

FIFISH E-MASTER · NAVI

Technical Specifications



ROV

Dimensions	430mm(l) x 345mm(w) x 185mm(h)
Weight	6.7kg
Depth Rating	200m
Payload	5kg
Speed	>3 Knots (>1.5 m/s)
Propellers	6 Degrees of Freedom
	Movement: left & right, up & down, forward & backward, 360° yaw, 360° pitch, 360° roll
	Hard Anodized Aluminum Alloy
Operating Temp.	-10 °C ~ 60 °C (Operational Temp. Range)
Power	1-4h (Dependent on Work Environment)
	69.12wh * 2 Capacity
	Hot-Swappable Power System
	Smart Battery Management
	Quick Charging: 90% Full Power in 1h (Actual Charging Speed May Differ)
Navigation	Underwater Inertial Navigation System (U-INS)

Sensors

Downward DVL	Detection range: 0.15m-60m	Station Lock & Collision Avoidance
Forward DVL	Detection range: 0.15m-10m	
Gyroscope	±0.1°	Posture Lock: ±0.1° pitch angle or ±0.1° roll angle, moving in any direction
Accelerometer	±0.1°	
Magnetometer	±1°	
Depth Sensor	Suspension within ±1 cm	Depth Lock
Altimeter / Echosounder	Detection Range: 0.3m-50m	Bathymetric Survey & Altitude Track/Lock
Temp. Sensor	±1°	
Laser Scaler	Wavelength: 660nm (Red)	Smart Measurement
	Type: Dual Spot Laser	
	Distance: 10cm Apart	

Camera

Sensor	1/1.8"
Pixels	12MP
Aperture	f/2.5
Field of View	Above Water: 176° Underwater: 146°
Focus Range	0.1m~ + ∞
Shutter Speed	5-1/5000 Second
Burst Shooting	1/3/5/10 Frames
ISO	100-3200 (Auto/Manual)
White Balance	2500K-7500K (for Seawater & Freshwater, Auto/Manual)
Exposure Compensation	-3.0 EV to +3.0 EV (Auto/Manual)
Photo Resolution	4:3 = 4000 × 3000 16:9 = 3840 × 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	External MicroSD Storage (128GB Standard, Supports up to 512GB)
AI Vision Functionality	Vision Lock, Diver Tracking, Imaging Dehazing

Lighting

Brightness	5000 Lumen LED * 2
CCT	5500K
Beam Angle	160°
Brightness Levels	3

Please contact the QYSEA team for more details; specifications are subjected to change without notice.



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Charger

ROV	Input: 100-240 V, 50/60 Hz · 2.5A MAX
	Output: 18V – 10A
Controller	Input: 100-240V, 50/60 Hz, 0.5A MAX
	Output: 5V – 3A

Port Interface

Quantity	2 Ports, Expandable to 6 Ports (Extension Dock Required)
Material	Stainless steel 316
Interface	11V-24V @ 5A ETHERNET, UART
Adjustable Power	Adaptive Voltage Range for External Add-on Accessories
Secure Plug	Self-diagnostic Tests & Leakage Prevention

Controller

Wireless Network	5GHz WiFi: 802.11a/n/ac
Usage Time	Up to 4 hours
File Download Format	MicroSD Card: FAT32 & EXFAT (128GB Max. Storage Support)
HDMI Output	HDMI Box Required

Tether & Spool

Cable Length	200m
Tensile Strength	120kgf
Cable Diameter	4.6mm
Tether Weight (Underwater)	Neutral Buoyancy
Waterproof Rating	IP65