

**AUTEL**  
ROBOTICS

# EVO Nest

Powered by Autel SkyCommand

Simplify Remote Operations



-22°F ~ 131°F



Easy To  
Maintain



25 Minutes  
Fast Charging

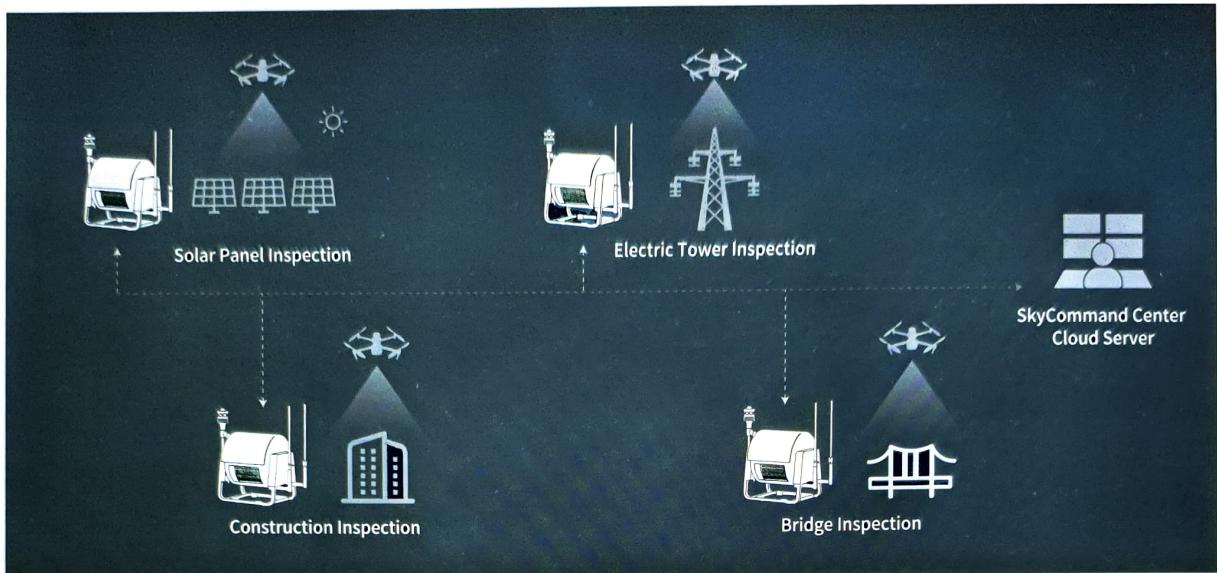


IP55

Reliable, durable, and transportable, EVO Nest is a base for automatic take off, landing, charging, and mission planning for the EVO series. The Nest is designed for all-weather operation and uses a single-piece protective drum with fewer moving parts to simplify maintenance. The Nest fits in the bed of a standard pickup truck and is light enough for 2 people to carry. Paired with the Autel SkyCommand Center for centralized drone management, the Nest is easy to set up, maintain, and operate.

# Complete Remote Operations System

The Autel Remote Operations System consists of the EVO Nest, UAV, and the SkyCommand Center to provide a full end-to-end solution for remote task management.



## Autonomous, Semi-Autonomous, Or Remote Piloting

Autel's Remote Operations System gives the pilot great flexibility and control whether the mission is preplanned before the flight, layered on top of an ongoing mission, or if the pilot wants to remotely control the aircraft live.

## Multi-Nest Systems

Multiple Nests can be networked to cover large areas and allow flexible, expandable operations.

## All Weather Performance

The Nest's integrated weather systems provide localized weather data for safe remote drone operations. An industrial temperature control unit allows the Nest to work in temperatures between -22°F and 131°F.

## Transportable & Easy Setup

The Nest weighs 132 lbs, has a footprint of less than 1 yd<sup>2</sup>, and can be set up by a team of 2.

## Specification

Size	36.77*25.24*30.51 inches (hatch closed) 36.77*25.24*21.57 inches (hatch open)	Max Power	1.2 kW
Weight	132 lbs	Standby Power	10W
Protective Level	IP55	Operating Voltage	AC 110V / 220V
Operating Temperature	-22°F~131°F	Max Charge Current	16A
Operating Humidity	95±3% (68°F~86°F)	Drone Charge Duration	10% ~ 90% 25min
Max Operating Altitude	6000m	Hatch Endurance	≥50000 Times
		Model	EVO Max Series

## Information Management

The EVO Nest uploads flight and mission data into the SkyCommand cloud for easy access, storage, and management.

## Encryption

The EVO Nest supports AES 256 image transmission encryption and GB28181 protocol output video stream.

## Simplified Maintenance

Thoughtfully designed, the EVO Nest is made for remote operations requiring infrequent maintenance trips.

## Fast Charge Capable

The EVO Nest can safely charge an EVO II from 10% to 90% within 25 minutes.

## Custom Solutions

Autel can provide customization and further system development to suit industry-specific drone needs.



### Exceptional Anti-Interference Capability

Autel Titan's GNSS visual positioning capabilities, adaptive frequency hopping and SLAM navigation technology empowers resistance from interference and enables the drone to fly confidently near powerlines, critical structures and in complex areas.



### A-Mesh Networking

With integrated A-Mesh networking technology, the drone can establish networks between drones and controllers, supporting various working modes such as "single controller multiple drones" and "master slave dual control." Even in scenarios with long distances and obstacles, such as mountains, buildings, or areas without network, it can achieve multi-device networking, enabling drone-to-drone autonomous communication, connection, and collaboration.



### Extended Endurance, Superb Payload Capacity

The four-rotor, eight-propeller foldable design is lightweight yet sturdy and reliable. This design enhances lifting capabilities, with a dual-battery redundancy design, it can achieve up to 60 minutes of maximum flight time with a standard payload and cover distances of up to 50 km, effectively accommodating payloads to 10 kg to meet diverse transportation needs.



### Omnidirectional Obstacle Avoidance, All-Weather Operations

By fusing multiple sensors, including a binocular fisheye vision system and millimeter-wave radar, it provides 720° all-around perception and obstacle avoidance capabilities. It also supports nighttime obstacle avoidance, ensuring safe flights.

## Accessories



### Transportation Case

Efficiently Empowering Long-Distance Transportation Operations



### DG-L35T Gimbal Camera

Providing support for long-distance and nighttime reconnaissance operations



### Ground Station Pro

Extending the transmission range by 90%

## Applications



### Logistics Transportation



### Emergency Rescue



### Public Safety

## Specifications

Weight (Battery and gimbal included)	23kg
Max. Payload	10kg
Dimensions	1879*1866*584mm (incl. propellers and mount) 1141*1120*563mm (excl. propellers) 752*328*526mm (folded, excl. mount)
Max Flight Time (windless)	60mins (@ 1kg payload)
Max Horizontal Speed (windless near sea level)	25m/s

Max Wind Resistance	12m/s
Operating Frequency	2.4GHz/5.2GHz/5.8GHz/900MHz
IP Rating	IP55
Max Transmission Distance	12.4 miles (20km)
GNSS	GPS+GLONASS+BeiDou+Galileo



# Autel Alpha

## Beyond The Frontiers

Autel Alpha is an intelligent industrial drone for multi-purpose. Boasting significant enhancements in autonomous flight capabilities, anti-interference capabilities, obstacle avoidance, video transmission technology, and battery systems, it injects robust performance into the flight platform. With a foldable design and IP55-rating level, it tackles challenging environments. The built-in RTK dual-antenna system ensures precise control within millimeters when carrying out the missions. Paired with the next-gen DG-L35T gimbal, it integrates a 560x hybrid zoom camera, dual thermal imaging cameras, a visible light wide-angle camera, and a laser rangefinder. The dual thermal imaging cameras meet the needs of both short-range overview and long-range detail observation, achieving distant operation scenarios with unobstructed personnel recognition within an 8-kilometer range, providing more professional and comprehensive solutions for applications such as public safety, energy inspection, and emergency management.

	Anti-interference
	High-Precision Visual Navigation
	A-Mesh Network
	56x Dual Thermal Camera
	4K 35x Optical Zoom
	720°
	Wire-Level Obstacle Avoidance and Pathfinding
	20 kilometers Transmission Range
	Flexible Payload Expansion
	IP55 Rating
	Hot-swappable Battery

# Autel DG-L35T Gimbal

## Zoom Camera

8 MP

4K 3x optical zoom

560x hybrid zoom

Ultra-sensitive ISO supports up to a maximum of 160,000

Wide Camera
48 MP
Aperture: F/2.8
DFOV: 84°
Equivalent focal length: 24mm



## Laser Rangefinder

Measurement range: 10-2000 meters

Measurement accuracy: < 40cm; +/m;

>400m; Dx0.3%

\* where D represents the distance from the central reflecting surface

Dual Thermal Camera
560x512
13mm focal length wide-angle thermal imaging
45mm focal length long-range thermal imaging



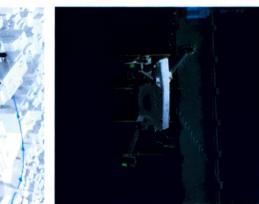
## Exceptional Anti-Interference Capability

Autel Alpha's GNSS visual positioning capabilities, adaptive frequency-hopping and SLAM navigation technology empowers resistance from interference and enables the drone to fly confidently near powerlines, critical structures and in complex areas.



## Autonomous Flight

Autel's Autonomy Engine is continuously improving enabling functions such as global path planning and 3D scene reconstruction in complex environments. It offers various obstacle avoidance capabilities, including return-to-home, manual control, and mission planning, providing a more professional solution for industries such as security, inspection, and surveying.



## A-Mesh Networking

With integrated A-Mesh networking technology, the drone can establish networks between drones and controllers supporting various working modes such as "single-controller multiple drones" and "master-slave dual control". Even in scenarios with long distances or areas without network, it can achieve multi-device networking, enabling drone-to-drone autonomous communication, connection, and collaboration.



## No Blind Spots

### Ultimate Obstacle Avoidance

By integrating multi-source sensor fusion technology, including 5-direction dual fisheye vision + 6-direction millimeter-wave radar, the drone is equipped with wireless obstacle avoidance and pathfinding capabilities. Additionally, it supports nighttime obstacle avoidance for flight safety.



## Public Safety



## Search & Rescue



## Inspection

## Specifications

Weight (including battery, gimbal camera, and propellers)	6.349kg
Max. Payload	3.000kg
Dimensions	120.5*56.6*278mm (unfolded) / 120.5*56.6*48mm (folded, w/o propellers)
Max. Flight Time (windless)	40min
Max. Horizontal Speed (windless)	25m/s

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# EVO Max 4T

## Reach New Frontiers

The EVO Max 4T utilizes Autel Autonomy's autonomous flight technology, enabling global path planning, 3D scene reconstruction, autonomous obstacle avoidance, and return-to-home capabilities in complex environments. Its high-precision visual navigation system ensures stable and reliable flight in conditions of strong signal interference, signal occlusion, or weak signals. This drone introduces the industry's first A-Mesh networking technology, supporting the free networking of multiple devices for integrated air-ground network coverage. The combination of "binocular fisheye vision + millimeter-wave radar" multi-sensor fusion perception technology provides 720° all-round sensing and obstacle avoidance capabilities, allowing for all-weather operation. Equipped with the FusionLight camera 4T, it integrates a 4K 10x continuous optical zoom camera, an ultra-sensitive wide-angle camera, a thermal imaging camera, and a laser rangefinder, efficiently empowering public safety, energy inspection, emergency management, and setting a new benchmark for industry application drones.

 720°	 All-Weather Obstacle Avoidance	 Anti-Interference Capability	 High-Precision Visual Navigation	 A-Mesh Self-Organizing Network
 8K 10x Optical Zoom Camera	 Hot-Swappable Battery	 20-Kilometer HD Video Transmission	 42 Minutes of Enduring Endurance	



# FusionLight Camera 4T

## Laser Rangefinder

5-12,000 meters measurement range  
± 0.1 meter ± D×0.15% measurement accuracy  
TOF measurement distance

## Ultra-Sensitive Wide-Angle Camera

50 million pixels  
1/1.28 inch CMOS  
F1.9 aperture  
FOV: 85°  
23 mm equivalent focal length



## Autonomous Flight Planning

The EO Max 4T, equipped with Autel Autonomy's autonomous flight technology, collects environmental data in real-time to achieve global path planning, 3D scene reconstruction, autonomous obstacle avoidance, and return-to-home in mountainous, forested, and urban environments, empowering security, inspection, and surveying industries.



## Applications

power line inspection	emergency search and rescue	law enforcement	geographical surveying	firefighting rescue

## 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.

Introducing the industry's first A-Mesh networking technology, it enables free networking between drones and between drone and ground terminals, supporting various modes like "one-to-many control" and "dual control". Even across long distances, obstacles, mountains, buildings, or in no-network areas, it enables free networking within the network, collaborative operation, and breaks through the operational boundaries of conventional drones.



## A-Mesh Networking

Weight (including battery, gimbal camera, and propellers)	1640g	Maximum wind resistance	12m/s
Dimensions	562*651*147mm (unfolded with propellers) 318*401*147mm (unfolded without propeller) 257*145*31mm (folded without propeller)	Operating frequency	900MHz / 2.4GHz / 5.2GHz / 5.8GHz
Maximum endurance time	42 mins	IP protection level	IP43
Maximum horizontal flight speed	23m/s	Image transmission distance	20 kilometers
		GNSS	GPS + GLONASS + Galileo + Beidou

## Thermal Imaging Camera

640×512 resolution  
48 million pixels  
13 mm focal length  
16x digital zoom  
F2.8/F4.8 variable aperture  
-20°C to +150°C / 0°C to +55°C temperature measurement range

## Zoom Camera

48 million pixels  
8K video resolution  
10x continuous optical zoom  
16x digital zoom  
F2.8/F4.8 variable aperture



## COMBAT FLIGHT HOURS 350 000+

### BATTLE PROVEN



### PAYOUTADS (one-minute hot-swapping)

Unmanned aerial systems dominate modern warfare.  
RAYBIRD delivers 28+ hours endurance and 250+ km range

### TECHNICAL SPECIFICATIONS

Wingspan	3-4.2 m	MTOW	23 kg	Flight Duration	28+ hours	Maximum Flight Altitude	5500 m	Maximum Flight Range	2500 km	Drone Link Range	5-10 km	Payload Capacity	up to 220 kg	Cruise Speed	110 km/h
Payload System	EFL, four-stroke gasoline	Engine	95 Octane	System Deployment Time	up to 25 minutes	Operating Temperature	from -35 to +55°C	Range							
Autonomated Takeoff	Mechanical catapult	and Landing													
SAR															

**DEEP RECCO MISSIONS**

- Long-range reconnaissance deep in enemy territory
- High-resolution imagery
- Compact size = stealth against air defenses
- Deep Reconnaissance

**SYSTEM**

**DEEP PRECISE RECCO-STRIKE**

- Long-range precision strikes for artillery
- Deliver munitions with up to 2.5 kg warheads
- Destroy targets up to 220 km away
- Serve as eyes for HIMARS and other strike systems using radio frequency payload
- Extend data transmission by 50-80 km

**RF Signal Detection & Location**

- Raybird locates and identifies enemy systems using radio frequency payload
- Extend data transmission by 50-80 km

**Extending Data Transmission**

- Extend data transmission by 50-80 km

**Munitions Delivery**

- Deliver munitions with up to 2.5 kg warheads
- Deep Reconnaissance
- Long-range rocket systems
- Serve as eyes for HIMARS and other strike systems using radio frequency payload
- Extend data transmission by 50-80 km

**Targeting & Precision Fire Control**

- Deep Reconnaissance
- Long-range rocket systems
- Serve as eyes for HIMARS and other strike systems using radio frequency payload
- Extend data transmission by 50-80 km

**RF Signal Detection & Location**

- Raybird locates and identifies enemy systems using radio frequency payload
- Extend data transmission by 50-80 km

bexStream  
Remote Control  
Software



VTOne  
Class 3 Quadcopter  
Fixed Wing



HEIFU  
Class 3 Hexacopter



Beyond Vision is a leading innovator in drone technology, dedicated to developing advanced solutions that meet the evolving needs of defense and security operations. With a focus on integrating cutting edge technologies, the field of unmanned aerial systems. Beyond Vision continues to innovate in the field of unmanned aerial systems.

