QYSEA

FIFISH E-GO

Easy Go, Just Dive.

Industrial ROV

iF DESIGN AWARD 2024

GOOD DESIGN AWARD 2023

FIFISH E-GO

Next-generation AI Underwater Robot

A New Era & Model of Efficiency
Unwavering Reliability & Endurance

- Efficient Speeds
- Extensive Battery Life
- Heavy Payload
- Strong Flow Resistance
- Simple Operation
- Quick-release Modules
- AI-assisted Functions
- Super-fast Charging
- Ultra-wide HD Camera System
- Enhanced Reliability & Durability

Highly Efficient & Modular

Seamless Integration

The internal core tank of FIFISH E-GO possesses exceptional attributes such as pressure resistance, corrosion resistance, and crystallization resistance. These qualities provide excellent protective coverage for the core precision components within the tank, ensuring the overall durability and robustness of the entire unit.

Quick-Release Modules

FIFISH E-GO's modular architecture seamlessly integrates the robot's essential components, including the motor, camera, lighting, and battery. This design enables rapid and precise assembly, disassembly, and troubleshooting. Battery and accessory removal take just seconds, and spare part replacements can be completed within 5 minutes, significantly enhancing operational efficiency*.

*: The durations such as "9 seconds" and "5 minutes" are measured in actual operating scenarios by proficient operators. The actual assembly and disassembly times may vary due to factors such as the operator's skill level and working environment.

Nature-Inspired Design

The rugged biomimetic fin of the E-GO stabilizes the drone underwater and serves as a secure cable anchor. The ergonomic T-shaped tail fin allows for easy one-handed carrying simplifying transportation and enabling swift deployment.

Precise & Powerful Control

Innovative Ring-Wing Propulsion

At its core, the FIFISH E-GO features an innovative ring-wing motor system, achieving speeds of 3 knots and demonstrating strong resistance in challenging waters. It incorporates six high-performance metal wing propellers with an expanded blade area, resulting in a 30%* power increase while ensuring remarkable reliability, wear resistance, and corrosion protection.

*: Compared to the FIFISH V6 EXPERT, the FIFISH E-GO offers a 30% performance improvement.

360° Full-Motion Capability

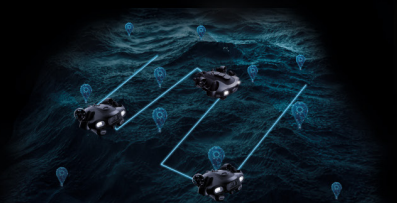
Leveraging FIFISH patented six-directional vector layout, FIFISH E-GO achieves a complete 360° full-dimensional underwater motion, eliminating blind spots. This groundbreaking technology empowers operators with complete freedom of movement underwater, breaking through spatial and angular limitations to achieve precise inspections.

AI-Driven Stabilization

Equipped with the FIFISH Q-Steady 3.0 self-stabilization system, driven by its AI-based station lock technology, FIFISH E-GO automatically adjusts its stability based on changing water flows, ensuring remarkably steady underwater operations and inspections.

Underwater Auto-Cruise

For extensive scan and search scenarios, FIFISH E-GO enables auto-cruise and predefined movement paths through the FIFISH APP. This feature frees up your hands, allowing focus to be placed on the visual screen during inspections, significantly enhancing the efficiency of crucial underwater tasks.



Station Lock Module
(Optional Add-on)

In operational scenarios with strong currents, the FIFISH E-GO's station-keeping system achieves extended and self-adaptive stability, allowing operators to effectively navigate strong currents and perform tasks with optimal smoothness.

Fast Charging Redefined

Dual Power System, Hot Swap Technology

FIFISH E-GO features an upgraded design with a dual battery systems, employing advanced hot-swappable technology. Achieve seamless alternation of battery replacement without powering down or restarting the machine.

Quick-Release System, Rapid Power Refill

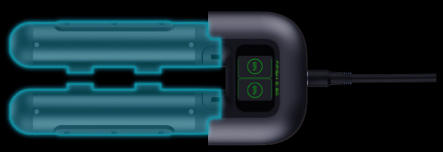
The battery adopts a quick-release design, allowing for efficient battery replacement within seconds. Additional individual battery modules are available for comprehensive preparedness in remote operating locations.

Portable Charging Station,* A Complete Solution
(Optional Add-on)

FIFISH E-GO comes equipped with a portable smart charging solution, the Portable Charging Station, offering three distinct modes:

Smart Charge Mode: Reach 150 minutes of standard operational time on a full charge, with 50-minute rapid charging to 90% capacity.
Outdoor Power Mode: Features dual Type-C interfaces with dual 36W outputs.
Charge Management Mode: Monitor and manage the power status and health of the power modules through the station's display screen.

*Note: The Portable Charging Station is an optional accessory and needs to be purchased separately or as part of a package.



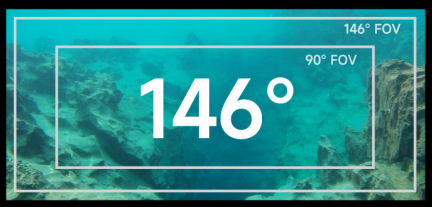
Air Travel Compatibility, Hassle-Free Flying

FIFISH E-GO utilizes two 69.12Wh single-capacity lithium batteries, ensuring full compliance with air travel regulations for carry-on transportation.

Leading-Edge Imaging System

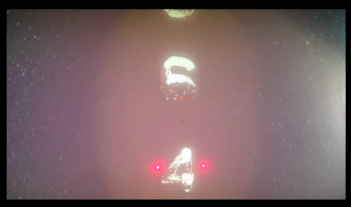
Next-Gen Fisheye Lens & Camera Sensor

Featuring an innovative ultra-wide-angle camera lens, FIFISH E-GO provides a 176° super-wide surface view and a 146° underwater panoramic perspective, enabling operators to capture the entire underwater scene. The E-GO is equipped with a 1/1.8-inch CMOS sensor for 4K UHD filming and RAW format image capture.



Ultra-Proximity Underwater Focus

With a 10cm macro focus range, FIFISH E-GO ensures precise close-range imaging even in turbid waters. Its auto focus capabilities allow for detailed captures across numerous ranges.



Vivid Four-Lamp Lighting System

Boasting multi-lamp LED lights, FIFISH E-GO provides up to 10,000 lumens of brightness and a 160° beam angle with adjustable intensity across three levels.

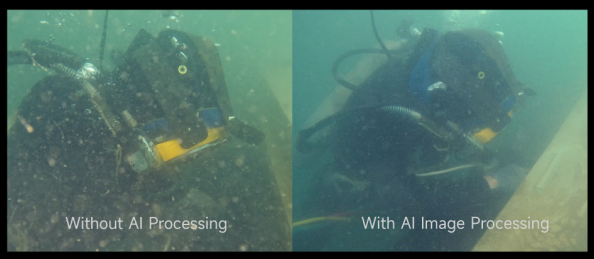
Advanced AI Functions

AI Visual Enhancement

Using adaptive methods for dehazing, contrast enhancement, and natural color correction, FIFISH E-GO's AI algorithms deliver enhanced, realistic, and higher-quality visuals.

AI Dehazing Algorithms

Enhance image clarity and improve decision-making efficiency for underwater operations by identifying and filtering out the snowflake effects caused by suspended underwater particles.



AI Vision Station Lock

Accurately lock onto underwater targets with a single touch on your screen. AI Vision Station Lock calculates the vehicle's position, enabling all-round, adaptive, and autonomous control while maintaining a stable floating posture.

AI-Powered Fish Quantity Assessment*

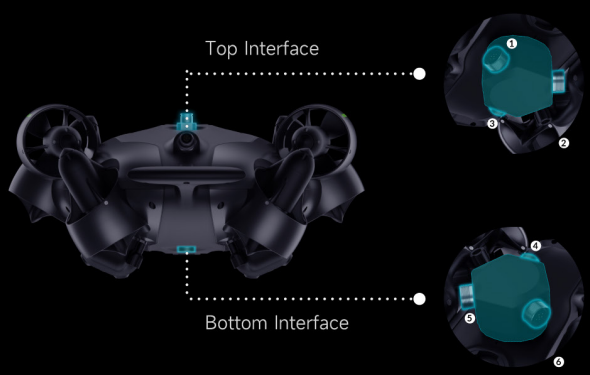
Leveraging the machine's hardware visual capabilities, FIFISH E-GO's unique feature automatically identifies and counts fish types within the screen frame, bring a boost to efficiency in underwater assessments.

*: This feature will be upgraded for free via OTA (over-the-air) updates.

Robust & Reliable Performance

Enhanced Six-Port Expansion

Through a meticulous internal redesign, FIFISH E-GO is equipped with dual load interfaces on both the top and bottom of the body. Utilizing professional expansion docks (optional), it can accommodate up to 6 operational tools simultaneously. The device maintains stable performance, effectively meeting deep-sea and customized operational requirements.

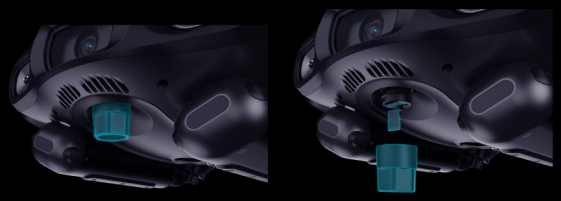


5kg Payload Capability

Supported by robust power and equipped with dual load interface ports, the FIFISH E-GO can accommodate a maximum payload of up to 5kg, providing ample room to integrate a variety of professional accessories and customize your configurations.

Quick Storage Capability

Equipped with a detachable Micro SD card slot, FIFISH E-GO can quickly read and transfer underwater operational content.

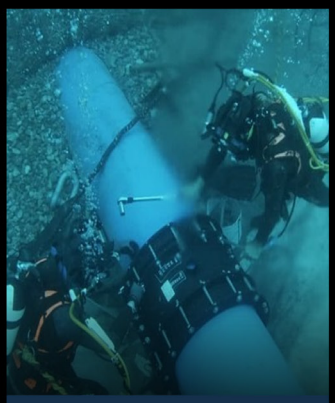


Swift Add-on Upgrades

With the newly upgraded quick-install bracket structure, component installation speeds are optimized to an impressive 9 seconds, allowing users to significantly enhance efficiency through rapid switching between different modes of operation.

Application Scenarios

Emergency Search & Rescue



Public Security & Law Enforcement

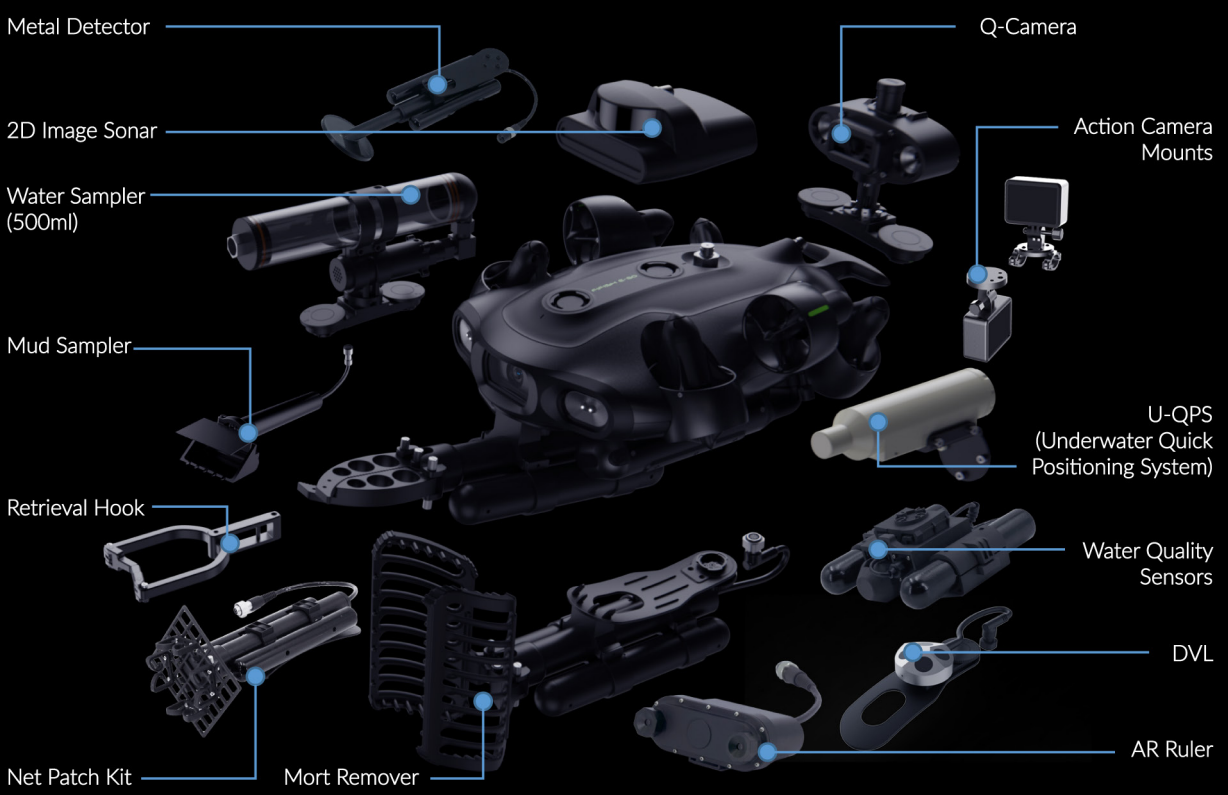
Underwater Inspection & Monitoring

Aquaculture & Fisheries

Versatile Configurations & Combinations*

Tailor your equipment to different operational scenarios with a variety of professional accessories, offering dozens of options to create a customized setup that suits your needs.

*: When installing multiple accessories simultaneously, it is essential to evaluate their potential impact on the ROV's performance and payload configuration. For customized solutions, please contact the QYSEA team for consultation.



E-GO Specifications

ROV

Dimensions	430mm(l) x 345mm(w) x 170mm(h)
Weight	5.9kg
Depth Rating	100m
Payload	5kg
Speed	>3 Knots (>1.5 m/s)
Propellers	6 Propellers, Hard Anodized Aluminum Alloy
	6 Degrees of Freedom
	Movement: left & right, up & down,forward & backward, 360° yaw, 360° pitch, 360° roll
Operating Temp.	-10 °C ~ 60 °C (Operational Temp. Range)
Power	1-4h (Dependent on Work Environment)
	69.12wh * 2 Capacity
	Hot-Swappable Power System
	Smart Battery Management
	Quick Charging: 90% Full Power in 1h (Actual Charging Speed May Differ)

Sensors

Gyroscope	±0.1°	Posture Lock: ±0.1° pitch angle or ±0.1° roll angle, in any direction
Accelerometer	±0.1°	
Magnetometer	±1°	
Depth Sensor	Suspension within ±1 cm	Depth Lock
Temp. Sensor	±1°	

Port Interface

Quantity	2 Ports, Expandable to 6 Ports (Extension Dock Required)
Material	Stainless steel 316
Interface	11V-24V @ 5A ETHERNET, UART
Adjustable Power	Adaptive Voltage Range for External Add-on Accessories
Secure Plug	Self-diagnostic Tests & Leakage Prevention

Tether Spool

Cable Length	100m/ 200m
Tensile Strength	120kgf
Cable Diameter	4.6mm
Tether Weight	Neutral Buoyancy (Underwater)
Waterproof Rating	IP65

Camera

Sensor	1/1.8"
Pixels	12MP
Aperture	f/2.5
Field of View	Above Water: 176° / Underwater: 146°
Focus Range	0.1m~+∞
Shutter Speed	5-1/5000 Second
Burst Shooting	1/3/5/10 Frames
ISO	100–3200 (Auto/Manual)
White Balance	2500K-7500K (Seawater/Freshwater, Auto/Manual)
Exposure Comp.	-3.0 EV to +3.0 EV (Auto/Manual)
Photo Resolution	4:3 = 4000 × 3000 / 16:9 = 3840 × 2160
Photo Format	JPEG, DNG
Video Resolution	4K UHD: 25/30 fps
	1080p FHD: 25/30/50/60/100/120 fps
	720P HD: 25/30/50/60/100/120/200/240 fps
Video Encode	H.264
Video Format	MP4
Stabilization	Electronic Stabilization (EIS)
Color System	NTSC & PAL
Internal Storage	External MicroSD Storage (128GB Standard, Supports up to 512GB)
AI Functions	Vision Lock, Diver Tracking, Imaging Dehazing

Lighting

Brightness	5000 Lumen LED * 2
CCT	5500K
Beam Angle	160°
Brightness Levels	3

Controller

Wireless Network	5GHz WiFi: 802.11a/n/ac
Usage Time	Up to 4 hours
Download Format	FAT32 & EXFAT (128GB Max. Storage Support)
HDMI Output	HDMI Box Required

Charger

ROV	Input: 100-240V, 50/60 Hz, 2.5A MAX
	Output: 18V⎓ 10A
Controller	Input: 100-240V, 50/60 Hz, 0.5A MAX
	Output: 5V⎓ 3A

※ Specifications are subject to change without prior notice. Please contact QYSEA for detailed parameters.

Connect with QYSEA

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