

AUTEL
ROBOTICS

EVO Max Series

Reach New Frontiers



Reach New Frontiers

The EVO Max Series combines Autel's leading autonomy technology with innovative obstacle avoidance, unveiling the next generation of intelligent, agile drones.

The EVO Max Series can analyze any environment in real time to create 3D flight paths, navigating through difficult conditions with ease, even in areas without GPS signals. Combine that with swappable payloads, A-Mesh 1.0 networking for grouping drones, and an all-weather rugged design, the EVO Max Series is portable and also highly capable.



No Blind Spots



Navigation In GPS
Denied Environments



A-Mesh
Networking



0.0001 LUX
Starlight Camera



Hot-Swappable
Batteries



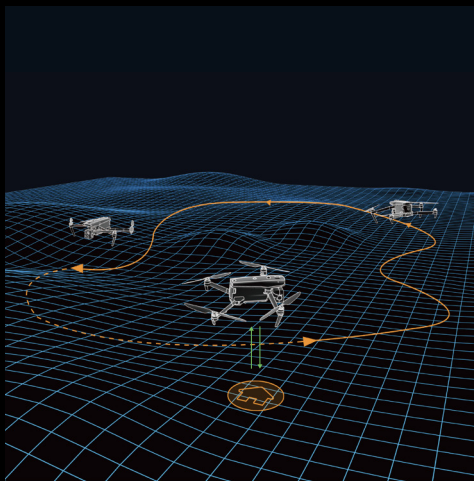
12.4 Miles
Transmission Range



42 min
Max. Flight Time



IP43
Weather Rating



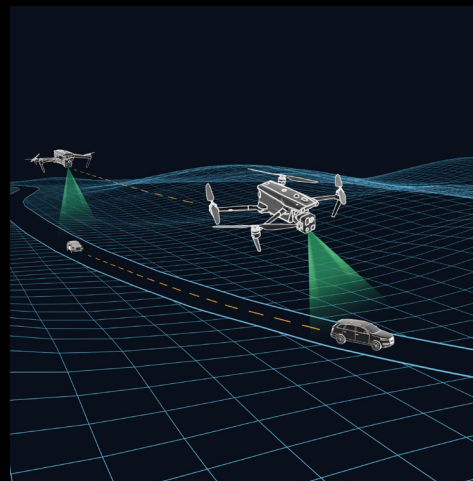
Auto Path Finding

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.



Navigation in GPS Denied Environment

Advanced sensors allow the EVO Max series to navigate within hardened structures, underground, or in environments without GPS.



Accurate Object Identification and Tracking

Based on Autel's AI recognition technology, the EVO Max series can automatically identify and lock onto different types of targets such as heat sources, moving people, or vehicles and achieve high-altitude tracking and data collection for law enforcement.

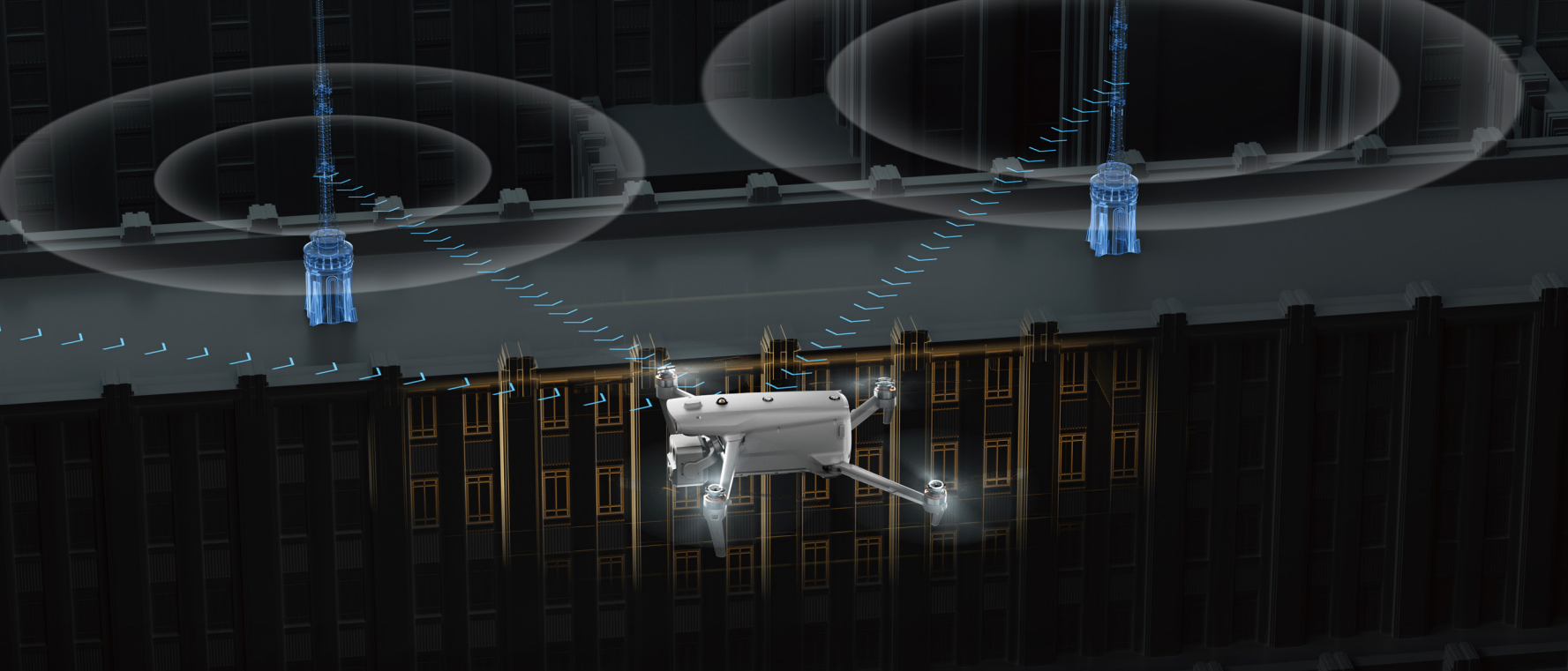
No Blind Spots

Ultimate Obstacle Avoidance

The EVO Max series is the only commercial drone that combines traditional binocular vision systems with millimeter wave radar technology. This allows the onboard Autel Autonomy Engine to perceive objects down to 0.5 inches, eliminating blind spots and enabling operation in low light or rainy conditions.

*OA performance varies with drone speed, lighting, and flying conditions and is not meant to replace pilot responsibility.





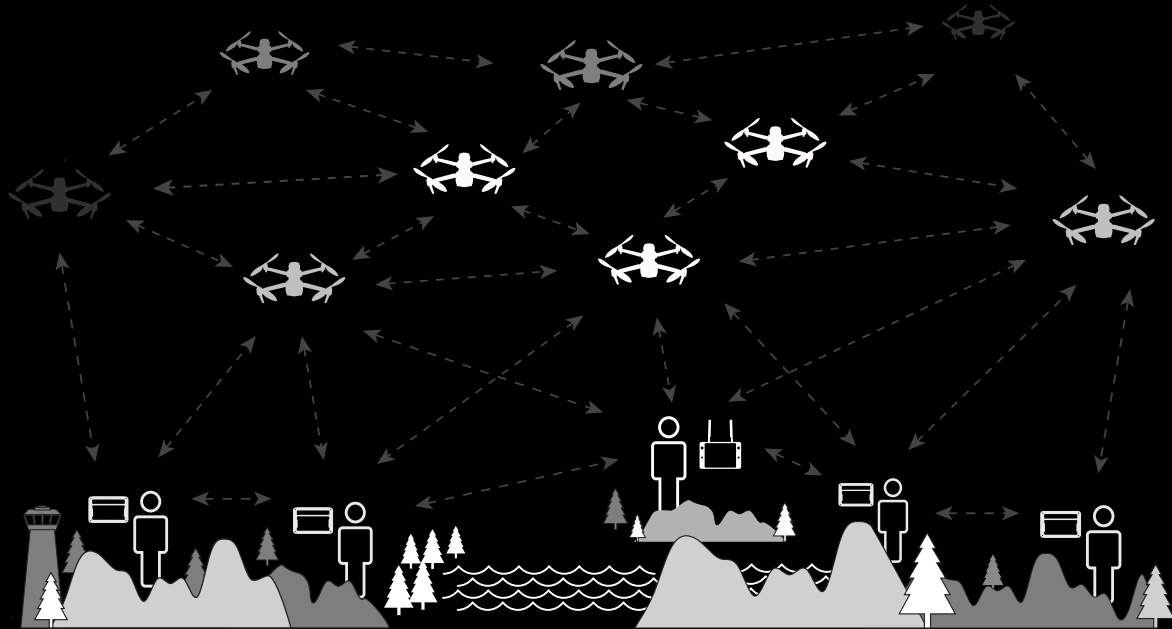
Anti Interference

The EVO Max series uses advanced flight control modules and algorithms specially designed to resist interference, which enables the EVO Max series to fly confidently near power lines, critical structures, and in complex areas.

A-Mesh 1.0

The Industry's First Mesh Networking

EVO Max series features the new A-Mesh system, enabling drone-to-drone autonomous communication, connection, and collaboration.



A-Mesh 1.0

The Industry's First Mesh Networking



Enhanced Anti-Interference

The EVO Max series can communicate seamlessly with other drones in the vicinity, unlike a traditional chain structure. If a single drone fails or exits unexpectedly, the entire system will independently self-organize and continue to relay critical information.



Beyond-Line-of-Sight Applications

With A-Mesh, multiple drones in the vicinity can act as relay points to greatly improve BVLOS operation effectiveness.



Full-Fleet Control

Multiple drones can be controlled autonomously by 1 pilot or by a group of pilots simultaneously with or without LTE coverage.



Enhanced Anti-Interference

Communication nodes can be placed statically on hills or poles to provide full coverage to an area, or a swarm of drones can provide mobile communication points to extend the coverage of the entire group.



Autel SkyLink 3.0

SkyLink 3.0 system of the EVO Max Series comes with 6 antennas, 4 frequency bands, AES-256 encryption, and optional 4G integration to provide users with the most advanced flight capabilities ever in an EVO.

12.4 miles

Image Transmission
Distance

1080P@30FPS

Real-Time Image
Quality

<150ms

Latency

900MHz/2.4GHz/5.2GHz/5.8GHz*

Frequency Bands

*while 900 MHz only to FCC regions, 5.2 GHz is applicable only to FCC, CE, and UKCA regions.



Mission Ready Payload

The payload integrates starlight camera, wide camera, zoom camera, thermal camera, and a laser rangefinder for all data capture needs and critical decision making.



Explore the Night

EVO Max 4N

Thermal Camera

640×512
Focal Length: 9.1 mm
16x Digital Zoom
Range: -4 °F to 1022 °F

Starlight Camera

2.3MP
LUX: 0.0001, ISO: 450000
Equivalent: 41.4 mm



Laser Rangefinder

Measuring Range:
16.4–3737 ft
Measurement Accuracy:
 $\pm (1 \text{ m} + D \times 0.15\%)$

Wide Camera

50MP
1/1.28" CMOS
Aperture: f/1.9
DFOV: 85°
Equivalent: 23 mm

Chase the Heat

EVO Max 4T

Laser Rangefinder

Measuring Range:
16.4-3737 ft
Measurement Accuracy:
 $\pm (1 \text{ m} + D \times 0.15\%)$

Wide Camera

50MP
1/1.28" CMOS
Aperture: f/1.9
DFOV: 85°
Equivalent: 23 mm



Thermal Camera

640x512
Focal Length: 13 mm
16x Digital Zoom
Range: -4 °F to 1022 °F

Zoom Camera

48MP
8K 10x Optical Zoom
160x Max. Hybrid Zoom
Aperture: f/2.8-f/4.8

Autel Enterprise App Platform

The Autel Enterprise App is built from the ground up for industrial applications and features a brand-new interface for simple, efficient operation. Additional features and semi-autonomous modes maximize the EVO Max series' mission capability.



Smart Features



3D Map Planning*

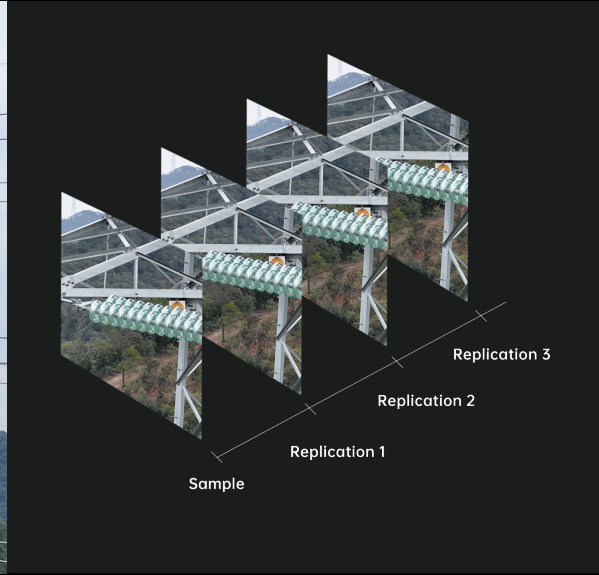
Plan, create, and execute 3D waypoint missions on a 3D map, and switch map sources as required.



Quick Mission*

Temporary missions can be created while executing other missions, and multiple sub-missions can be stacked for enhanced flexibility.

*This feature will be available in a future update.



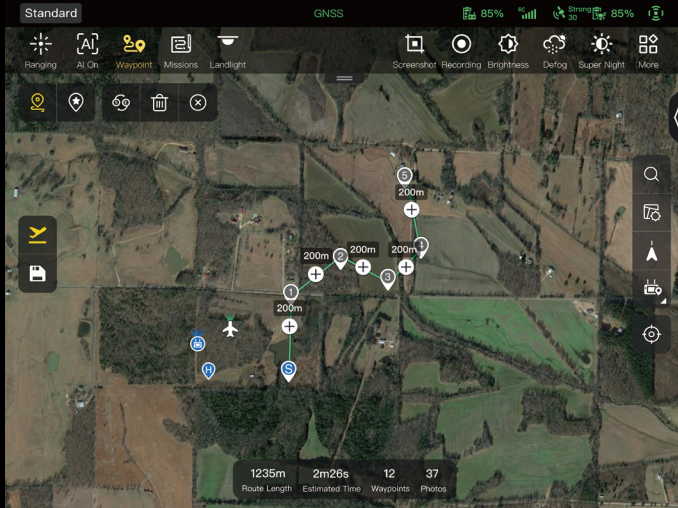
Mission Reproduction*

The EVO Max series automatically records the camera angles and replicates the mission you just flew.

*This feature will be available in a future update.

Multiple Mission Types

The Enterprise App provides various autonomous and semi autonomous mission planning for public safety, inspection, and surveying.



Waypoint Missions

Users can add waypoints for flexible, non-structured flight paths.



Rectangular Mission

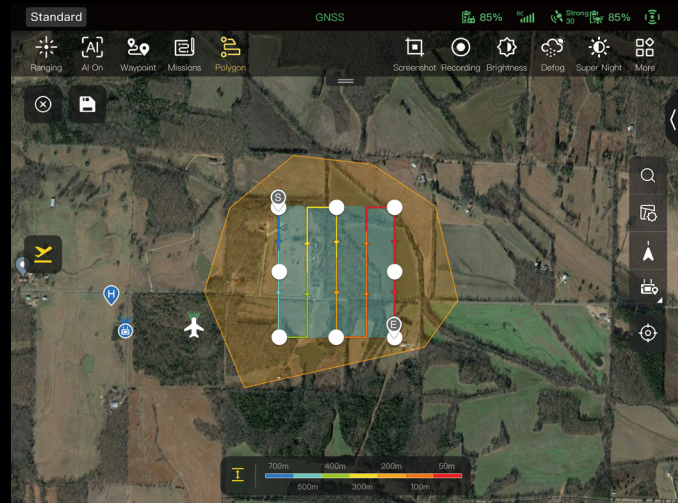
Supports one-click automatic generation of a rectangular flight area.



Automatic Mission Generation And Data Capture*

Automatically produce routes by adding regional boundary points through dots or importing KML files.

*This feature will be available in a future update.



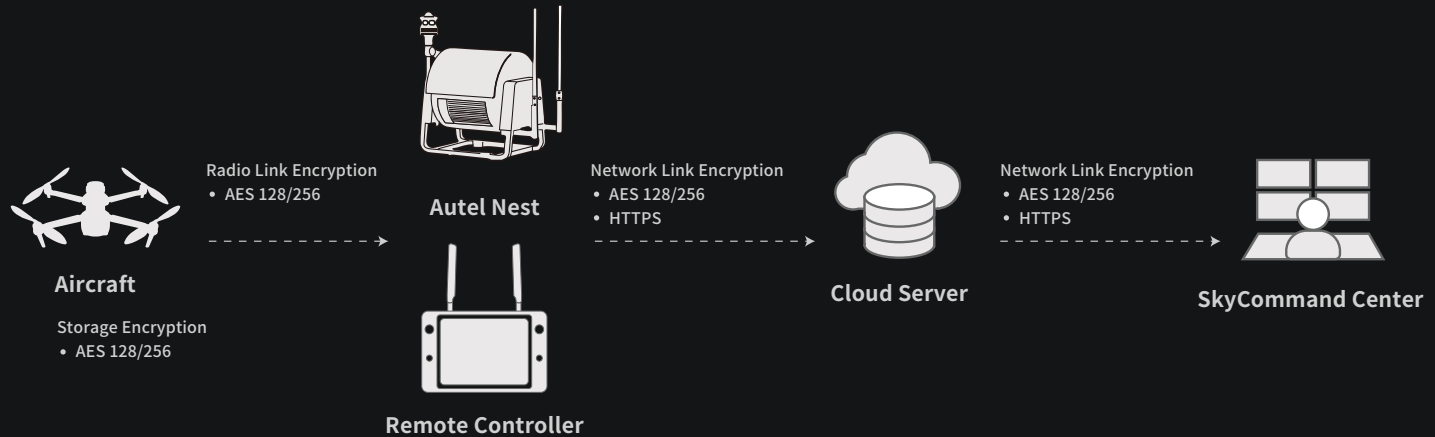
Polygon Mission

Supports one-click automatic generation of polygon flight areas.

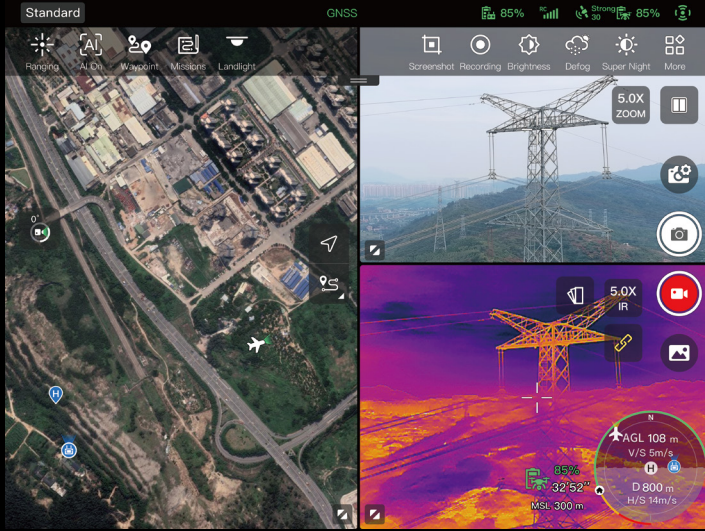
Data Security

Data* can only be physically accessed via the aircraft locally, and can be encrypted using AES-256 and passwords.

*User and aircraft information, including flight logs, locations, and accounts.

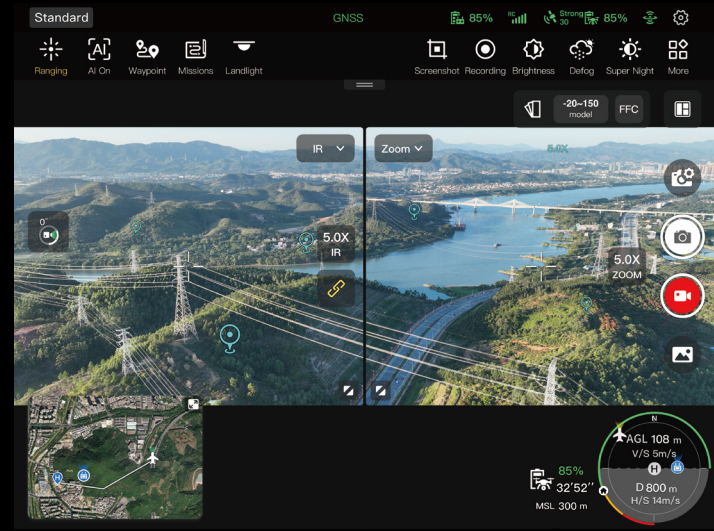


Enhanced Live-View



Multi-channel Projection Screen

Supports simultaneous output of RGB/night vision, infrared, and map.



AR Scene*

Geo-location data and other aircraft location info detected by ADS-B can overlay on real-time map, which is convenient for you to confirm the drone's location and avoid airborne risks.

*This feature will be available in a future update.

Operating Environment

IP43

IP Rating

-4 °F to 122 °F

Temperature



Complete Remote Operations System

Used with the EVO Nest, the EVO Max series supports all-weather auto piloting for scenarios such as substations, industrial parks, and rooftops.



Autel SDK

The Autel SDK is open to the world, helping developers and partners reduce software and hardware development costs and jointly create a new industry ecosystem.



Mobile SDK

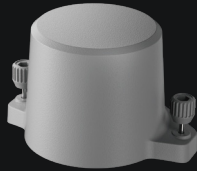
Open UX SDK (iOS/Android) can directly call up the ready-made interactive interface.

Ecosystem



Autel Smart Controller V3

Daylight Readable Display: 7.9 inches, 2000nits maximum brightness, 2048*1536 resolution.
SuperDownload: Download footage from drones to mobile devices at a maximum rate of 20 MB/s.
Functional Interface: HDMI ports allow connection to 3rd party displays or monitors.
Ultra-Long Battery Life: Up to 4.5 hours of continuous operation. 2-hr fast charging from empty.
Storage: Built-in 128G storage space allows 3rd party apps and mission media storage.



RTK Module (optional)

Provides centimeter-accurate positioning data for mapping and reduces electromagnetic interference for flying near critical structures.



EVO Nest (optional)

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.

Application



Specifications

Aircraft	
EVO Max 4T Weight	3.57 lbs (1620g, battery and gimbal included)
EVO Max 4N Weight	3.62 lbs (1641g, battery and gimbal included)
Max. Takeoff Weight	4.41 lbs (1999 g)
Dimensions	562*651*147 mm (unfolded, incl. propellers) 318*400*147 mm (unfolded, excl. propellers) 257*145*131 mm (folded, excl. propellers)
Diagonal Wheelbase	1.53 ft (466mm)
Max Flight Time	42 mins
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Max Wind Resistance	27 mph* *Takeoff and landing can withstand wind speeds up to 27 mph (12 m/s).
Hovering Accuracy	Vertical: ±0.1 m (Vision System enabled); ±0.3 m (GPS enabled); ±0.15 m (RTK enabled); Horizontal: ±0.15 m (Vision System enabled); ±0.3 m (GPS enabled); ±0.1 m (RTK enabled);
IP Rating	IP43
GNSS	GPS+Galileo+BeiDou+GLONASS

Image Transmission	
Operating Frequency	2.4G/5.8G/900MHz* 900MHz is only applicable for FCC regions.
Max Transmission Distance (unobstructed, free of interference)	12.4 miles/20km (FCC) 4.9 miles/8km (CE)
Transmitter Power (EIRP)	2.4GHz FCC: <30dBm, CE/SR-RC/MIC: <20dBm 5.8GHz FCC/SRRC: <27dBm, CE: <14dBm 5.15-5.25GHz FCC/CE: < 23dBm 902-928MHz FCC: <30dBm 5.65-5.755GHz MIC: <27dBm

Visual Sensing System	
Obstacle Sensing Range	Forward: 19.7-1220.5in (0.5-31m) Backward: 19.7-984.3in (0.5-25m) Sideward: 19.7-1023.6in (0.5-26m) Upward: 0.66-85.3ft (0.2-26m) Downward: 0.98-75.5ft (0.3-23m)
FOV	Forward/Backward Sensor: 60°(H), 80°(V) Upward/Downward Sensor: 180°(side-ward), 120°(forward & backward)

Millimeter-wave Radar Sensing System

Frequency	60GHz/24GHz* *For 60GHz use, please fly safely and comply with your local laws and regulations.
Sensing Range	60GHz Radar: Upward: 0.98-787.4in (0.3-20m) Downward: 5.9-3149.6in (0.15-80m) Forward and Backward: 0.98-98.43ft (0.3-50m) 24GHz Radar: Downward: 2.62-39.4ft (0.8-12m)
FOV	Horizontal (6dB): $\pm 60^\circ / \pm 22^\circ$ (60GHz/24GHz) Vertical (6dB): $\pm 30^\circ / \pm 20^\circ$ (60GHz/24GHz)

Radar and Visual Sensing Systems

Sensing Range	Forward & Backward: 11.8-1968.5in (0.3-50m) Sideward: 19.7-1023.6in (0.5-26m) Upward: 0.66-85.3ft (0.2-26m) Downward: 0.49-262.5ft (0.15-80m) (60GHz radar)
FOV	Forward/Backward Sensor: 80°(H), 120°(V) Upward/Downward Sensor: 180°(sideward), 120°(forward & backward)
Operating Environment	Forward, Backward, Upward, Downward: supports all-weather obstacle avoidance for glass, water, twigs, buildings and high voltage lines. At least one of the 2 conditions should be met: sufficient lighting or the obstacle has strong reflection ability to electromagnetic waves. Sideward: The surface has rich texture, under sufficient lighting environment (>15 lux, normal indoor fluorescent lighting environment)

EVO Max 4N Starlight Camera

Sensor	Effective Pixels: 2.3M
Lens	Focal Length: 35mm (equivalent 41.4mm) FOV: 52° Zoom Range: 1-8x (synced zoom supported)
ISO Range	Auto: ISO100-ISO450000 Super Sensitive Mode: Auto ISO100-ISO450000

EVO Max 4N / 4T Wide Camera

Sensor	1/1.28" CMOS, Effective pixels: 50M
Lens	DFOV: 85° Focal length: 4.5 mm (equivalent: 23 mm) Aperture: f/1.9 AF motor: 8-line SMA, PDAF focusing Focus Range: 1m ~ ∞
ISO Range	Photo: ISO100~ISO6400 Video: ISO100~ISO64000 (Night mode: up to ISO64000)

EVO Max 4T Zoom Camera

Sensor	1/2" CMOS, Effective pixels: 48M
Lens	Focal Length: 11.8-43.3mm(35mm, equivalent: 64-234mm) Aperture: f/2.8-f/4.8 Focus Range: 5m ~ ∞
ISO Range	Normal Mode Auto: Auto: ISO100 - ISO6400 Manual Photo: ISO100 - ISO12800 Video: ISO100 - ISO6400

EVO Max 4N / 4T Laser Rangefinder

Measurement Accuracy	± (1m + D×0.15%) where D is the distance to a vertical surface
Measuring Range	5-1200m

EVO Max 4T Thermal Camera

Thermal Imager	Uncooled VOx Microbolometer
Lens	DFOV: 42° Focal length: 13mm Aperture: f/1.2 Focus Range: 6m ~ ∞
Infrared Temperature Measurement Accuracy	±3°C or reading ±3% (using the larger value) @ambient temperature from -4°F to 140°F (-20°C~60°C)
Video Resolution	640×512@25FPS
Temperature Measurement Range	-4°F to 302°F, 32°F to 1022°F (-20°C to 150°C, 0 to 550°C)
Temperature Alert	High and low temperature alarm thresholds, reporting coordinates and temperature values

EVO Max 4N Thermal Camera

Thermal Imager	Uncooled VOx Microbolometer
Lens	DFOV: 61° Focal length: 9.1mm Aperture: f/1.0 Focus Range: 2.2m ~ ∞
Infrared Temperature Measurement Accuracy	±3°C or reading ±3% (using the larger value) @ambient temperature from -4°F to 140°F (-20°C~60°C)
Video Resolution	640×512@25FPS
Temperature Measurement Range	-4°F to 302°F, 32°F to 1022°F (-20°C to 150°C, 0 to 550°C)
Temperature Alert	High and low temperature alarm thresholds, reporting coordinates and temperature values



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