

HydroView Pro Technical Specifications

Vehicle Power

Battery	2 Packs - Lithium, 15V 15.6 Ah User replaceable 3 Hours Run Time 18 Hours Recharge Time
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Mechanical/Physical Characteristics

Motors (Enables TRUE 6 Degrees of Freedom driving experience)	Up to 8 Swiss Made High Torque Motors Precious Metal Magnets with 80% Efficiency Custom Motor configurations available: 5-8 motors
Weight	Dry: 13 – 15 lbs. (5.9 – 6.8 kg) (Based on Configuration) Wet: -0.1 lbs. (0.04 kg) (Saltwater configuration)
Payload	2 lbs payload capability (Sensors / optional instrumentation)
Dimensions	14.6 in x 19 in x 12 in (37 cm x 48 cm x 30 cm) – W x L x H Fits through 18 in (45 cm) circular hatch
Color	Lime Green and Black
Cable	250 ft. (75m) Black Thermoplastic Elastomer Pressured 0.5 in. (12 mm) RoHS compliant, hazardous industrial environment

Performance

Speed Lithium Battery	Up to 3 Knots (5.4 Km/h) forward Up to 1 Knot (1.8 Km/h) reverse
Depth	330 ft. (100 m) Cable Dependent
Range	250 ft. (75 m) Cable

Video and Picture

[Pictures and Video may be stored on iPad, PC or Vehicle.](#)

Vehicle Memory Storage	32 GB High Speed
Camera	Wide Angle Full 1080p HD (1920x1080), True HD quality 24bit color depth 16:9 Aspect Ratio Widescreen Format 130 degrees diagonal field of view Continuous Focus (20 cm to infinity / 9" to infinity) Automatic exposure control

Vehicle Processing

Processor Board	Dual Core Cortex-A9 Processor at 1 GHz 1GB DDR Ram
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Operating System	Embedded Linux MOOS Open Source Application Environment Developed by Massachusetts Institute of Technology and Oxford University
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User Applications	Downloads available through Apple iPad Store and http://www.aquabotix.com/softwaremanuals.html
iPad App (Free)	HydroView Pro (View and control vehicle, Manage and download Videos)
Windows (Free)	HydroView (View and control vehicle, Manage and download Videos)
Auto Pilot	Vehicle Heading, Thrust, Depth, Pitch
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Sensors	
Orientation Sensor	3 axis attitude sensor (roll/pitch/yaw) Compass heading with respect to true north
Depth Sensor	Provides depth of vehicle in water with 0.25+- % accuracy
Temperature Sensor	+ - 0.2 degrees C, Tolerance +-0.32%, 1 sec response
Propeller Covers	Guards vehicle propellers from debris
Hardened Cable / Power	Cable for commercial applications with topside power configurations
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Carrying Case	
Specifications	Waterproof molded ultra high-strength polypropylene copolymer resin with gasket for water and dust tightness. Submersible design spec MIL-C-4150J. Corrosion and impact resistant. Extension Handle.
Size	23 in x 31 in x 17.5 in (58.4 cm x 78.7 cm x 44.5 cm)

Options Available for HydroView Pro

Vehicle Power

110-240 Direct Power	Requires 10A Input AC Indefinite Run Time
Speed Direct Power	Up to 2 Knots (3.6 Km/h) forward Up to 1 Knots (1.8 Km/h) reverse

Mechanical/Physical Characteristics

Cable Extensions	125 ft (38 m) and 250 ft (76 m) Enables extended operational range
Neutrally Buoyant Cable	Copper Tether, Fiber Optic Tether or Fiber Optic Tether with Power
Fish Plow	For Mort Removal Rugged construction Adjustable position (manual)
Manipulator Arm/Grabber	Easy software control through iPad or PC Rugged construction Adjustable position Strong gripping force 100kg lifting capacity

Performance

Depth	Custom Depths Available
Range	Additional range available dependent on cable selected

Video and Picture

Vehicle Memory Storage	128/256/512 GB Solid State Drive
Tilt Camera	1080p HD (1920x1080), True HD quality Tilt Camera +- 60 degrees 24bit color depth 16:9 Aspect Ratio Widescreen Format 130 degrees diagonal field of view Continuous Focus (20 cm to infinity / 9" to infinity) 4X Zoom Automatic exposure control
External Camera	1080p HD (1920x1080), True HD quality Attachment point on the body of the vehicle Manual pan/tilt of camera 24bit color depth 16:9 Aspect Ratio Widescreen Format 66 degrees diagonal field of view Auto Focus Automatic exposure control
High Intensity Lights	1400 Lumens External Lighting Additional lights available 700 lumens/each 5600K Dominant Wavelength On/Off/Intensity controlled through App
Sonar	Scanning Sonar, Side Scan Sonar
Additional Sensors	Oxygen, Salinity, Fluoride, pH, Turbidity, Chloride, Ammonium, Nitrate

User Applications

Auto Pilot Way points, Patterns

User Control Workstation

All-inclusive viewing, control and recording station

Display 10 in diagonal

Memory 8 GB RAM, 128 GB Storage

Operating System Windows/Linux

User Interfaces Keyboard, Touchpad and Joystick

Recordings User controlled recording of images and movies on vehicle storage, workstation storage, USB thumb drive, or external USB drive

Interfaces USB, HDMI Video Out, Ethernet Cat5

Battery Charging For battery configurations, battery charger is embedded

Power Requirements 100-240V AC 10 Amp Supply needed for standard workstation

Carrying Case Waterproof molded ultra high-strength polypropylene copolymer resin with gasket for water and dust tightness. Submersible design spec MIL-C-4150J. Corrosion and impact resistant.