

E-MASTER SPECIFICATIONS



ROV

Number of Propellers	6 (FIFISH Ring Wing Motors)
Maneuverability	6 DOF (Degree of Freedom)
	Moving: left & right, up & down, forward & backward Rotation: 360° yaw, 360° pitch, 360° roll
Posture Lock™	± 0.1° pitch angle or ± 0.1° roll angle and moving in any direction
Depth Holding	Suspending in ± 1 cm
Depth Rating	200M
Speed	>3 knots (>1.5 m/s) in still water
Operating Temp.	-10 °C - 60 °C (*Working environment temperature range)
Battery	Operating Time: 2.5 hours (*May vary depending on working conditions)
	69.12wh*2
	Swappable Battery: Supports quick replacement (Without shutting down machine)
	Smart battery management and detection
	Fast Charging: 90% in 1 hour (*Factory tested data; actual charging speed may differ)

Sensors

Downward DVL	Detection range: 0.15m-50m	Station Lock & Collision Avoidance
Forward DVL (Inline)	Detection range: 0.1m-15m	Station Lock & Collision Avoidance
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	Working Range: 0.3m-50m	Bathymetric Survey & Altitude Track/Lock
Laser Scaler	Wavelength 660 nm(Red)	Smart Measurement
Temperature Sensor	±1°	

Remote Controller

Wireless Network	5GHz WIFI,11a,n,ac
Battery Usage Time	Up to 4 hours
File Download Format	FAT32 & EXFAT (maximum storage support of 256GB)
HDMI Output	Requires QYSEA HDMI BOX for connection

Charger

ROV	Input: 100-240 V, 50/60 Hz, 2.5 A MAX
	Output: 18V = 10A
	Input: 100-240 V, 50/60 Hz, 0.5 A MAX
	put:5V = 3A,DC

Port Interface

Quantity	2 Ports,Expandable to 6 Ports (*Requires the use of the FIFISH extension dock)
Interface(Upper,Lower)	11V-24V@5A ETHERNET,UART
Adjustable power	Adaptive voltage range for external accessories
Secure plug	Self-diagnostic tests, leakage prevention

Camera

Sensor	1/1.8"
Effective Pixels	Effective Pixels: 12M
Aperture	f/2.5
FOV (Underwater)	H: 120°
	V: 70°
	D: 146°
Focus Range	0.1m~∞
ISO	Auto, 100, 150, 200, 300, 400, 600, 800, 1600, 3200, 6400
White Balance	2500K, 2700K, 3000K, 3500K, 4000K, 5000K, 5500K, 6000K, 7000K, 8000K
Exposure Compensation	Auto, +3,+2,+1,0,-1,-2,-3
Photo Resolution	4:3: 4000*3000; 16:9: 3840*2160
Photo Format	JPEG, DNG
Video Resolution	4K30fps (H.264) 4K25fps (H.264)
	1080p120/100fps 1080p60/50fps 1080p30/25fps 720p180/150fps 720p120/100fps 720p90/75fps 720p60/50fps
Video Encode	H.264
Stabilization	Electronic Stabilization
Video Format	MP4
Color System	NTSC & PAL
Internal Storage	External, expandable up to 512GB (standard 128GB)
Camera Function	AI Vision Station Lock, AI Dehazing Algorithm

LED Beams

Brightness	5000 lumen*2
CCT	5500 K
Beam Angle	160°

Robotic Arm

Size	120mm
Grip	10kgf
Power Supply Voltage	9-12V
Maximum Current	3A

Motor

Number of Wings	6
Blade Material	Hard Anodized Aluminum Alloy

Tether & Spool

Cable length	200M
Tensile strength	130kgf
Cable diameter	4.6mm
Underwater weight	Neutral buoyancy
Waterproof rating	IPX5

* The data is obtained using FIFISH E-MASTER operating under standard intermittent detection in a static water environment until the remaining battery reaches 0%. Actual endurance may vary depending on the water environment and is provided for reference only.*



QYSEA Website



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