QYSEA

AI ROV Platform

FIFISH W6 NAVI

Underwater Navigation · Station Locking

Subsea Inspection AI Underwater Robot

dive-IT

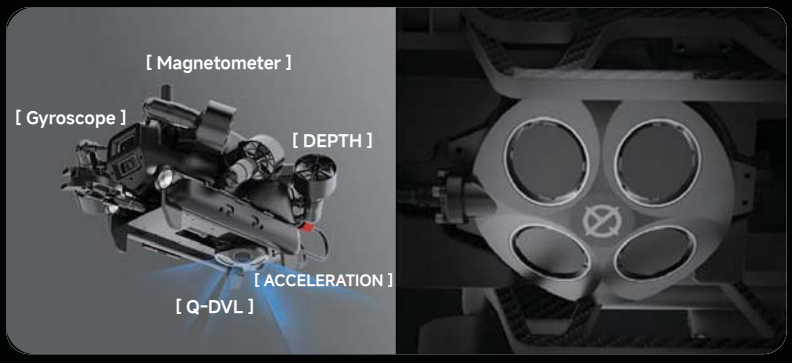
Underwater Navigation · Station Locking
Subsea Inspection AI Underwater Robot

FIFISH W6 NAVI

FIFISH W6 NAVI is an industrial-grade compact inspection AI ROV, reaching depths of 350 meters with powerful propulsion and stability in strong currents. Its modular design and multiple port interfaces allow for swift component replacement and accessory switching, ensuring efficient, precise, and reliable operations.

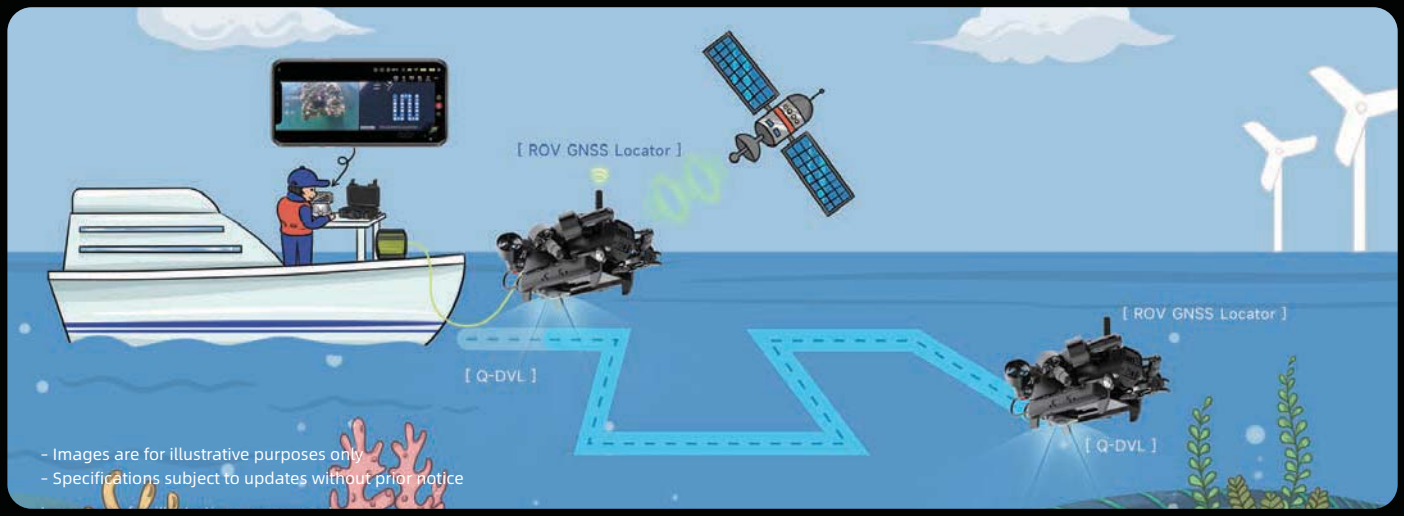
U-INS (Underwater Inertial Navigation System)

Leveraging QYSEA's AI algorithm for enhanced functionality, U-INS for the W6 NAVI integrates multiple internal sensors to enable station locking, navigation planning, path tracking, and bathymetric scanning for underwater inspections.



U-QPS 2.0 (U-INS Version) Underwater Quick Positioning System

U-QPS 2.0 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, a precise navigation planning. The QYSEA-designed software applications deliver an enhanced operating and inspecting experience for the ROV pilot.



Q-DVL | Station Locking

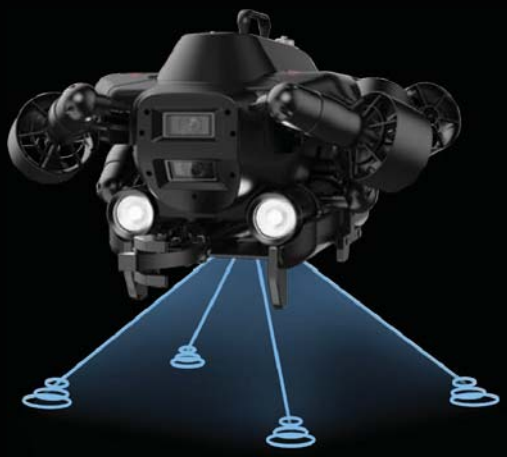
FIFISH W6 NAVI's built-in Q-DVL is an adaptive and intuitive system, locking the ROV position underwater and precisely returning to its locked position against interferences and challenges from the underwater work environments. Execute and deliver inspections with exceptional stability, smoothness, and precision.

Altitude Locking

Bathymetric Mapping

Altitude Tracking

Downward Collision Avoidance

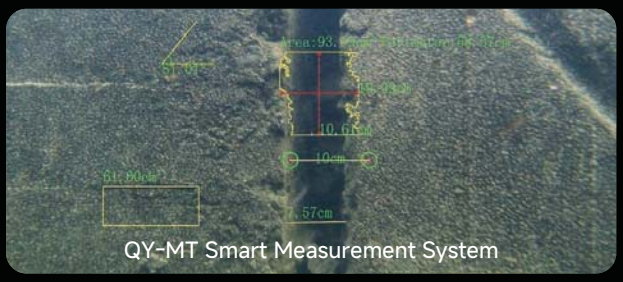


QY-MT
(QYSEA Measurement Tool)

W6 NAVI's built-in laser scaler, combined with QYSEA's software applications, enables smart and adaptive methods of measurement.

Measure object length, width, area, perimeter, and angles with millimeter precision. Identify structural defects, log essential data, and empower professionals to conduct comprehensive evaluations with ease.

Laser Scaler

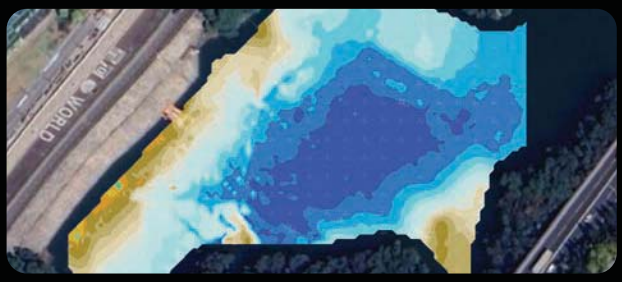


QY-MT Smart Measurement System

QY-BT
(QYSEA Bathymetric Tool)

W6 NAVI's integrated Q-DVL achieves stable maneuverability and precise measurements for underwater mapping missions.

Set automated paths to capture seabed depths, export data for detailed analysis, and generate 2D/3D maps, contour lines, and volume calculations with QYSEA's professional post-processing software.



Identify Structures & Landscapes with Sonar Imaging (Optional)

2D and 3D image sonar equipment can be integrated into the W6 NAVI, providing the operator the 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 great stability and efficiency.

Dual 4K Camera System

The FIFISH W6 NAVI's Dual 4K Camera System offers an ultra-wide field of view, enhancing inspection efficiency and providing operators with a complete underwater picture. Its comprehensive capabilities, coupled with FIFISH's patented software, facilitate extensive data collection, benefiting professional organizations and teams.

4K Dual Camera System
Pixels: 12 Megapixels
Video resolution: 4K UHD
Lights: 12,000 Lumen LEDs
Lens: Ultra-Wide FOV Lens
Vertical FOV: 100°
Horizontal FOV: 166°
ISO: 6400 (Max)

Q-Motor | Compact & Powerful Motor System

QYSEA's Q-Motor is a double closed-loop induction motor system, offering autonomous control, strong depth resistance, and improved energy efficiency. Its six-motor configuration, supported by intelligent algorithms, provides highly stable and smooth mobility for ROV users.

Removable Lithium Battery

Standard 388Wh removable battery which can be replaced at any time can perform long-time underwater operations, and the battery supports quick charging mode, which can be charged 70% in one hour.

Direct Power Supply Unit (Optional)

W6 NAVI adopts Explore and work at greater distances with ease. The is a simultaneous operating and charging system delivering enhanced operation lengths and uninterrupted subsea missions.

FIFISH W6 NAVI Standard Package


Q-DVL


Robotic Arm Module
(Replaceable Claw)


Remote Controller


ROV & RC Chargers


Rugged
Industrial Case


305m Tether Reel
with Hard Case

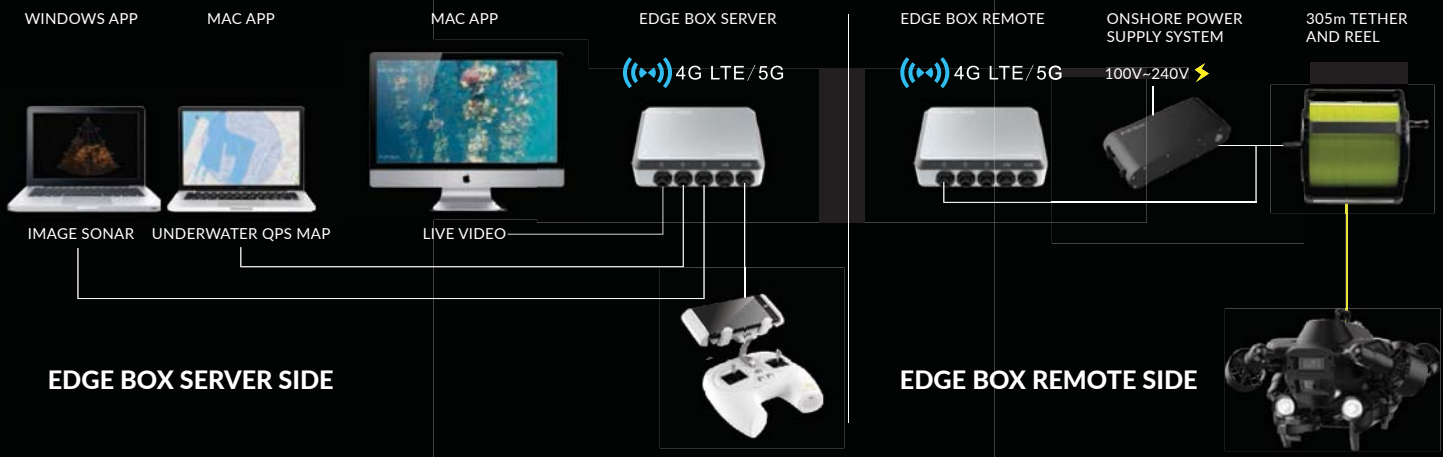

5 Q-IF for
Payload Integration


Communication
Tether (3m)

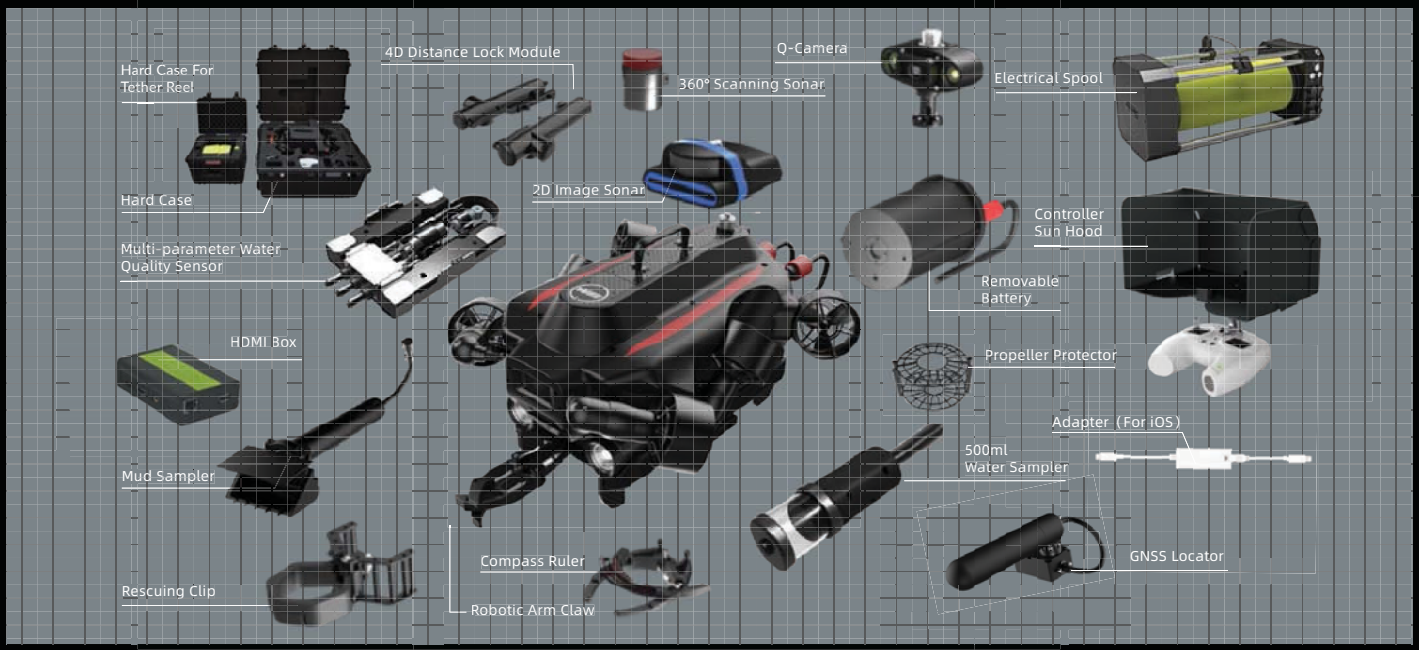
Application Scenarios

Add-on Accessories

Remote System Control [4G/ 5G/ Broadband Network]



Discover FIFISH W6 Tools:
www.qysea.com/products/attachment-tools



FIFISH W6 NAVI Specifications

ROV

Dimensions	710mm x 490mm x 340mm
Weight	22 kg
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 ± 0.1° pitch or roll angle, in any direction
Hovering	Keep the ROV suspending in ± 1 cm
Speed	Maximum 3.0 knots (1.5 m/s)
Depth Rating	350 meters
Temperature Range	-10 °C ~ 60 °C
Battery	Dive Time: 4 Hours (Depending on usage scenario)
	Rated Capacity: 388.8Wh
	Charge Voltage: 25.2V, 1.5 Hour Quick Charge
	Li-ion Panasonic 18650
Sensors	Doppler Velocity Log
	Accelerometer，Gyroscope，Electronic Compass
	Depth Sensor, Temperature Sensor

LED LIGHTS

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

ROBOTIC ARM

Grip	20kgf
Supply Voltage	10~26V
Maximum Current	3A
Maximum grasping Diameter	125mm

Q-DVL

Station Lock	Equipped
Underwater Navigation	Equipped
Altitude Locking	Equipped
Altitude Tracking	Equipped

※Due to continuous improvements, information on the parameters, functions, and accessories of each product may be updated without prior notice.

CAMERA

Sensor	1/2.3" CMOS
Pixels	12MP
ISO Range	100-6400 In Auto / Manual
Lens	Field of View: 166°
	Aperture: f/2.5
	Minimum Focusing Distance: 0.3 m
Shutter Speed	5~1/5000 Second
Burst Shooting	3 / 5/ 10 / 15 Frames
White Balance	2500K-8000K
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	MP4
Stabilization	EIS (Electronic Image Stabilization)
Colour Encoding	NTSC & PAL
Internal Storage	128GB*2 standard,support up to 512GB

CONTROLLER

Wireless	5GHz WiFi,11a,n,ac
Battery Life	Up to 4 hours
SD Card Support	MicroSD Card FAT32 & EXFAT Format (to 128GB)
HDMI Output	QYSEA HDMI Output Box

CHARGER

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

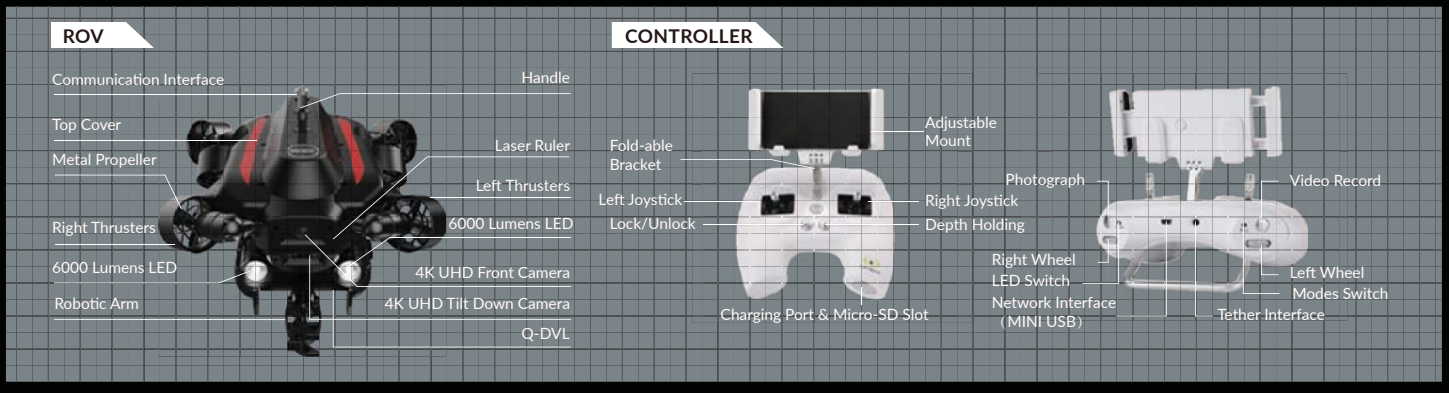
LASER RULER

Laser Tube Type	Spot Laser
Wavelength	650nm（Red）
Scale Length	10cm

TETHER

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

Component Breakdown



dive-IT

dive-IT d.o.o.
Zvečaj 6A, 47261 Zvečaj, Hrvatska
email: info@dive-it.hr
tel: + 385 99 45 888 45
OIB: 15276786681
www.dive-IT.hr

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