



# INDUSTRIAL-GRADE UNDERWATER ROV

Perform Advanced Underwater Work at an Industrial Level



**Industrial** OMNI · 4K Mid-Sized Underwater Robot

**FIFISH** **W6**  
UNDERWATER ROBOT

FIFISH W6 Domestic Line

# Industrial OMNI · 4K Mid-Sized Underwater Robot

## FIFISH W6

Inheriting all the essential features of the world's first omni-directional 4K underwater drone, **FIFISH W6** also includes an all-new patented **Q-Motor** for greater power, speed and functions fit for the industrial level, as well as all-new attachment tools for advanced underwater applications. W6 brings possibility and reliability for all your advanced underwater missions!

## FIFISH W6 Features

(All-new functions of the W6 indicated by the **color code**)



FIFISH W6

**QYSEA Specialty** Q-Motor Power System

Max Speed **4 knots** **600** Hours

Max Depth

**305 m**

Dual Camera

Rich Video Resolution  
**3D Mapping**

※ Special software is required.

High Brightness LED

**10000 lm**

Industrial Attachments

Countless Applications  
**High Performance**

**Comparison Table** (Calculated independently based on maximum depth, operating time, mobility, camera function, and optional parts. Higher the recommendation is based on greater ★.)

	Ship Inspections, Photography & Repair	Infrastructure Inspection & Maintenance	Aquaculture Equipment Checks	Dams & Hydro-power	Water Tank Inspections	Sewer Inspections	Underwater Filming (4K)	Bridge/Pier Inspections	Search & Rescue	Research & Development	Diving & Fishing	Price
V6	★★★★	★★	★★★★	★★★	★★★★	★★★★	★★★★★	★★★★★	—	★★★★★	★★★★★	★★★★★
V6 PLUS	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★★★	★★★	★★★★★	★★★★	★★★★	★★★★	★★★★
<b>W6</b>	★★★★	★★★★★	★★★★★	★★★★	★★★★★	★★★★★	★★★	★★★★	★★★★	★★★★	★★★	★★★

※ (Please use the chart above for reference)

### Quick Deployment

## Distance Lock Sonar System (Optional Tool)

FIFISH W6's embedded sonar system features a distance-measuring function. In addition, **DL (Distance Lock)** enables the W6 to fix it's height and speed, reducing the operational complexity and allowing the pilot to better focus on capturing and recording important images. This makes W6 the ideal ROV for inspections of all kinds (i.e., large vessel, boat / yacht, bridge inspection, infrastructure, etc).



## Quick Positioning System (Optional Tool)

FIFISH W6's GPS kit and underwater **Quick Positioning System (QPS)** allows for both hardware and software upgrades. QPS assists the pilot with where the FIFISH W6, is below the surface, at all times and in real-time . (Suitable for ship inspections, as well as search and rescues, under depths of 100–300 feet).



## Lasting Tether Automatic Reel

Manual: 100m

Automatic: 200m/ 300m

(Extend-able & Retractable)



## Replaceable Battery

Developed to commercial & Industrial Standards



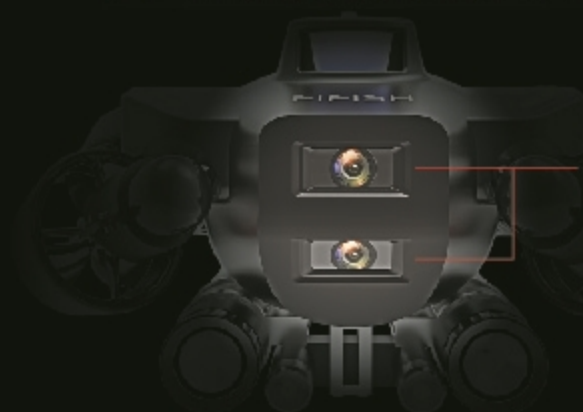
# Be Active Across the Underwater World.

FIFISH W6 delivers the tools for high-level inspections (i.e. hulls, bridges, fish farms, hydroelectric power plants, sewage treatments, ports, etc.), Sea-floor mapping, search & rescues, and more. Eliminate the human dangers and difficulties of underwater operations, along with attachment tools for that enables advanced underwater work at the industrial level.

## Inspect

### Dual Camera

FIFISH W6's **dual camera system** provides a 60° vertical FOV, giving the pilot the entire picture of their environment. With this system, perform detailed inspections with great clarity and efficiently capture big data for underwater 3D mapping missions through our special software.



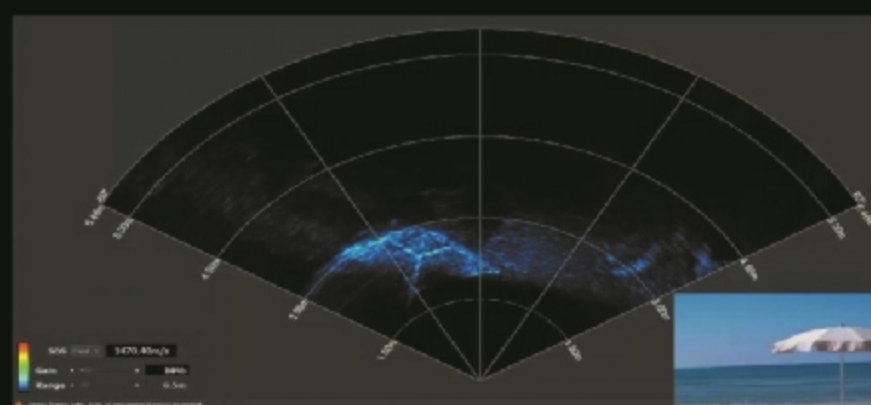
#### Dual Camera

Effective Pixels: 12MP  
Video Resolution: 4K UHD Camera  
Lens: Wide-Angle FOV  
Vertical 60°  
Horizontal: 166°

### Imaging Sonar

(Optional Tool)

The W6 integrated Imaging Sonar system enhances your images, even in turbid underwater environments.

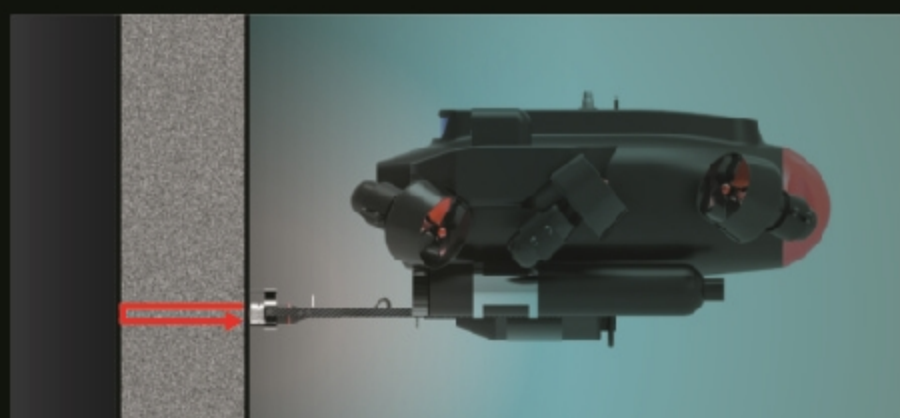


## Measure

### Laser Scaler

(Optional Tool)

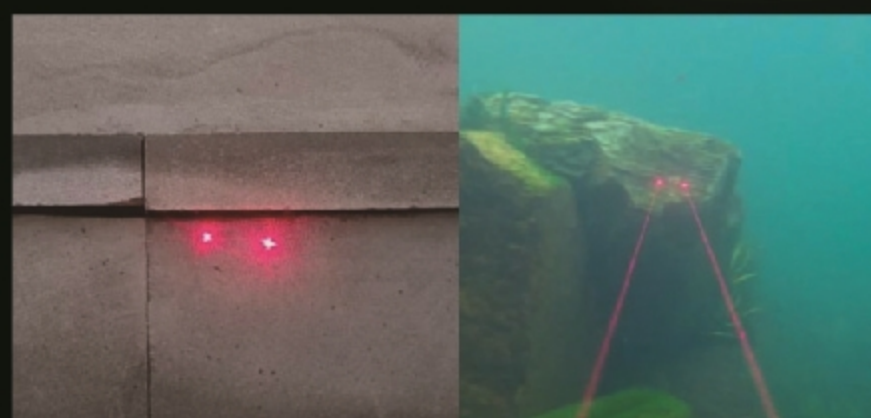
Accurately measure a hole size on the vessel hull,, in order to effectively identify and prevent further damage.



### Corrosion Gauge

(Optional Tool)

Evaluate corrosion characteristics, through a layers of paint, with great accuracy and reliability.



## Maintain

### Underwater Cleaner

(Optional Tool)

Specially designed by QYSEA for regular maintenance of the vessel hulls and to prevent barnacle growth. With its 360° omni-directional movement capabilities, the W6 cleans the hull with great detail, power and effectiveness.



#### Cleaner

# of Brushes: 3  
Size: 300mm in Diameter  
Motor Speed: 300bps  
Power: DC24V, Max 30A

### Grabber ARM

(Optional Tool)

Equipped with various types of grabbers, the W6 can adapt towards different types of terrains and environments.



#### Grabber ARM

# FIFISHWE Specifications



## ■ ROV

Dimensions	536 mm x 416 mm x 270 mm
Weight	13kg
Thrusters	6 Thrusters (FIFISH Q-Motor Technology)
Maneuverability	6 Degrees of Freedom
	Movement: left & right, up & down, forward & backward
	Rotation: 360° pitches, 360° rolls, 360° yaws
Posture Lock™	Lock the $\pm 0.1^\circ$ pitch or roll angle, in any direction
Hovering	Keep the ROV suspending in $\pm 1$ cm
Speed	Maximum 4.0 knots (2.06 m/s)
Depth Rating	305m
Temperature Range	$-10^\circ\text{C} \sim 60^\circ\text{C}$ ( $14^\circ\text{F} \sim 140^\circ\text{F}$ )
Battery	Up to 6 Hours of Operation
	Rated Output: 213Wh X 2
	Charge Voltage: 22.2V, 1.5 Hour Quick Charge
	Li-ion Panasonic 18650
Sensor	Accelerometer: 3D Tilt Compass
	Leakage Indicator, Temp./ Depth Sensor, MEMS Gyro
	System Voltage & Humidity Sensors, Baroreceptor
Sonar (Optional)	Operating Frequency: 650KHz, Range: 6.8 x 0.3–25m
	Probe Size: 29mm x 32mm
	Power: 12–24V, Max 0.5A, Data Communication: UART

## ■ LED LIGHTS

Brightness	10000 Lumen LED
CCT	5500 K (Correlated Color Temperature)
Beam Angle	$120^\circ$
Levels	3 Brightness Levels

## ■ CHARGER

ROV	Input: 100–240 V, 50/60 Hz, 3A MAX
	Output: 25.2 V = 6A
RC	Input: 100–240 V, 50/60 Hz, 0.5A MAX
	Output: 5V = 3A

## ■ CAMERA

Sensor	1/2.3" SONY CMOS
Pixels	12M
ISO Range	100–6400 In Auto / Manual
Lens	Field of View: $166^\circ$ (Single Camera)
	Aperture: f/2.5
	Minimum Focusing Distance: 0.4 m
Shutter Speed	5–1/5000 Second
Burst Shooting	1 / 3 / 5 / 7 / 10 Frames
White Balance	2500K ~ 8000K
Exposure Comp.	- 3.0 EV ~ + 3.0 EV
Photo Resolution	4:3: 4000 x 3000
Photo Format	JPEG, RAW (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	64GB standard

## ■ CONTROLLER

Wireless	Wi-Fi supported
Battery Life	Up to 8 hours
SD Card Support	MicroSD Card FAT32 & EXFAT Format (to 128GB)

## ■ TETHER

Length	305m (~1000ft)
Breaking Force	100 kgf

## ■ APP

Operating System	iOS 10.0.0 & above, Android 5.0 & Above
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### ※Open Source

QYSEA Platform provides Open Source customization (CMD/Communication Protocol), allowing users to re-design numerous elements suitable to their requirements (Windows/LI-

FIFISH V6 Plus Web Page: <https://www.qysea.com>

※Product specifications & accessories are subject to change without notice.

## Component Breakdown

