

# EVO Max Series

# **Reach New Frontiers**

The EVO Max Series features industry-leading A-Mesh networking, anti-interference, autonomous flight (Autonomy), high-precision visual navigation, AI target recognition and positioning, and 720° omnidirectional obstacle avoidance. These capabilities ensure stable and intelligent operations in all-weather, complex environments. EVO Max 4T is equipped with a 10x optical zoom camera, enabling long-range reconnaissance of vehicles and vessels up to 2 km away. EVO Max 4N integrates an ultra starlight night vision camera, delivering clear visibility in extremely low-light conditions. The powerful flight platform, combined with a range of gimbal payloads, delivers outstanding performance across public safety, energy inspection, emergency response and many other fields, setting a new benchmark for industrial UAV applications.



No Blind Spots



8K 10x Optical Zoom Camera



Superior Anti-Interference Capability



0.0001 LUX Starlight Vision Camera



High-Precision Visual Navigation



Hot-Swappable Battery



A-Mesh Networking



15 km Transmission Range



Al Target Recognition



42 min Max. Flight Time





#### **Autonomous Flight Planning**

Autel's Autonomy Engine collects surrounding environmental data and plans 3D flight paths through complex environments such as mountains, forests, and buildings. Use cases include rapid 3D scene reconstruction, public safety overwatch, industrial inspection, and land surveying.



#### **A-Mesh Networking**

EVO Max series features the new A-Mesh system, enabling drone-to-drone autonomous communication, connection, and collaboration. With A-Mesh, multiple drones in the vicinity can act as relay points to greatly improve BVLOS operation effectiveness.



### Super Zoom

EVO Max 4T supports 10x continuous optical zoom and up to 160x hybrid zoom, and clearly identifies vehicles and vessels from over 2 km away, greatly enhancing the operational efficiency by reducing the need for on-site presence. It is ideal for public safety, energy inspection, emergency rescue missions and other application scenarios.



#### **High Precision Visual Navigation**

Even in urban environments where satellite signals are obstructed or weak, it achieves high precision and low latency in distance and coordinate information. It utilizes SLAM visual navigation technology for high-precision indoor and outdoor navigation and stable flight.



#### Anti-interference

The EVO Max Series uses advanced flight control modules and algorithms that can identify flight control interference signals and satellite positioning interference signals. This enables the EVO Max Series to fly confidently near power lines, critical structures, and in complex areas.



### **Starlight Camera**

EVO Max 4N delivers exceptional night vision imaging performance, precisely capturing rich details even in ultra-low light (0.0001 Lux). It is capable of surveillance through glass and detecting light sources from 5 km away, making it ideal for long-range, covert night operations.

# **Applications**



Law Enforcement



Security Patrol



Emergency Search and Rescue



Geographical Surveying



**Powerline Inspection** 



Firefighting Rescue

# Fusion 4T XE / Fusion 4T V2

### Laser Rangefinder

5-1200 m Measurement Range ±(1 m+D\*0.15%) Accuracy

(D refers to distance from vertical reflective surface)

### Zoom Camera

1/2" CMOS, 48 MP F2.8-F4.8 Adjustable Aperture 10x Optical Zoom, 160x Hybrid Zoom 4000 × 3000 30P Video Resolution 8000 × 6000 Max Photo Size



**Thermal Camera** 

640 × 512 Resolution 9.1 mm Focal Length, 16x Digital Zoom -20°C to 150°C / 0°C to 550°C Measurement Range ±2℃ or reading ±2% Measurement Accuracy

### Wide-Angle Camera

1/2" CMOS, 48 MP F2.8 Aperture, FOV 83.4° 24 mm Equivalent Focal Length 4000 × 3000 30P Video Resolution 8000 × 6000 Max Photo Size

# Fusion 4N / Fusion 4N V2

### **Thermal Camera**

640 × 512 Resolution 9.1 mm Focal Length, 16x Digital Zoom -20°C to 150°C / 0°C to 550°C Temperature Range ±2°C or reading ±2% Measurement Accuracy

### **Starlight Vision Camera**

2.3 MP LUX: 0.0001 ISO: 440000 1920 × 1200 30P Video Resolution 8x Digital Zoom



5-1200 m Measurement Range  $\pm$ (1 m+D\*0.15%) Accuracy

(D refers to distance from vertical reflective surface)

## Wide-Angle Camera

1/0.98" CMOS, 50 MP F1.85 Aperture, FOV 85° 23 mm Equivalent Focal Length 4000 × 3000 30P Video Resolution 8192 × 6144 Max Photo Size

# Accessories



### Autel Smart Controller V3

High-brightness display: 7.9 inches, maximum brightness of 2000 nits, resolution of 2048\*1536. Fast download: Up to 20MB/s maximum rate to download materials from the drone to mobile devices. Functional interfaces: HDMI interface outputs live broadcast signal, USB interface expands 4G module. Long battery life: Up to 4 hours of continuous work, fully charged in 2 hours. Large storage: Built-in 128G of storage space, easily back up shooting materials.



### Loudspeaker And Spotlight Combo (optional)

Size: 145x116x83 mm Installation method: Screw quick release Searchlight: Maximum rated power 30W; FOV14°; Illuminance 30Lux@50m / 7Lux@100m / 3Lux@150m; Illumination pitch angle supports remote adjustment from 30° to -90° or automatic adjustment with the gimbal

Loudspeaker: Rated power 10W; 114 decibels @1m; Broadcasting distance ≥300m; Speaker delay <300ms; Supports recording, audio playback



### EVO Nest (optional)

Evo Nest is an unmanned aerial vehicle (UAV) automatic operation platform equipped with an all-weather meteorological monitoring station, modular lightweight design, can be quickly deployed in substations, industrial parks, rooftop platforms, and other various situations. The unattended system consists of the nest, multi-rotor UAVs, and command center, among other components. Autel Command Center can remotely issue operation tasks, ensuring data transmission security while decision-making from miles away.



### **RTK Module (optional)**

Improves anti-electromagnetic interference ability, achieves centimeter-level positioning accuracy, assisting in completing precision inspection tasks.

# **EVO Max Series Model Comparison**



 EVO Max Series

Compared to the EVO Max series, the EVO Max Series V2 has refined the placement of the fisheye lens and navigation lights, further enhancing the UAV's visual obstacle avoidance capabilities. The EVO Max Series V2 features side grooves for improved heat dissipation.

# Payload and Feature Differences

	EVO Max Series			EVO Max Series V2			
Gimbal [1]	Fusion 4T	Fusion 4T XE	Fusion 4N	Fusion 4T V2	Fusion 4N V2		
Battery [2]	ABX40 / ABX41			ABX41-D (Support battery in-place detection function)			
Other Mounting	RTK Module, Loudspeaker & Searchlight combo						
4G Transmission [3]	Not Support			Optional			
Remote Controller	Autel Smart Remote Controller V3						
Арр	Autel Enterprise						

Notes:

[1] Gimbals are interchangeable between the Evo Max Series and the EVO Max Series V2. Specifically, Fusion 4T XE and Fusion 4T V2, as well as Fusion 4N and Fusion 4N V2, are fully compatible across versions. However, Fusion 4T is only compatible with the EVO Max Series aircraft platform.

[2] The EVO Max Series comes standard with the ABX40 or ABX41 model battery (specific model based on actual purchase), while the EVO Max Series V2 comes standard with the ABX41-D model battery. The batteries for the EVO Max Series and EVO Max Series V2 are compatible and both support hot swapping. The ABX41-D Intelligent Battery supports the Battery In-place Detection Function.

[3] Contact sales for more information.

# **Specifications**

Series		EVO Max Series	EVO Max Series V2						
Model	EVO Max 4T	EVO Max 4N	EVO Max 4T XE	EVO Max 4T V2	EVO Max 4N V2				
Aircraft Dimensions		) mm (unfolded, with 113 ) mm (unfolded, with 115	563*657*147 mm (unfolded, with 1158 propellers)						
weight	1645 g (including ABX40 battery, Fusion 4T, propellers)	1665 g (including ABX40 battery, Fusion 4N, propellers)	1635 g (including ABX40 battery, Fusion 4T XE, propellers)	1666 g (including ABX41-D battery, Fusion 4T V2, propellers)	1700 g (including ABX41-D battery, Fusion 4N V2, propellers)				
Max Takeoff Weight	1999 g								
Max Flight Time	42 min								
Max Endurance Range	25 km								
Max Wind Speed Resistance	12m/s								
Operating Frequency	900MHz / 2.4GHz / 5.2GHz / 5.8GHz								
Max Transmission Distance	15 km								
Ingress Protection Rating	IP43 (* Customization is supported)								
GNSS	GPS + GLONASS + Galileo + BDS								