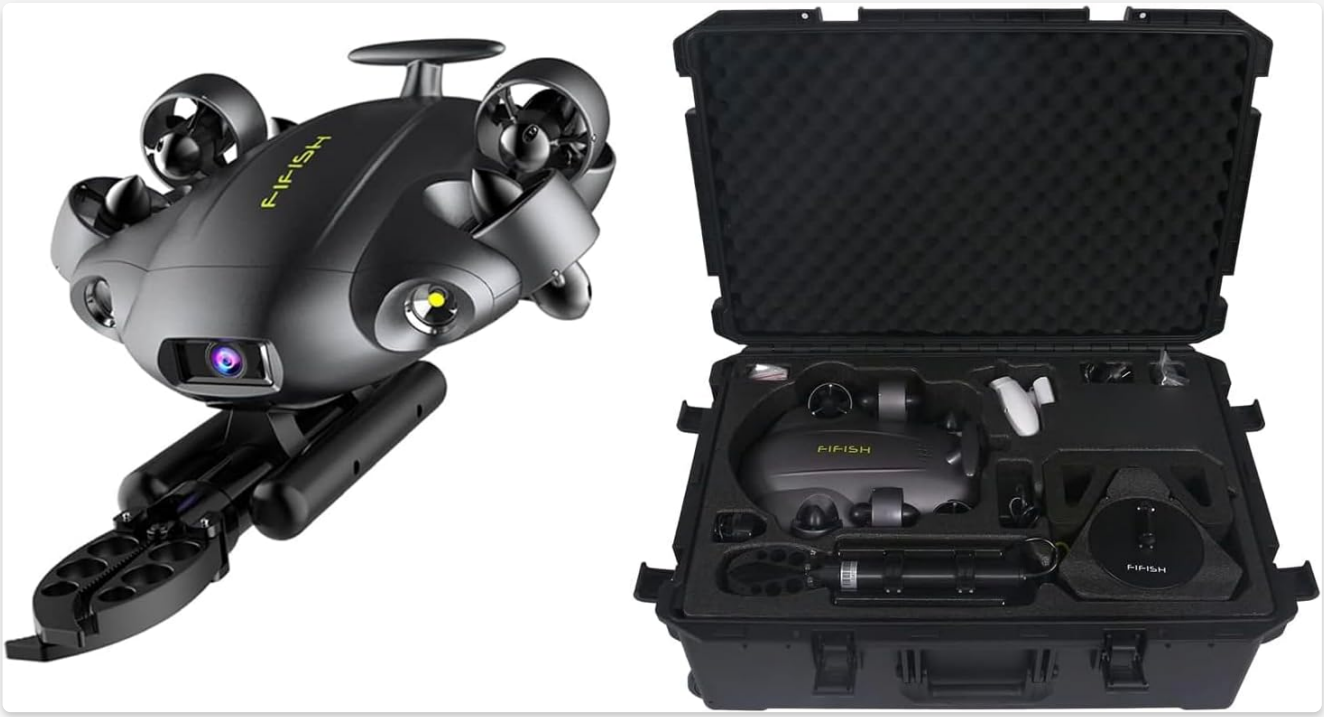
FIFISH V6 Expert M100A

FIFISH V6 Expert M100A Underwater Drone Instruction Manual

Your comprehensive guide to operating and maintaining your FIFISH V6 Expert M100A.

1. Introduction

The FIFISH V6 Expert M100A is an advanced underwater drone designed for professional and enthusiast use. This Remotely Operated Vehicle (ROV) features a robotic arm, a 4K UHD camera, AI Vision Lock technology, and omnidirectional movement, enabling versatile underwater operations for inspection, exploration, and data collection. This manual provides essential information for the safe and effective use of your FIFISH V6 Expert M100A.



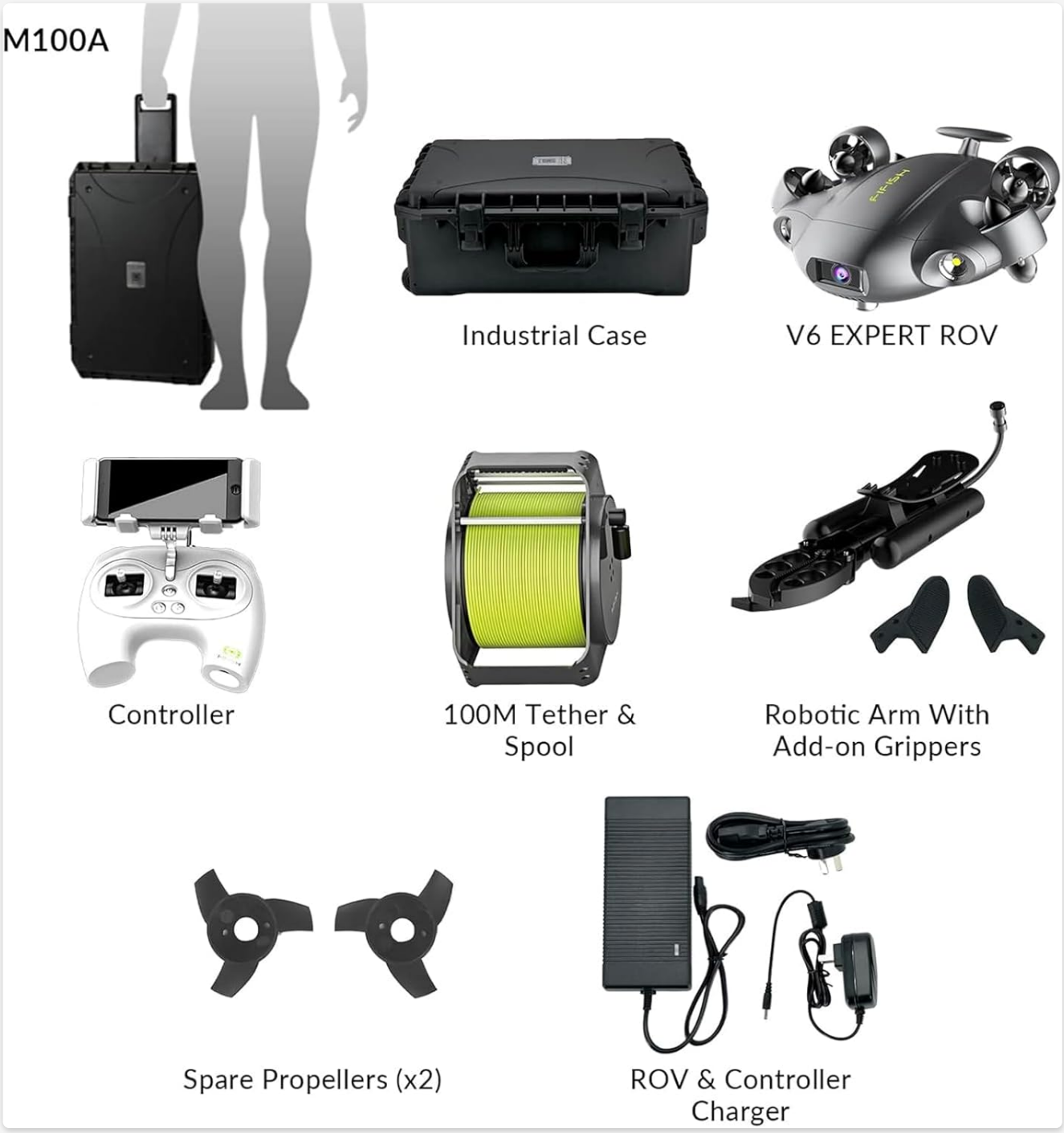
The FIFISH V6 Expert M100A Underwater Drone with its robotic arm attachment.

The drone is equipped with a robust 14400mAh battery, providing up to 6 hours of operational time, and supports quick charging to reach 90% capacity in just one hour. Its upgraded motor system ensures protection against corrosion and enhanced stability in various underwater environments.

2. What's in the Box

The standard FIFISH V6 Expert M100A package includes the following components:

- FIFISH V6 Expert ROV (Remotely Operated Vehicle)
- Industrial Case for transport and protection
- 100m Tether and Spool
- Remote Controller
- Robotic Arm with Add-on Grippers
- Spare Propellers (x2)
- ROV & Controller Charger

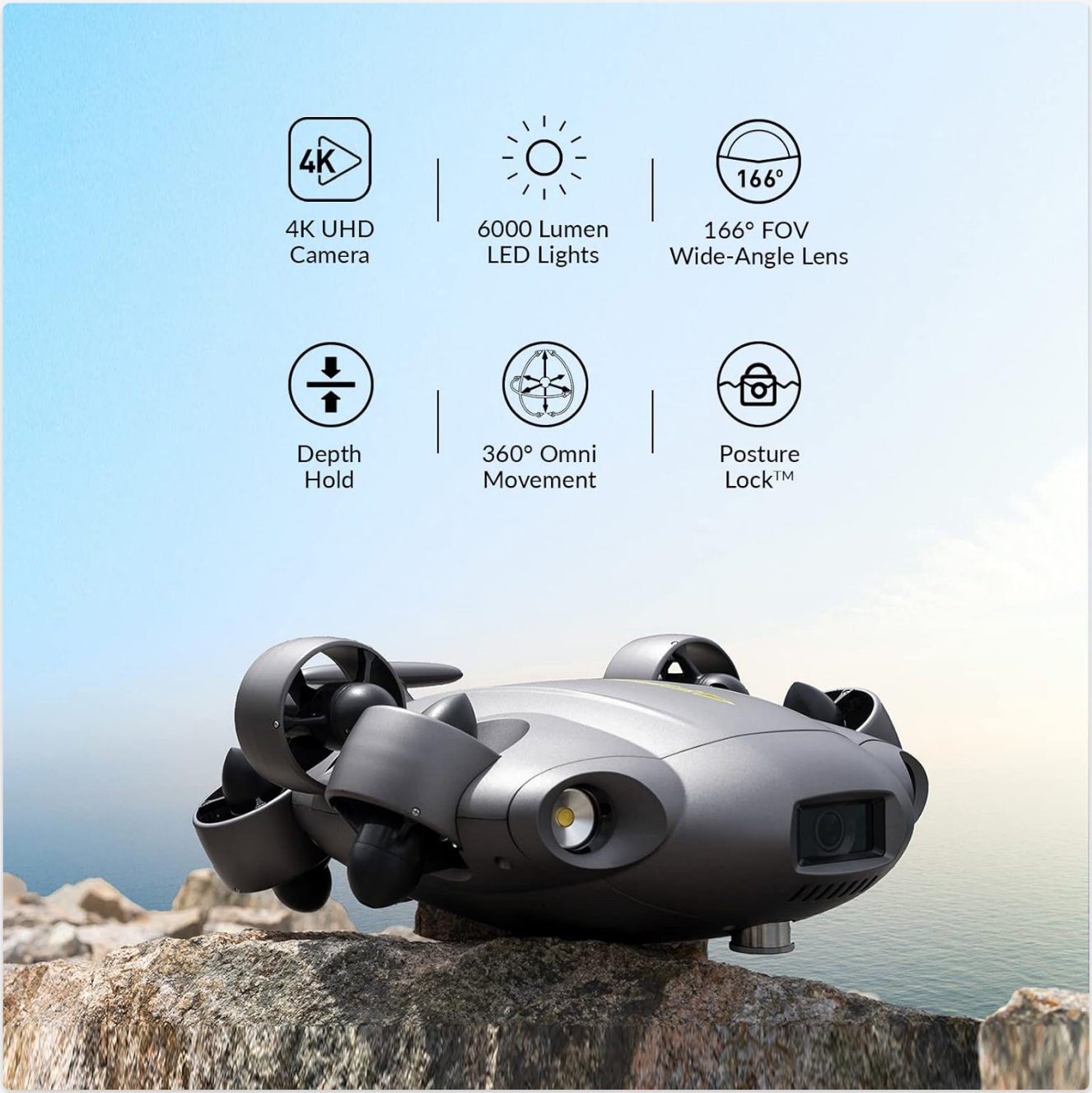


An overview of the components included with the FIFISH V6 Expert M100A, including the drone, industrial case, tether, controller, robotic arm, spare propellers, and chargers.

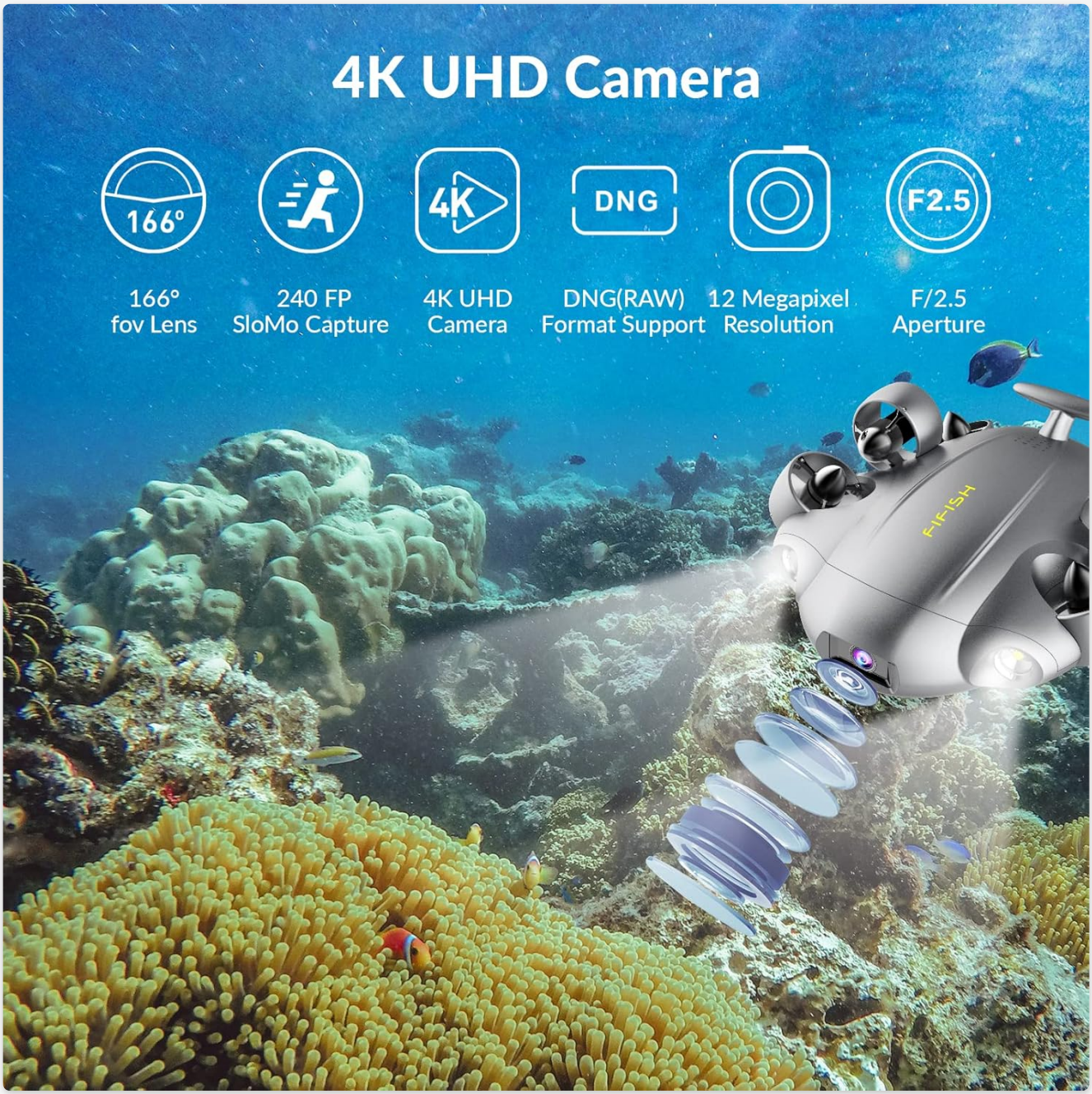
3. Key Features

The FIFISH V6 Expert M100A offers a range of features designed for high-performance underwater operations:

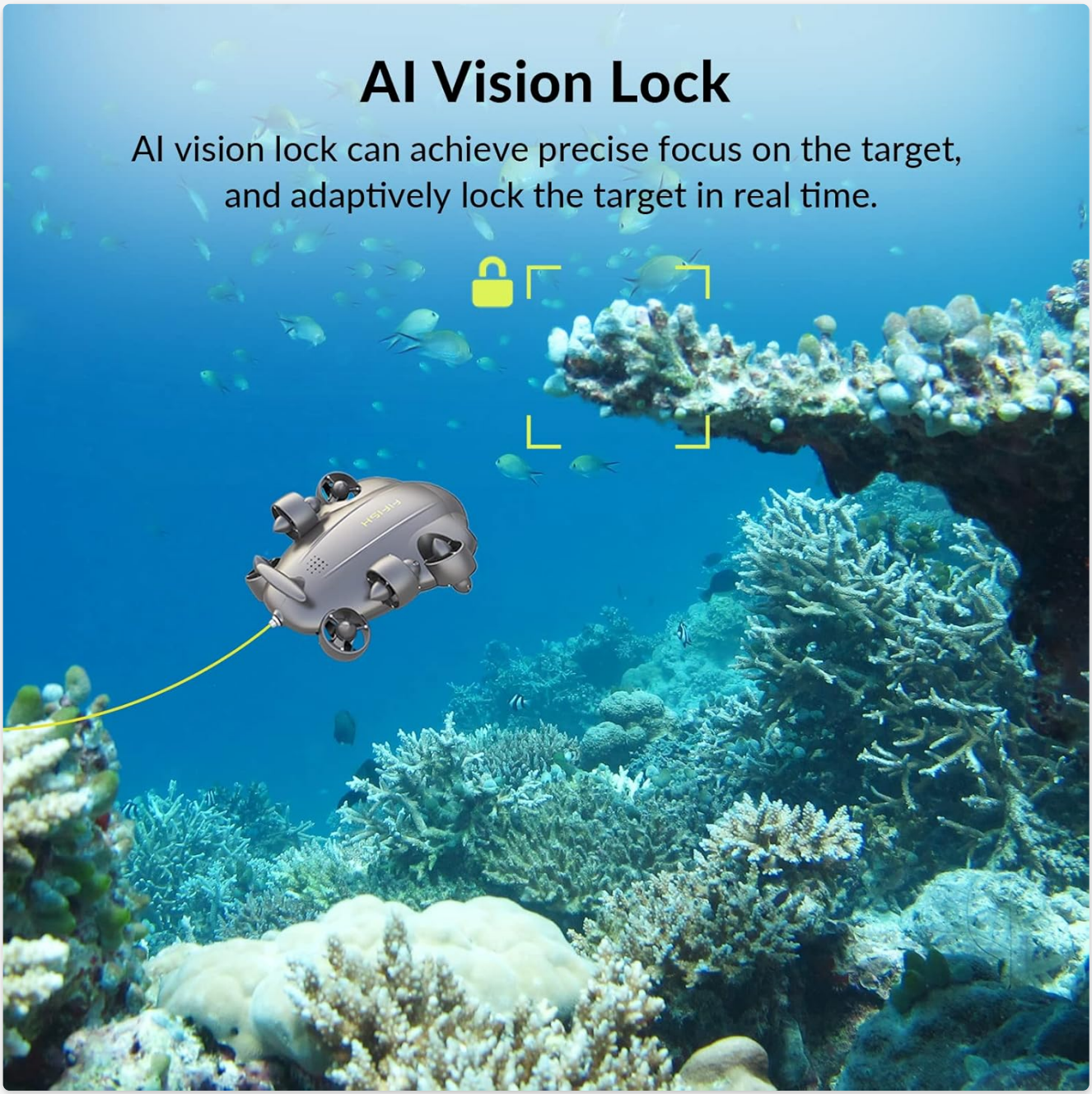
- **4K UHD Camera:** Captures high-resolution video and images with a 166° Field of View (FOV) wide-angle lens, 240 FPS slow-motion capture, DNG (RAW) format support, 12-megapixel resolution, and F/2.5 aperture.
- **6000 Lumen LED Lights:** Provides powerful illumination for clear visibility in dark underwater environments.
- **AI Vision Lock:** Enables precise focus and adaptive real-time tracking of underwater targets.
- **Omnidirectional Movement & 360° Maneuverability:** Allows for flexible and precise navigation in all directions.
- **Depth Hold & Posture Lock:** Maintains desired depth and orientation for stable operation.
- **Robotic Arm:** A compact and durable manipulator tool with a 100N clamping force, ideal for grabbing and salvaging objects.
- **Extended Battery Life:** 14400mAh battery provides up to 6 hours of working time, with quick charging capabilities.
- **Secure Micro SD Slot:** Built-in quick plug compartment for easy data transfer, includes a 128GB Micro SD card.



Key features include a 4K UHD camera, 6000 lumen LED lights, 166° FOV wide-angle lens, depth hold, 360° omni movement, and posture lock.



The 4K UHD camera features a 166° FOV lens, 240 FPS slow-motion capture, DNG (RAW) format support, 12-megapixel resolution, and F/2.5 aperture.



The AI Vision Lock feature allows the drone to precisely focus on and adaptively lock onto a target in real-time.

4. Setup

1. **Unpacking:** Carefully remove all components from the industrial case. Inspect for any visible damage.
2. **Charging:** Connect the ROV and controller to their respective chargers. Ensure both are fully charged before operation. The ROV's 14400mAh battery can be charged to 90% in approximately 1 hour.
3. **Tether Connection:** Securely connect one end of the tether to the ROV and the other end to the tether spool. Ensure the connection points are clean and dry before assembly.
4. **Controller Preparation:** Ensure your mobile device (smartphone or tablet) is securely mounted on the remote controller. Download and install the official FIFISH application from your device's app store.
5. **Robotic Arm Attachment:** If using the robotic arm, carefully attach it to the designated port on the ROV according to the specific instructions provided with the accessory.

5. Operating Instructions

1. **Power On:** Power on the ROV and the remote controller. Wait for the connection to establish, indicated by the status lights on both devices.
2. **App Connection:** Open the FIFISH application on your mobile device. Follow the on-screen prompts to connect to the ROV via Wi-Fi.
3. **Pre-Dive Check:** Before deployment, perform a visual check of the ROV, tether, and robotic arm (if attached) for any obstructions or damage. Ensure all propellers are clear.
4. **Deployment:** Gently place the ROV into the water. Maintain a firm grip on the tether spool.
5. **Navigation:** Use the remote controller to navigate the ROV. The omnidirectional movement allows for precise control in all six degrees of freedom (forward/backward, up/down, left/right, pitch, roll, yaw). Utilize Depth Hold and Posture Lock for stable positioning.
6. **Camera Operation:** Use the controls on the app or controller to capture 4K UHD video and 12-megapixel photos. Adjust LED lights as needed for optimal visibility.
7. **Robotic Arm Operation:** If equipped, use the dedicated controls on the remote to operate the robotic arm for grasping or manipulating objects.
8. **Retrieval:** Once operations are complete, carefully retrieve the ROV using the tether. Avoid pulling the ROV directly by the tether while it is still under power or actively maneuvering.

6. Maintenance

- **Post-Dive Cleaning:** After each use, thoroughly rinse the ROV, tether, and robotic arm with fresh water to remove salt, sand, and other debris.
- **Drying:** Ensure all components are completely dry before storing them in the industrial case.
- **Propeller Inspection:** Regularly inspect the propellers for any entanglement, damage, or wear. Replace damaged propellers promptly using the spare set provided.
- **Battery Care:** Store the ROV and controller batteries at a partial charge (around 50-60%) if not used for extended periods. Avoid fully discharging or overcharging the batteries.
- **Component Protection:** The upgraded motor system provides protection against corrosion, but regular inspection of seals and connectors is recommended to ensure longevity.
- **Software Updates:** Periodically check the FIFISH application for firmware updates for the ROV and controller to ensure optimal performance and access to new features.

7. Troubleshooting

This section addresses common issues you might encounter. For more complex problems, refer to the support section.

- **No Power:** Ensure both the ROV and controller are fully charged. Check charger connections.
- **Connection Issues:** Verify Wi-Fi is enabled on your mobile device and that the FIFISH app is open. Ensure the ROV and controller are within range and powered on. Restarting both devices can often resolve connectivity problems.
- **Poor Image Quality:** Check for debris on the camera lens or LED lights. Ensure sufficient lighting is provided by the ROV's LEDs. Verify camera settings in the app.

- **Drone Not Responding:** Check tether connection for integrity. Ensure the controller is paired correctly. If issues persist, power cycle the ROV and controller.
- **Robotic Arm Malfunction:** Ensure the robotic arm is securely attached and its connection port is clean. Check for any physical obstructions.

If you encounter any problems not listed here or require further assistance, please contact customer support.

8. Specifications

Feature	Specification
Brand	FIFISH
Model Name	FIFISH V6 Expert M100A
Special Features	AI Vision Lock, 4K UHD camera, 6000 lumen LED lights, omnidirectional movement, 360° maneuverability, robotic arm
Video Capture Resolution	4K UHD 2160p
Connectivity Technology	Wi-Fi
Included Components	Underwater Drone, Industrial Case, Tether Reel, Remote Controller, Robotic Arm, Chargers
Skill Level	Professional
Item Weight	13.02 Kilograms (28.6 pounds)
Battery Capacity	14400 Milliamp Hours (Li-Ion)
Video Capture Format	MP4
Control Type	Remote Control
Maximum Range	330 Feet (100 meters)
Optical Sensor Technology	CMOS
Product Dimensions	29.5 x 20 x 11.6 inches

9. Support

For any product-related inquiries, operational assistance, or troubleshooting, please contact Amazon customer service. The support team aims to respond to messages within 24 hours and provide effective solutions.
For additional resources, including FAQs and software downloads, please visit the official FIFISH website.