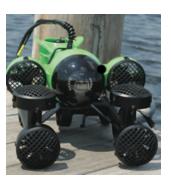
# **HydroView Pro Technical Specifications**

#### **Vehicle Power**

Battery 2 Packs - Lithium, 15V 15.6 Ah

User replaceable 3 Hours Run Time 18 Hours Recharge Time



## **Mechanical/Physical Characteristics**

Motors Up to 8 Swiss Made High Torque Motors (Enables TRUE Precious Metal Magnets with 80% Efficiency

6 Degrees of Freedom driving experience)

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

**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

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

**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)

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# **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

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# **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.

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