical (with RTK)

GNSS and Gimbal Specifications

Single frequency high sensitivity GNSS:
GNSS+BeiDou+GLONASS+Galileo (depending on region)
Multi-frequency multi-system high-precision RTK GNSS:
Frequency points used:
GPS:L1/L2; GLONASS:L1/L2;BeiDou:B1/B2;Galileo:E1/E5
First positioning time:<50 s
Positioning accuracy:
Vertical 1.5 cm + 1 ppm (RMS);
Horizontal 1 cm + 1 ppm (RMS)
1 ppm means that the error increases by 1 mm for every 1 km the aircraft moves

Gimbal:	Three-axis stabilization
Mechanical range:	Tilt:-135° to +45° Pan:-100° to +100°
Controllable rotation range:	Tilt:-90° to +30° Pan:-90° to +90°
Max control speed (tilt):	300°/s
Angular vibration range:	±0.005°

REMOTE CONTROLLER AND IMAGE TRANSMISSION SPECIFICATIONS

Transmission power:
2.4~2.4835GHz; FCC/ISED:≤27dBm; SRRC/CE/MIC/RCM:≤20dBm;
5.725~5.850GHz FCC/ISED/SRRC/MIC:≤27dBm CE/RCM:≤14dBm
Max transmission distance (unobstructed, free of interference):
FCC:9 km; CE:5 km

Real-time image transmission quality:	720p@30fps/1080p@30fps
Max bitrate of real-time image:	40Mbps
Display screen:	7.9" OLED; 854x480
Remote controller battery:	5000mAh/3hrs runtime
Charging time:	2hrs (fast charge)
Working current/voltage:	1.7A@3.7V

SENSING SYSTEM SPECIFICATIONS

Sensing system type: Omnidirectional sensing system (forward, backward, upward, downward, left and right
Operating Environment:
Forward, Backward and Sides:
Surface with clear pattern and adequate lighting (lux > 15)
Upward:
Detects diffuse reflective surfaces (>20%)
(walls, trees, people, etc.)
Downward:
Surface with clear pattern and adequate lighting (lux > 15)
Detects diffuse reflective surfaces (>20%)
(walls, trees, people, etc.)

CAMERA SPECIFICATIONS

Sensor:	1 inch CMOS; 20 million effective pixels
Lens:	FOV 82°; Aperture f/2.8-f/11; Focus range: 1m to infinity (with autofocus)
ISO range:	100-6400 (video); 100-12800 (photo)
Electronic shutter:	8-1/8000 s
Zoom:	1-16x
Photo mode:	Single shot Burst shooting: 3/5 frames Auto Exposure Bracketing: 3/5 bracketed frames at 0.7 EV Bias Time Lapse: JPG:2s/5s/7s/10s/20s/30s/60s DNG:5s/7s/10s/20s/30s/60s HyperLight: support (under 4K JPEG format) Long exposure:Max. 8s HDR imaging: support (under 4K JPEG format)
Photo resolution:	5472*3648 (3:2) 5472*3076 (16:9) 3840*2160 (16:9)
Video resolution:	6K 5472*3076 p30/p25/p24 4K 3840*2160 p60/p50/p48/p30/p25/p24 2.7K 2720*1528 p120/p60/p50/p48/p30/p25/p24 1080P 1920*1080 p120/p60/p50/p48/p30/p25/p24
Effective frame:	5472x3648
Max bitrate:	120 Mbps
Photo format:	JPG (default); DNG
Video format:	MOV (default); MP4
Supported file system:	FAT32 (≤32GB);exFAT (>32GB)
Supported SD cards:	Class4 / Class10 / U3 Capacity:4G / 8G / 16G / 32G / 128G

BATTERY AND CHARGER SPECIFICATIONS

Battery capacity/voltage/type:	7100 mAH, 82Wh/11.55V/LiPo 3S
Battery charging temperature range:	5°C-45°C (41°F-113°F)
Battery storage temp and humidity:	-10°C-30°C; 65±20%RH
Battery max charging capacity:	93W
Battery charge time:	90 minutes
Charger input:	100-240 V, 50/60 Hz, 1.5A
Charger output:	13.2V@5 A; 5V@3A 9V@2A; 12V@1.5A
Charger voltate/rated power:	13.2 ±0.1V/66W

STORAGE SPECIFICATIONS

Internal storage:	8GB
SD storage:	Standard: 32GB, max supported 256GB (UHS-3 rating required)

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