DRAGONFISH
MOVE BEYOND CONVENTION, COMMAND THE FUTURE
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 120 mins (including payload) further augments the Dragonfish’s robust mission capabilities and pushes it significantly ahead against other VTOL competition.
INTELLIGENCE AND AUTONOMY

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

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

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

Ip43, high strength composite body, level 6 wind resistance allows the dragonfish to handle complex environments with ease.

The Dragonfish will automatically transition to multi-rotor mode in the event of adverse conditions where fixed winged flight may stall or be unsustainable.

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

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

Integrated airspeed velocity sensors enable the Dragonfish to monitor its environments in real time- impervious to snow or ice.

Dragonfish uses AI to continuously self-check the system and prevents accidents/ faults before they occur.
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.

4K Dual Sensor
- 4K 20x stabilized Optical Zoom
- 48 MP Wide Angle
- 3-Axis Gimbal

Triple Sensor
- 4K 20x stabilized Optical Zoom
- 48 MP Wide Angle
- 640x512 Radiometric Thermal
- 3-Axis gimbal

Multispectral
- 1 RGB Wide Angle (48 MP)
- 5 multispectral sensors (2MP)

Third Party Payloads
Autel’s Payload SDK (PSDK) allows third party users to develop unique payload solutions quickly and efficiently for different mission scenarios and applications.
APPLICATIONS

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

- Fire Fighting and Prevention
- Public Safety
- Coastal Surveillance and Security
- Energy
- Agriculture
- Traffic Monitoring and Management
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.
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.

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 6 hours and can be operated indefinitely with a remote power source.
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 in 3 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

- **Takeoff Weight**: 120 min endurance (with standard payload)
- **Max Speed**: 18.6 Miles (30KM) Video Transmission
- **Video Transmission**: Level 6 Wind Resistance
- **Operating Temperature**: -4~131°F (-20~50°C)
- **Service Ceiling**: 19685 ft (6000m)
- **Highest Transition Altitude**: 14763ft (4500m)
- **Positioning Accuracy**: 1 cm +1 ppm

**Wingspan**: 7.9 ft (2.3m)
**Height**: 1.5 ft (0.46m)
**Length**: 4.2 ft (1.29m)

**Takeoff Weight**: 17.2 lb (7.8)
**Max Payload**: 3.3 lbs (1.5 kg)
**Rating System**: IP43

**Quick assembly**: 3 minutes
**Positioning Accuracy**: 1 cm +1 ppm
**Endurance**: 120 min
**Wind Resistance**: 18.6 Miles (30KM)
**Max Speed**: 67 mph (108km/h)
**Operating Temperature**: -4~131°F (-20~50°C)
**Service Ceiling**: 19685 ft (6000m)
**Highest Transition Altitude**: 14763ft (4500m)

**Wingspan**: 7.9 ft (2.3m)
**Height**: 1.5 ft (0.46m)
**Length**: 4.2 ft (1.29m)