AUTEL ROBOTICS

Dragonfish Series

Command The Future

Smart. Simple. Efficient.

The Dragonfish's unique tilt-rotor design simplifies operation while maximizing performance and efficiency. With no complicated moving parts, the Dragonfish is modular, waterproof, smart, and reliable. The Dragonfish is mission ready right out of the box and includes powerful AI tracking capabilities and a multitude of modular payload options. An endurance of up to 158 minutes (including payload) further augments the Dragonfish's robust mission capabilities and pushes it significantly ahead of the competition.

158 minutes Longest Fight Time With Load	**4K 50x** Stabilized Optical Zoom	**3 minutes** Quick Assembly
108 km/h Max Speed	**18.6 miles** Transmission Range	**5 s** System Boot and Self Check

Endurance With Payload

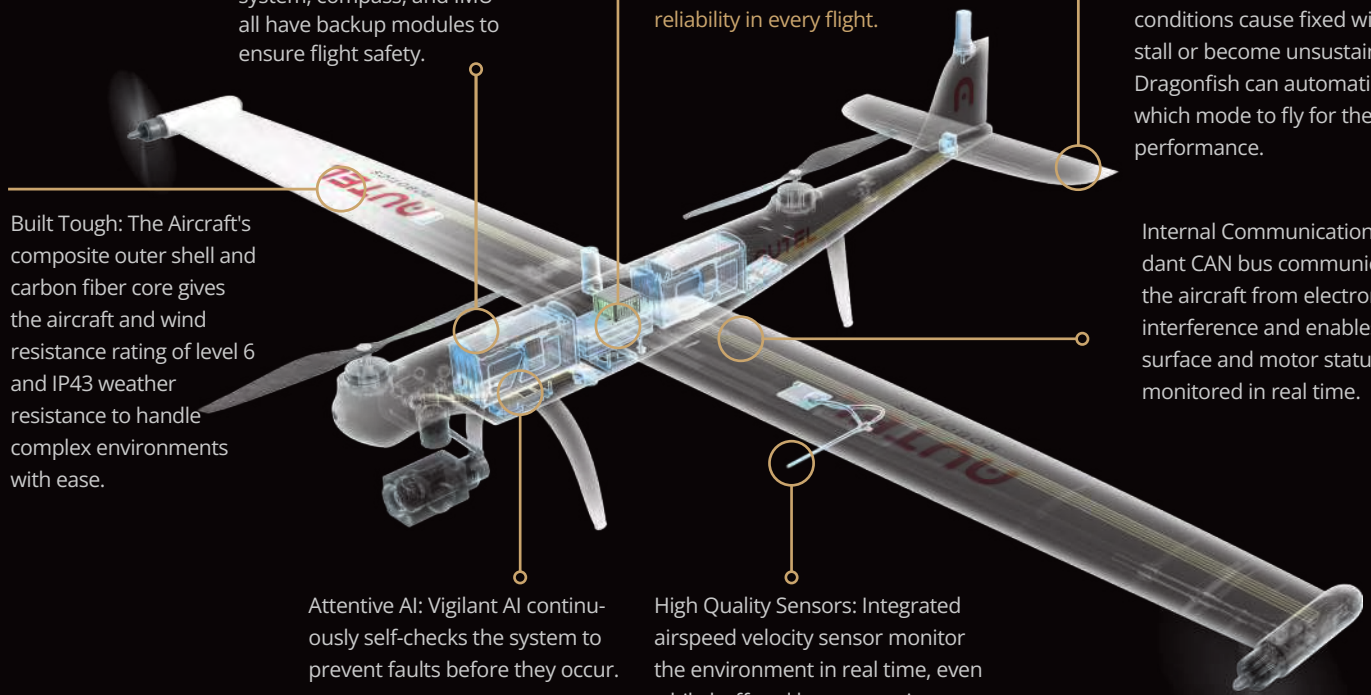
The Dragonfish series includes three models: the Dragonfish Lite, Dragonfish Standard, and Dragonfish Pro. With a flight time of 81 minutes, 126 minutes, and 158 minutes respectively while carrying a payload, each model can greatly improve work efficiency.

Safety and Redundancy

Backup Modules: The Dragonfish battery, barometer, positioning system, compass, and IMU all have backup modules to ensure flight safety.

Autel Robotics' superior flight control platform guarantees stability and reliability in every flight.

Automatic Transition: The Dragonfish will automatically transition to multi-rotor mode if adverse conditions cause fixed winged flight to stall or become unsustainable. The Dragonfish can automatically choose which mode to fly for the best performance.



Built Tough: The Aircraft's composite outer shell and carbon fiber core gives the aircraft and wind resistance rating of level 6 and IP43 weather resistance to handle complex environments with ease.

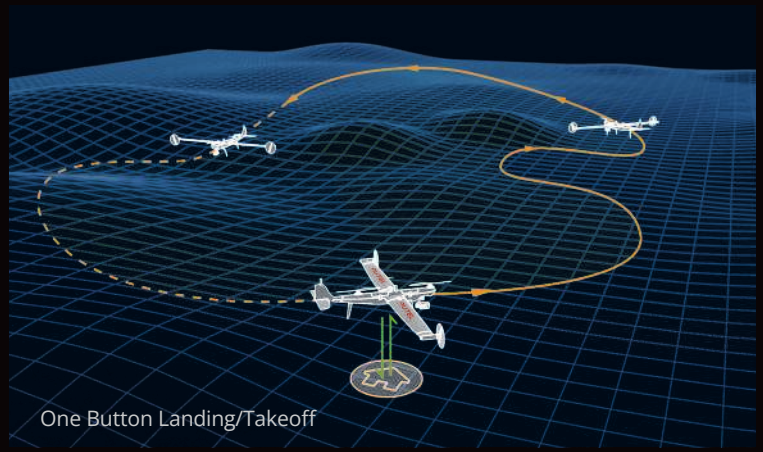
Internal Communication: Dual-redundant CAN bus communication protects the aircraft from electromagnetic interference and enables the rudder surface and motor status to be monitored in real time.

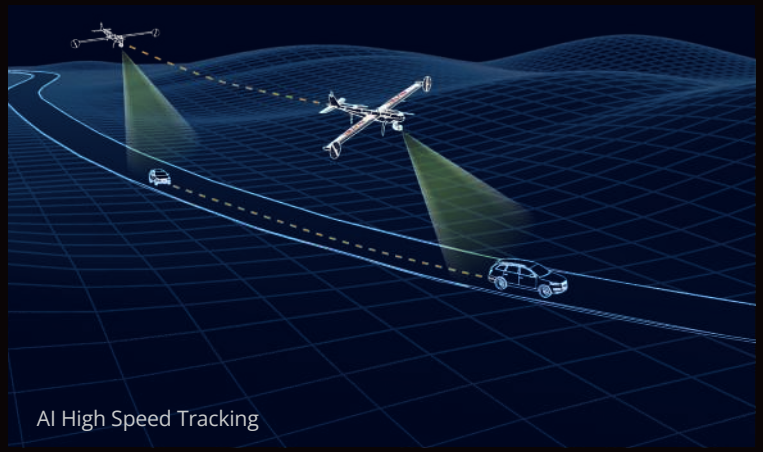
Attentive AI: Vigilant AI continuously self-checks the system to prevent faults before they occur.

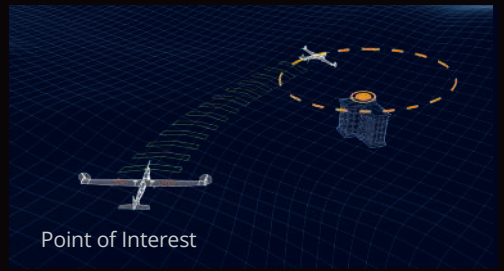
High Quality Sensors: Integrated airspeed velocity sensor monitor the environment in real time, even while buffeted by snow or ice.

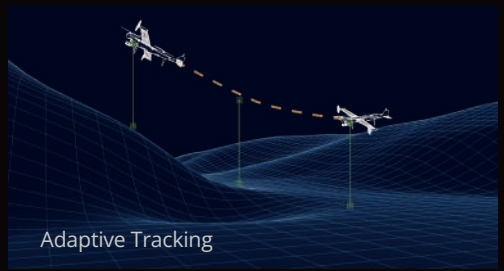
Intelligence And Autonomy

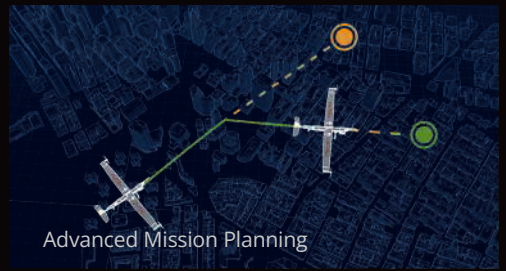
The Dragonfish comes with a variety of automated functions to streamline and simplify mission tasks. Advanced algorithms add an additional of layer of consistency and simplicity for the user workflow.


One Button Landing/Takeoff


AI High Speed Tracking

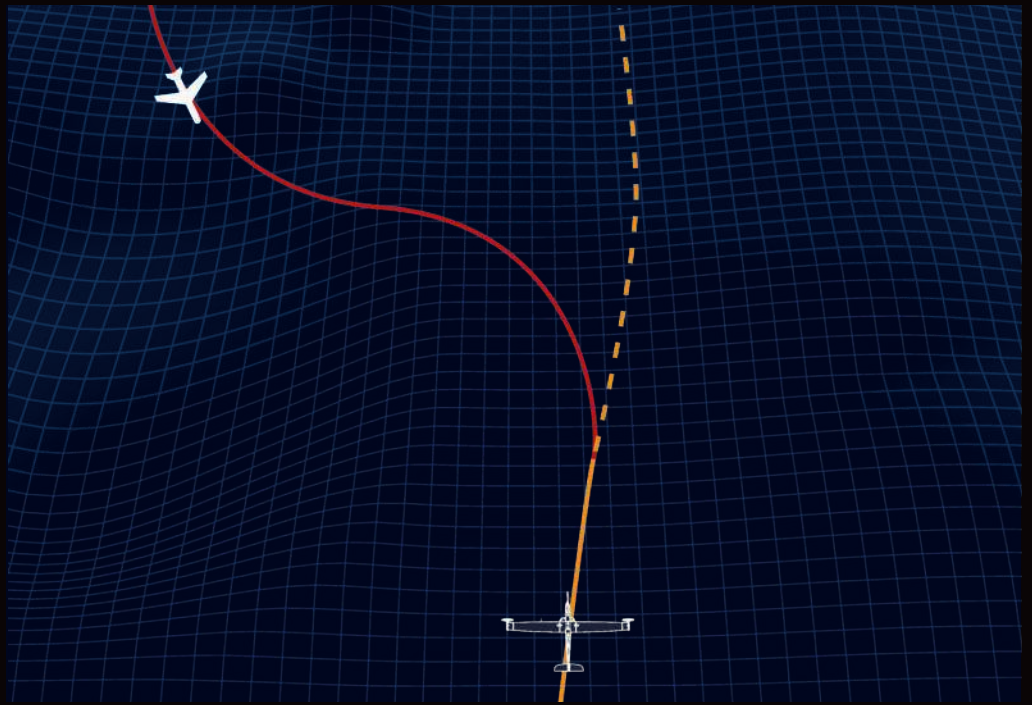

Point of Interest


Adaptive Tracking


Advanced Mission Planning

ADS-B Receiver

A Millimeter-wave Radar Is Built In The Nose Of Dragonfish, Which Can Detect Obstacles Up To 200meters Away, And The Aircraft Automatically Adjust Its Height And Speed According To The Collected Flight Data, Giving Dragonfish Excellent Obstacle Avoidance Performance.



Interchangeable Payload System

Tackle any operation with a variety of payload options that can be toolessly swapped to suit mission needs. Dragonfish payloads are designed to be interchangeable between aircraft classes to maximize the value and enhance the mission capability of the system.

DG-Z2

- 4K 20x Optical Zoom
- 12m Pixel Wide-Angel
- 3-Axis Stabilized Gimbal System

DG-T3

- 4K 20x Optical Zoom
- 12m Pixel Wide-Angel
- 640x512 Infrared Camera
- 3-Axis Stabilized Gimbal System

DG-T3H

- 12m Megapixel Wide-Angel
- 1280×1024 High Resolution Infrared
- Laser distance measurement radar
- 3-Axis Stabilized Gimbal System

Interchangeable Payload System

Tackle any operation with a variety of payload options that can be toolessly swapped to suit mission needs. Dragonfish payloads are designed to be interchangeable between aircraft classes to maximize the value and enhance the mission capability of the system.

DG-L20T

- 4K 20x Optical Zoom
- 12m Megapixel Wide-Angel
- 640x512 Resolution Infrared
- Laser distance measurement radar
- 3-Axis Stabilized Gimbal System

DG-L50T

- 4K 50x Optical Zoom
- 12m Megapixel Wide-Angel
- 1280x1024 Resolution Infrared
- Laser distance measurement radar
- 3-Axis Stabilized Gimbal System

*Please refer to the specifications page for specific payloads adaptability.

Applications

The Dragonfish's powerful platform and modular payload options make it an asset in a wide variety of professions.

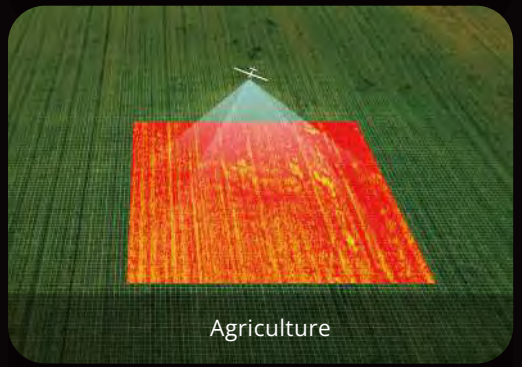
Public Safety

Fire Fighting and Prevention

Energy

Traffic Monitoring and Management

Coastal Surveillance and Security


Agriculture

RTK

RTK Accuracy

Map with confidence with the Dragonfish's two RTK (Real-Time Kinetic) modules, which enable the aircraft to provide centimeter-accurate location data when paired with a GNSS base station. The dual units back up each other's data for additional peace of mind, while also improving image metadata quality and increasing flight precision and safety.

Autel Robotics' GNSS Base Station provides centimeter accuracy and supports all 4 major satellite systems

9.7" 1000nit Autel Ground Control Station

With an ultra-bright touchscreen of 1,000 nits, the Autel Ground Control Station is twice as bright as the average smartphone, making the 9.7-inch screen easy to see under direct sunlight.

Samsung EXYNOS
Eight-core processor

9.7 inches
TFT-LCDcapacitive touchscreen

18.6 miles
Image transmission distance

2048x1536
Ultra HD resolution

4.5 hours
Battery life

256G
Internal storage

*18.6 miles is the image transmission distance when the base station is used. If there is no base station, the image transmission distance is 6.2 miles.

One Device.
Any Mission.

Autel Voyager

Autel Voyager is specifically designed for the dragonfish for indus try specific applications. The software provides advanced mission planning, intelligent tracking, flight history tracking, and other autonomous features. Simple to use yet incredibly powerful, Autel Voyager is the one stop solution for every mission.

Compact And Portable

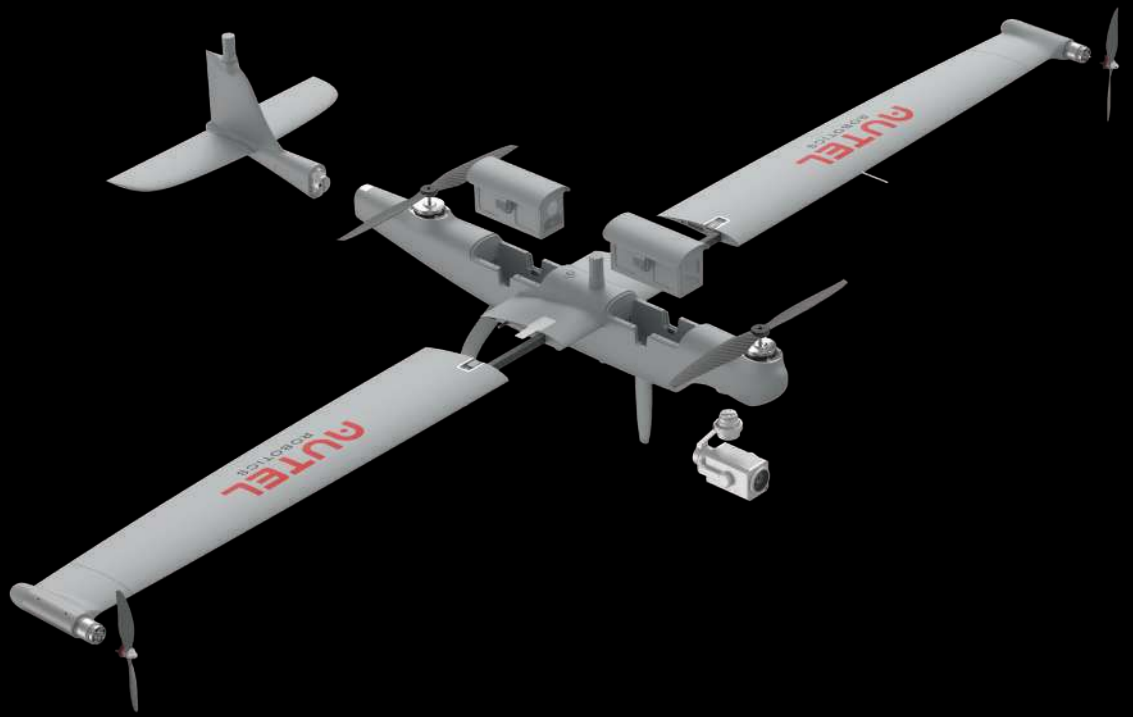
With its innovative quick-release design and a speedy self-check, the Dragonfish can be in the air and mission ready within 5 minutes.

The Dragonfish can be easily disassembled by a single person and fits into the trunk of any average-sized car. The entire system can be assembled without tools and ready to fly in less than 5 minutes.

5s

The whole system self checks in 5 seconds and is ready to fly in 5 minutes.

Quick-release blade design makes assembly simple and convenient.



Technical parameters

	Dragonfish Lite	Dragonfish Standard	Dragonfish Pro
Dimension	38*63*13.8 inches (965*1600*350 mm)	50.8*90.6*18.1 inches (1290*2300*460 mm)	65*120*18.1 inches (1650*3040*460 mm)
Max Flight Time	81 Mins	126 Mins	158 Mins
Aircraft Weight	9.92 lbs (4.5 kg)	16.53 lbs (7.5 kg)	31.97 lbs (14.5 kg)
Max Payload	2.2 lbs (1 kg)	3.31 lbs (1.5 kg)	5.51 lbs (2.5 kg)
IP Rating	IP43	IP43	IP43
Transmission Range	18.6 Miles (30km)	18.6 Miles (30km)	18.6 Miles (30km)
Max Wind Resistance	Fixed Wing Mode: 15 m/s (33.6 mph) Vertical Flight Mode: 12 m/s (26.8 mph)	Fixed Wing Mode: 15 m/s (33.6 mph) Vertical Flight Mode: 12 m/s (26.8 mph)	Fixed Wing Mode: 15 m/s (33.6 mph) Vertical Flight Mode: 12 m/s (26.8 mph)
Service Ceiling Above Sea Level	13123 ft (4000 m)	19685 ft (6000 m)	19685 ft (6000 m)
Flight Speed	Multi-rotor: 0m/s~17m/s (0 mph~38 mph) Fixed Wing: 17m/s~30m/s (38 mph~67 mph)	Multi-rotor: 0m/s~17m/s (0 mph~38 mph) Fixed Wing: 17m/s~30m/s (38 mph~67 mph)	Multi-rotor: 0m/s~17m/s (0 mph~38 mph) Fixed Wing: 17m/s~30m/s (38 mph~67 mph)
Operating Temperature	-4°F to 122°F (-20°C to 50°C)	-4°F to 122°F (-20°C to 50°C)	-4°F to 122°F (-20°C to 50°C)
GNSS	GPS+GLONASS+BeiDou+Galileo	GPS+GLONASS+BeiDou+Galileo	GPS+GLONASS+BeiDou+Galileo
Supported Payloads	DG-Z2,T3,T3H	DG-Z2,T3,T3H,L20T	DG-Z2,T3,T3H,L20T,L50T

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