Fast Sailing · Deep Diving · Efficiency Elevated

FIFISH SAR VERSION ROV

Professional Underwater Search & Rescue ROV

Professional Class
Underwater Search & Rescue ROV

FIFISH SAR VERSION ROV is a professional-grade ROV platform, equipped with a patented and powerful Q-motor system that delivers fast diving speeds, efficient power consumption, and precise controls for your comprehensive underwater missions and operations. FIFISH SAR VERSION ROV is equipped with a dual-camera system, 350-meter diving depth, and wide-ranging add-on capabilities, delivering greater reliability and possibilities for search and rescue missions.

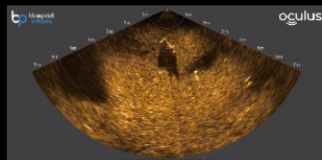| **350m**	**4 Knots**	**-10~60°c**	**8 Hours**
Max. Dive Depth	Max. Speed	Temp. Range	Max. Operational Time (Dependent on work type & conditions)

■ Sonar Imaging System
(Optional Add-On)

The 2D and 3D image sonar equipment can be integrated onto the FIFISH SAR VERSION ROV, providing the operator ability to perform, scan and inspect underwater environments in dark and turbid conditions. Get detailed visual data of the surrounding seabed areas and operate the oceans with greater stability and efficiency.

Sonar Imaging System

■ Station Lock System
(Optional Add-On)

FIFISH SAR VERSION ROV's Station Lock algorithm is an adaptive and intuitive system, locking the ROV position underwater and precisely returning to its locked position against any interferences from the underwater environments. Execute and deliver inspections with exceptional stability, smoothness, and precision.

■ Rugged Robotic Arm

FIFISH SAR VERSION ROV can be equipped with various types of grapples, adapting seamlessly to different types of environments and operational requirements.

Aluminum Alloy Three-clawed Robotic Arm

■ Side-scan Sonar System
(Optional Add-On)

The ROV's integrated Side-scan sonar efficiently creates images of large areas of the surrounding seafloor, as well as navigates and identifies targets in low-visibility, dark and turbid underwater environments. Adopting image equalization technology, scan underwater objects with optimal clarity and contrast which is essential for emergency search and recovery tasks.

Powerful & Precise, Compact & Stable

Eliminating the various risks from traditional diving methods, FIFISH SAR VERSION ROV reduces the challenges and complexities of underwater research and recovery tasks. With support for various inspection-based add-on tools, the ROV efficiently tackles challenges across different scenarios.

■ Dual 4K Camera System

FIFISH SAR VERSION ROV's Dual 4K Camera System delivers an ultra-wide field of view, facilitates greater efficiency for inspection tasks, as well as provides operators a complete picture of the surrounding underwater environments. The camera system allows for comprehensive inspections to be performed, as well as a great range of data to be collected through the FIFISH software which is beneficial for professional organizations and teams.

Dual Camera Details

Pixels: 12 Megapixels
Video Resolution: 4K UHD
Lens: Ultra-Wide FOV Lens
Vertical FOV: 100°
Horizontal FOV: 166°

■ Swappable Battery

Quick Plug Design, Switch with Ease & Security

8 Hrs. Battery Life | Expandable Functions | Quick Charge Enabled

■ Underwater Quick Positioning System (U-QPS)
(Optional Add-On)

The U-QPS is a software and hardware ecosystem that provides a 3D map of the FIFISH ROV's real-time location, POI recordings, three-dimensional dive paths, as well as a one-click function for returning to its original location. The QYSEA-designed software applications deliver an enhanced operating and inspecting experience for the ROV pilot.

GPS

QPS Box   FIFISH RC   QYSEA APP

QPS (Receiver)

QPS (Locator)

Real-time display of the ROV's position, direction, depth, distance, altitude, and trajectory

■ Onshore Power Supply System (OPSS)
(Optional Add-On)

Experience a further boost in operating time with the Onshore Power Supply System, which delivers simultaneous operation and charging for longer-lasting dive sessions. QYSEA's patented water-proof charging systems are safe, reliable, secure, anti-leak, as well as anti-shock, providing excellent quality for worry-free operations.

Specifications

■ ROV

Dimensions	700mm x 469mm x 297mm
Weight	20kg
Thrusters	6 Thrusters (Q-Motor)
Maneuverability	6 Degrees of Freedom
	Movement: left & right, up & down, forward & backward
	Rotation: 360° pitches, 360° rolls, 360° yaws
Posture LockTM	Lock the ± 0.1° pitch or roll angle, in any direction
Material	Pressure-resistant 1000m Glass Microbead Composite
Sail Speed	Maximum 4.0 knots (2 m/s)
Dive Speed	Maximum 4.0 knots (2 m/s)
Depth Rating	350 Meter
Temperature Range	-10~60°C
Battery	Max. Dive Time: 8 Hours (Depending on usage scenario)
	Rated Capacity: 388.8Wh
	Charge Voltage: 25.2V, 1.5 Hour Quick Charge
	Li-ion Panasonic 18650
Sensor	Accelerometer, Gyroscope, Electronic Compass
	Temperature Transducer
	Depth Transducer

■ CAMERA

Sensor	1/2.3" SONY CMOS
Pixels	12 Megapixels
ISO Range	100-6400 In Auto / Manual
Lens	Upper & Lower Dual 4K Camera FOV: 178°, single camera FOV: 166°
	Aperture: f/2.5
	Minimum Focusing Distance: 0.4 m
Shutter Speed	5~1/5000
Burst Shooting	1 / 3 / 5 / 7 / 10 Frames
Exposure Comp.	- 3.0 EV ~ + 3.0 EV
Photo Resolution	4:3: 4000 x 3000
Photo Format	JPEG, RAW in 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 Format	MPEG4- AVC/H.264, HEVC/H.265
Stabilization	EIS (Electronic Image Stabilization)
Colour Encoding	NTSC & PAL
Internal Storage	128GB standard

■ LED LIGHTS

Brightness	12000 Lumens LED
CCT	5500 K (Correlated Color Temperature)
Beam Angle	120°
Levels	3 Brightness Levels

■ CONTROLLER

Wireless	5GHz WiFi,11a,n,ac
Battery Life	Up to 4 hours
File Downloading	MicroSD Card FAT32 & EXFAT Format (to 128GB)

■ IMAGING SONAR

Dual Operating Frequency	750KHz (Low Frequency) / 1.2MHz (High Frequency)
Max. Measuring Range	120 Meters
Perspective	130°/ 70°
Number of Beams	512↑
Beam Width	≤1° x 20°
Beam Angle	0.25° (Low Frequency) / 0.16° (High Frequency)
Resolution	4mm (Low Frequency) / 2.5mm (High Frequency)
Max. Update Rate	40Hz
Max. Pressure Depth	300 Meters

■ TETHER

Length	305m standard
Breaking Force	160kgf
Tether Diameter	6.0mm

■ File Downloading

Use Interface	Video and sonar display on the same screen, robot attitude, electronic compass, depth, temperature, humidity
Information Collection	Image taking, video recording

■ ROBOTIC ARM

Sensor	122mm
Pixels	220N

■ CHARGERS

ROV	Input: 100-240 V, 50/60 Hz, 3 A MAX
	Output: 25.2V /6A
Controller	Input: 100-240 V, 50/60 Hz, 0.5 A MAX
	Output: 5V /3A