

## **DRAGONFISH SERIES**

#### MOVE BEYOND CONVENTION, COMMAND THE FUTURE



Dragonfish Lite

Dragonfish Standard

**Dragonfish Pro** 

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## SUPER LONG ENDURANCE 4K OPTICAL ZOOM

The Dragonfish's unique tilt rotor design simplifies operation and maximizes 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 180 mins (including payload) further augments the Dragonfish's robust mission capabilities and pushes it significantly ahead against other VTOL competition. 180 MINUTE

108 km/h

Speed (Max)

4K 50x

3 MINUTES

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Stabilized Optical Zoom

#### 18.6 MILES (30KM)

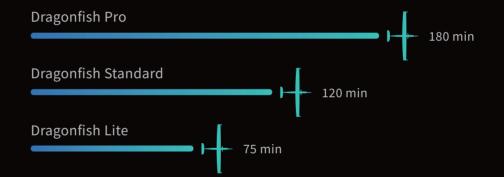
Max Video Transmission Range

**5 SECONDS** 

System Boot and Self Check

## LONGER ENDURANCE, BETTER EFFICIENCY

# ENDURANCE WITH PAYLOAD



## SAFETY AND REDUNDANCY

The battery, IMU, barometer, compass, and positioning system all have backup modules to ensure flight safety

IP43, high strength composite body, level 6 wind resistance allows the Dragonfish to handle complex environments with ease Autel Robotics' superior flight control platform guarantees stability and reliability in every flight The Dragonfish will automatically transition to multirotor mode in the event of adverse conditions where fixed wing flight may stall or be unsustainable

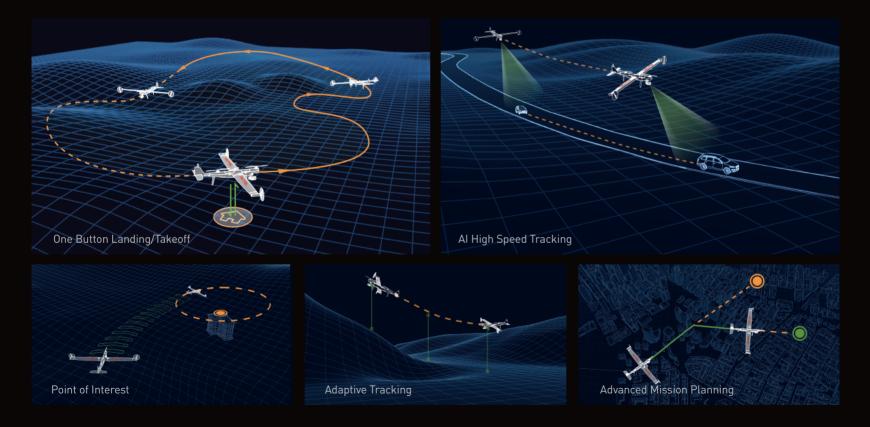
Dual-redundant CAN bus communication enables realtime monitoring of the rudder surface and motor status and protects the aircraft from strong electromagnetic interference

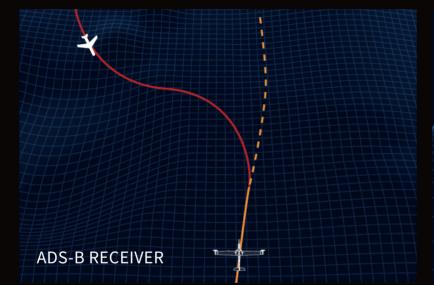
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Dragonfish uses AI to continuously self check the system and prevents accidents before they occur Integrated airspeed velocity sensors enable the Dragonfish to monitor its environments in realtime impervious to snow or ice.

## **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.





DRAGONFISH IS ALSO ABLE TO NOTIFY THE OPERATORS ABOUT INCOMING MANNED AIRCRAFTS' POSITION, ALTITUDE AND SPEED THROUGH AN INTEGRATED ADS-B RECEIVER, DRAMATICALLY IMPROV-ING FLIGHT SAFETY.

#### MILLIMETER-WAVE RADAR

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**

The Dragonfish comes with a variety of payload options that can be changed rapidly to suit mission needs or to offer future expandability and versatility



#### DG-Z2

- 4K 20x optical zoom
- 12m pixel wide angel camera
- 3 axis gimbal stabilization



DG-T3

- 4K 20x optical zoom
- 12m pixel wide angel camera
- 640x512 infrared camera
- 3 axis gimbal stabilization



- 12m pixel wide angel camera
- + 1280  $\times$  1024 infrared camera
- Laser range sensor
- 3 axis gimbal stabilization

## **INTERCHANGEABLE PAYLOAD SYSTEM**

The Dragonfish comes with a variety of payload options that can be changed rapidly to suit mission needs or to offer future expandability and versatility



#### DG-M1

- 12m pixel wide angel camera
- 6 Multispectral sensor
- 3 axis gimbal stabilization



#### DG-L20T

- 4K 20x optical zoom
- 12m pixel wide angel camera
- 640x512 infrared camera
- Laser range sensor
- 3 axis gimbal stabilization



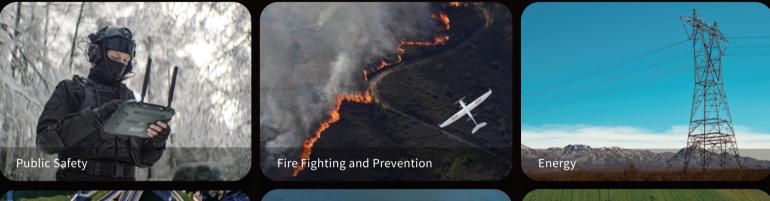
#### DG-L50T

- 4K 50x optical zoom
- 12m pixel wide angel camera
- 1280x1024 infrared camera
- Laser range sensor
- 3 axis gimbal stabilization

\*Please refer to the specification page for details on payload compatibility.

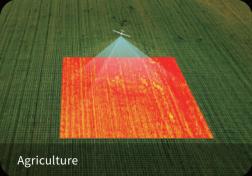
### **APPLICATIONS**

The Dragonfish's powerful platform and modular payload options gives it the flexibility to excel in a wide range of applications











## **RTK MODULE**



The Dragonfish is equipped with 2 RTK modules for additional redundancy. By integrating the GNSS Base Station with the RTK modules, the Dragonfish can achieve centimeter accuracy, precise headings and strong anti-magnetic interference capabilities. These modules back up one another and greatly improves the quality of image metadata for photogrammetry and increases flight precision and safety.

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

## 9.7"1000NIT ULTRA-BRIGHT GROUND CONTROL STATION

The high resolution (2048\*1536), 9.7 inches, ultra-bright (1000 nits) TFT-LCD touchscreen ensures maximum visibility and practicality in all situations.

Autel Ground Control Station is water, dust, and water resistant. Autel Robotics' new antenna design allows the video transmission to reach up to 18.6 miles (30km)

The Autel Robotics ground station controller has a battery life of up to 4.5hours and can be operated indefinitely with a remote power source

\$3.5

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# PROFESSIONAL SOFTWARE SOLUTIONS

#### **Autel Voyager**

Autel Voyager is specifically designed for the dragonfish for industry 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**

The Dragonfish can be easily disassembled by a one man team and will fit in the back of typical car trunks. The entire system can be assembled without tools and is ready to fly in less than 5 minutes.



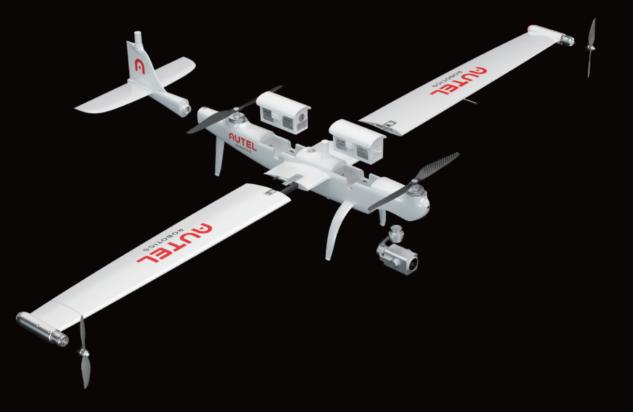
The Dragonfish's fuselage is highly modular for easy packing and repair



The entire system self checks in 5 seconds upon startup and is ready to fly immediately after



Tool-Free Quick Release Propellers



## **TECHNICAL SPECIFICATIONS**



	Dragonfish Lite	Dragonfish Standard	Dragonfish Pro
SIZE	1600x950x350 mm	2300x1290x460 mm	3040x1650x460 mm
ENDURANCE (WITH PAYLOAD)	75 min	120 min	180 min
AIRCRAFT WEIGHT (W/O PAYLOAD)	4.5 kg	7.5 kg	14.5 kg
MAXIMUM PAYLOAD	1.0 kg	1.5 kg	2.5 kg
IP RATING	IP43	IP43	IP43
TRANSMISSION RANGE	30 km	30 km	30 km
WIND RESISTANCE	Level 6(Multirotor);Level 7(Fixed Wing)	Level 6(Multirotor);Level 7(Fixed Wing)	Level 6(Multirotor);Level 7(Fixed Wing)
MAXIMUM HEIGHT	4000 m	6000 m	6000 m
FLYING SPEED	0m/s~17m/s (Multirotor)	0m/s~17m/s (Multirotor)	0m/s~17m/s (Multirotor)
	17m/s~30m/s (Fixed Wing)	17m/s~30m/s (Fixed Wing)	17m/s~30m/s (Fixed Wing)
WORKING TEMPERATURE	-20 ~ 50°C	1 cm+1 ppm (Multirotor)	-20 ~ 50°C
POSITION ACCURACY	1 cm+1 ppm (Multirotor)	3 cm+1 ppm (Multirotor)	1 cm+1 ppm (Multirotor)
	3 cm+1 ppm (Fixed Wing)	3 cm+1 ppm (Fixed Wing)	3 cm+1 ppm (Fixed Wing)
GNSS	GPS+GLONASS+Beidou+Galileo	GPS+GLONASS+Beidou+Galileo	GPS+GLONASS+Beidou+Galileo
SUPPORTED PAYLOADS	DG-Z2,T3,T3H,M1	DG-Z2,T3,T3H,L20T,M1	DG-Z2,T3,T3H,L20T,L50T,M1



www.auteldrones.com