

Versatile and Affordable Mini-ROV



Engineered to perform

HAVROV is conceived to provide an affordable solution for ROV operations requiring light work in waters with moderate environment.

Excellent maneuverability and performance is guaranteed by its 4 horizontal thrusters in vectored configuration and 2 vertical thrusters.

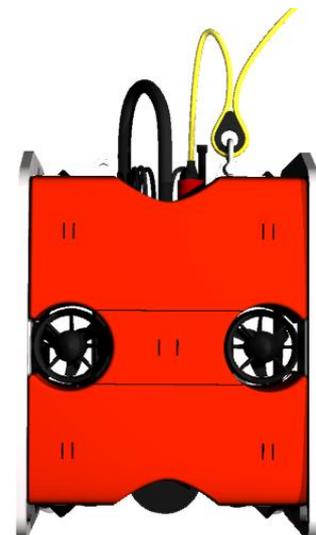
HAVROV is expandable with different devices, becoming the right tool for underwater monitoring when versatility is aimed for.

Applications

- Aquaculture: Net inspection, feed control, stock monitoring, mort recovery.
- Inspection and maintenance: Inspection platforms hull and tanks.
- Research: water and sediment sampling, coral monitoring.
- Marine operations: underwater monitoring and survey of subsea assets
- Security and harbor services: port surveys, search and recovery, wreck inspections.

Main features

- Excellent maneuverability
- Rechargeable and disconnectable long-lasting battery-pack
- Disconnectable tether
- HD tiltable camera
- Autopilot, able to maintain position
- Lighting suitable for low-light conditions
- Ruggedized frame
- Affordable
- Expandable with add-ons



Technical Specifications

Main characteristics

Depth rating	100m (300ft)
Dimensions	486mm x 364mm x 315mm
Frame material	POM-C
Weight in air	21 kg (inc. 1.8 kg ballast)
Removable components	Battery pack, Tether, Ballast Elements

Thrusters

Configuration	Six (6) Brushless DC thrusters - Four (4) vectored, two (2) vertical.
Forward thrust	14 kgf (30 lbf)
Vertical thrust	9 kgf (20 lbf)
Lateral thrust	14 kgf (30 lbf)

Cameras & Lighting

Camera tilt	180 degrees
Horizontal angle of view	110 degrees
Video quality	HD 1080
Lighting	4 x 1,080 Lumen LED controllable arrays.

Control system

Surface control	Hand controller, laptop (not included), connected via WiFi to tether reel
Sensors	Gyroscope, Accelerometer, Magnetometer, Barometer, Depth, Temperature, Leakage
Autopilot functions	Depth, heading, trim, roll compensation

Tether

Diameter	8mm
Length	50 – 300m
Connection to device	Disconnectable watertight connector
Working strength	45 kgf (100 lbf)
Breaking strength	160 kgf (350 lbf)
Strength member	Kevlar
Buoyancy	Neutral in water
Configuration	4 Twisted pairs, 26 AWG

Power supply

Type	Rechargeable and disconnectable Li-Ion battery pack
Capacity	36,000 mAh

Add-ons

Add-ons (optional)	Scaling laser system Grabbing arm Scanning sonar Thickness gauge Sounder Positioning Sediment sampler Water sampler
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