



FIFISH X1



Underwater NDT Solution

Mission ROV

Offshore · Infrastructure · Shipping

Mission ROV

Powerful Precision, Advanced Add-Ons, Superior Stability

FIFISH X1

FIFISH X1 is a Mission ROV for offshore energy applications, reaching depths of 350 meters with powerful propulsion and stability in strong currents.

- Newly upgraded Q-Motor Pro Motor
- Leading 4-knot underwater speed
- Enhanced velocity & stronger current resistance
- Significantly improved payload capacity
- Industry-level AI aggregation platform



Enhanced 4-Knot Speed & Power

FIFISH X1 features a revamped vector thruster system, enabling enhanced speeds and exceptional operating efficiency.

Non-Destructive Testing & Integrated Solutions

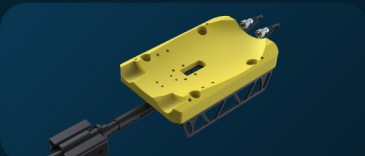
The FIFISH X1's load capacity has increased to 15kg, allowing for various industry add-ons. It supports up to four accessories simultaneously and integrates non-destructive testing tools, enhancing its versatility for inspection tasks.

Electric Cleaning Brush



Featuring a compact design with powerful force, this tool is driven by a high-speed motor to effectively remove dirt and deposits from surfaces, restoring objects to their original condition.

Cathodic Protection (CP) Tool



X1 can be equipped with a CP tool to measure the potential data of sacrificial anodes, enabling efficient and safe assessment of whether the anode blocks meet usage requirements.

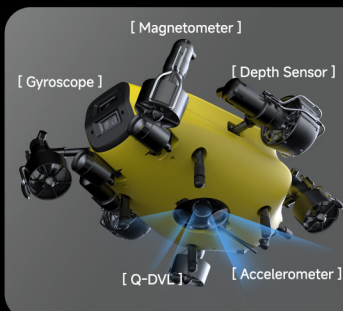
Ultrasonic Thickness Gauge (UTG)



Accurately assess and evaluate metal thickness, corrosion and material loss, all without damaging protective coatings. The UTG enables precise, non-destructive measurements for reliable inspection.

| Underwater Inertial Navigation System

Leveraging QYSEA's AI algorithm for enhanced functionality, W6 NAVI integrates multiple internal sensors to enable relative station locking, navigation planning, path tracking, and bathymetric surveys for underwater inspections and missions.





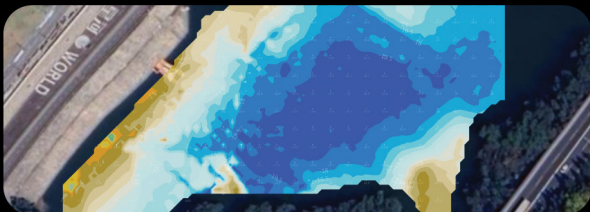
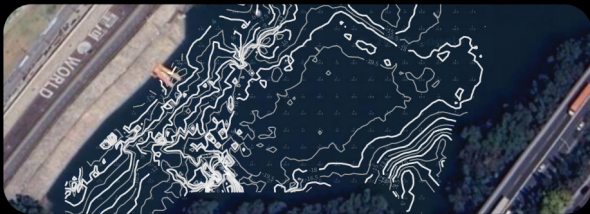
Multi-directional Hovering & Advanced Integrations

In addition to its built-in Q-DVL, the FIFISH X1 features a separately integrated Tri-Directional Q-DVL on top for advanced station lock and collision avoidance in three directions. It also offers various docking add-ons at the bottom, allowing users to customize the ROV for specific underwater tasks, enhancing its versatility.

Integrated Measurement Solutions & Tools

QY-MT | Smart Measurement System

The FIFISH X1's built-in laser scaler, paired with QYSEA's software applications, enables smart and adaptive measurement methods. It measures length, width, area, perimeter, and angles with millimeter precision, allowing professionals to identify structural defects, log essential data, and conduct comprehensive evaluations with ease.



Elevated Offshore Stability Q-DVL | Station Lock Hovering

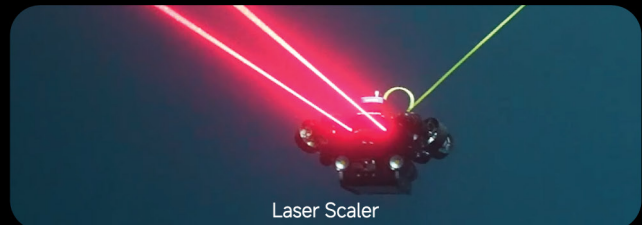
FIFISH X1's built-in Q-DVL is an adaptive system that locks the ROV's position underwater, ensuring precise returns despite interferences from the underwater environment. This enables inspections with exceptional stability, smoothness, and precision.



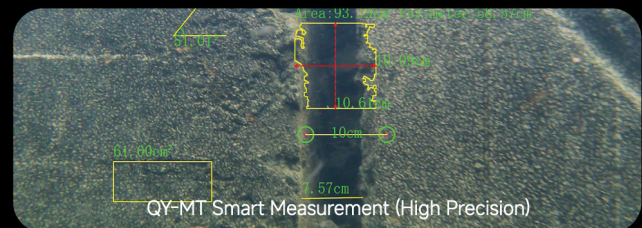
Altitude/ Distance
Lock & Track

Smart
Collision Avoidance

Bathymetric
Mapping



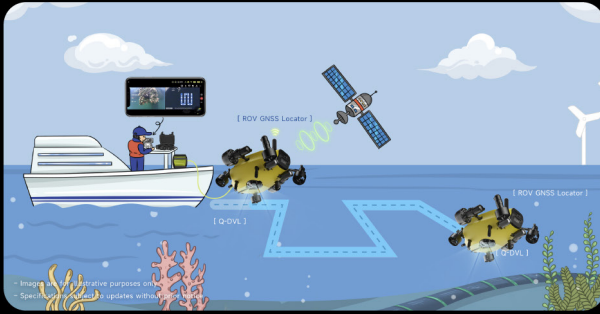
Laser Scaler



QY-MT Smart Measurement (High Precision)

Intuitive Mapping Capabilities QY-BT | Intelligent Seafloor Mapping

FIFISH X1's integrated Q-DVL ensures stable maneuverability and precise measurements for underwater mapping. Users can set automated paths to capture seabed depths, export data for analysis, and generate 2D/3D maps, contour lines, and volume calculations using QYSEA's professional post-processing software.



* ROV GNSS Locator for global positioning is a separate add-on.

Advanced Subsea Positioning U-QPS2 | Underwater Quick Positioning System

U-QPS2 is a software and hardware ecosystem that delivers a detailed map of the FIFISH X1's real-time absolute position, POI recordings, dynamic dive paths, and precise subsea mission planning, enhancing control and operational capabilities for the ROV pilot.

Advanced Dual 4K Camera System

FIFISH X1's Dual 4K Camera System, with an ultra-wide field of view, boosts inspection efficiency and provides a comprehensive underwater perspective. Paired with patented software, it enables extensive data collection for professionals.



4K Dual Camera System

Pixels: 12MP

Resolution: 4K UHD

Lighting: 12,000 Lumens

Ultra-wide FOV Lens

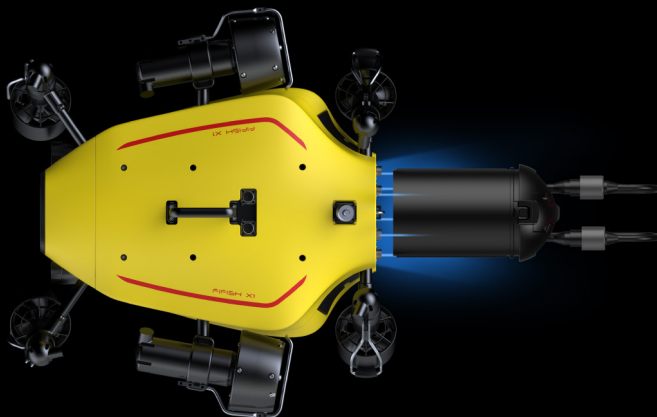
Pixels: 12 Megapixels

Vertical FOV: 100°

Horizontal: 166°

Direct Power Supply for Extensive Missions

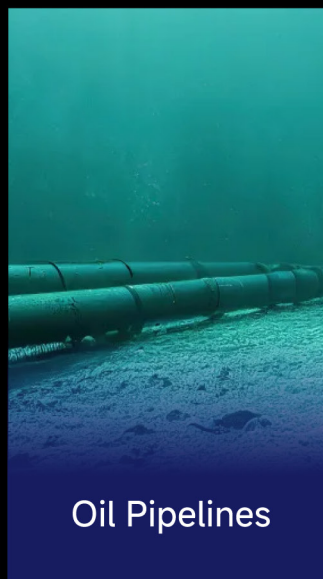
FIFISH X1 enables longer operations over greater distances with ease, featuring a standard shore-side charging system that provides continuous power for uninterrupted subsea missions.



Portable Removable Battery System (Optional)

The optional 388.8Wh removable battery enables reliable underwater operations and can be replaced at any time. It also features a quick charging mode, reaching 70% charge in one hour.

Application Scenarios



FIFISH X1 Core Package



Tablet Controller



200m/300m
Tether Spool



Direct Power
Supply System

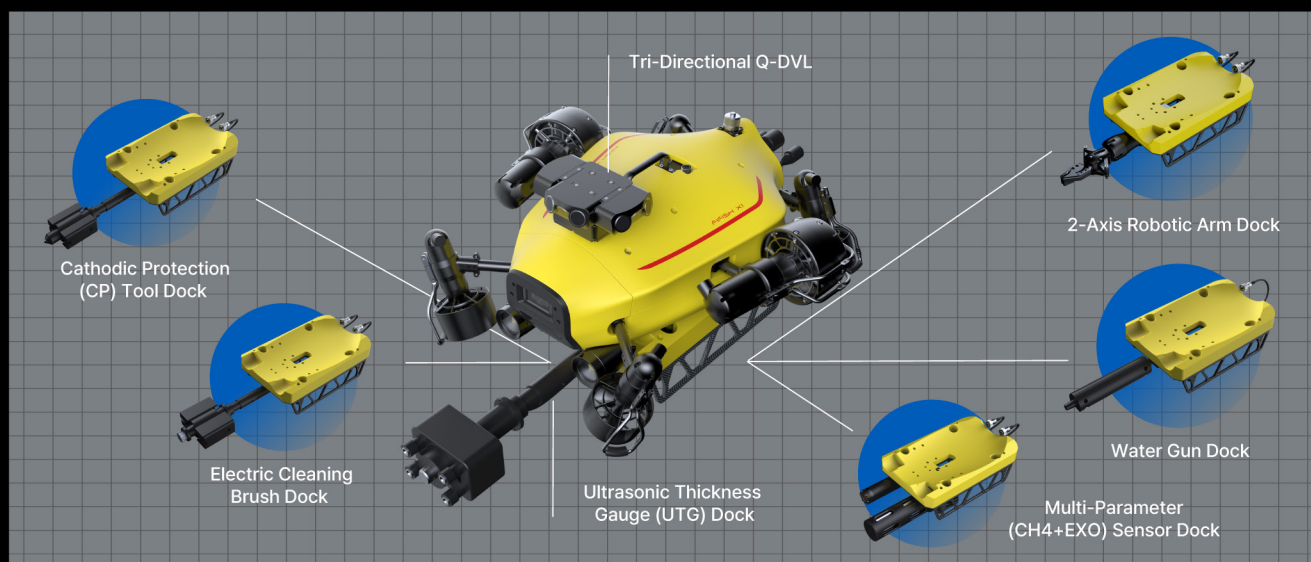


ROV Industrial Case



Tether Reel Industrial Case

Multi-dock Expansion



FIFISH X1 Specifications

■ ROV

Dimensions	750mm(l) x 660mm(w) x 330mm(h)
Weight	23kg
Depth Rating	350m
Payload	15kg
Speed	4 Knots (2m/s)
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)
Navigation	Underwater Inertial Navigation System (U-INS)

■ Sensors

Downward DVL	Detection range: 0.1m-100m	Station Lock & Collision Avoidance
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°	Smart Measurement
Laser Scaler	Wavelength: 660nm (Red)	
	Type: Dual Spot Laser	
	Distance: 10cm Apart	

■ Q-DVL

Dimensions	130mm(l) x 154mm(w) x 34.5mm(h)
Weight	840g in Air, 550g in Water
Velocity Resolution	0.1 mm/s
Communication	100-BaseT Ethernet & Serial (UART 921600 Baud)
Min. Altitude	10cm
Max. Altitude	100m

■ Direct Power Supply

Dimensions	460mm(l) x 360mm(w) x 190mm(h)
Weight	8.4kg
Input Voltage	85-265VAC
Output Voltage	400VDC±5%
Max. Output Power	3000W (220V)

■ Tether Spool

Cable Length	200m/300m
Cable Diameter	12mm
Tensile Strength	300kgf
Spool Dimensions	600mm x 430mm x 540mm
Spool Weight	32kg
Tether Weight	Neutral Buoyancy (Underwater)

■ Camera

Quantity	Dual 4K Camera System
Sensor	1/2.3" CMOS
Pixels	12MP
Aperture	f/2.5
Field of View	Above Water: 166° / Underwater: 96°
Focus Range	0.3m~+∞
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 x 3000 / 16:9 = 3840 x 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	Built-in Storage(128GB*2 Standard, Upgradeable to 256/512GB*2)
AI Functions	Vision Lock, Diver Tracking

■ Lighting

Brightness	6000 Lumen LED * 2
CCT	5500K
Beam Angle	120°
Brightness Levels	3

■ E-Tank

Dimensions	130mm(l) x 130mm(w) x 260mm(h)
Weight	4.8kg
Input Voltage	200-400V
Output Voltage	25.2V

■ Port Interface

Quantity	5
Material	Stainless steel 316
Interface	24V @ 5A ETHERNET, UART
Adjustable Power	Adaptive Voltage Range for External Add-on Accessories
Secure Plug	Self-diagnostic Tests & Leakage Prevention

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

Connect with QYSEA



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