Wave Glider SV2

Proven
With over 200 Wave Glider SV2s produced, five hurricanes and three cyclones survived, and over 300,000 nautical miles under its belt, the SV2 platform’s rugged performance has brought the revolutionary Wave Glider technology to bear on the success of over 100 customer missions to date.

Optimized
The Wave Glider SV2 is optimized for individual or small group deployments carrying preconfigured suites of sensors for specific science and security missions. With enough power to support a broad array of cross-compatible sensor payloads, WiFi and cellular communications options, as well as significant onboard processing power, the Wave Glider SV2 is a reliable and flexible long-endurance platform.
### Wave Glider SV2: Basic specifications

#### GENERAL

**Vehicle configuration**
Sub & Float joined by 4m (13ft) tether

**Dimensions**
- Float: 210cm x 60cm (83in x 24in)
- Sub: 40cm x 191cm (16in x 75in)
- Wings: 107cm wide (42in)

**Weight**
90kg (200lb)

**Endurance**
Operate for years at sea (with regularly scheduled maintenance)

**Water speed**
0.5kts (SS1) - 1.6kts (SS4)

**Depth rating**
Continuous wash and spray
Brief submergence to 2m (6.5ft)

**Observability**
Silent propulsion system
Visibility mast with flag and marker light
Radargator enhancer

**Transportation & shipping**
Air freight compatible
Ships in 3 wooden crates
Crate dimensions: 305cm x 61cm x 61cm (10ft x 2ft x 2ft)
Crates 1: 118kg (260lb)
Crates 2: 98kg (215lb)
Crates 3: 73kg (160lb)

#### POWER

**Propulsion**
Mechanical conversion of wave energy into thrust

**Battery**
665 Wh rechargeable Li-Ion

**Solar power**
112W (peak)

#### SAFETY

**Emergency location**
Shore-activated light
2-Year redundant Iridium® tracker

**Health sensors**
Pressure, temperature & leak sensors

**Battery compliance**
Individual batteries isolated from each other
Automatic charge/discharge cut-off (for temperature and/or voltage)

#### NAVIGATION

**Heading**
Solid state magnetometer

**GPS**
12 channel WAAS capable

**Accuracy**
3m radius CEP50

**Station keeping**
40m radius CEP90 (SS3: current <0.5kts)

#### PAYLOAD

**Architecture**
Standard mechanical, electrical & software Modular Payload Unit (MPU) architecture for easy integration and configurability

**Base integration**
Water speed sensor
AIS receiver
Radargator reflector, light, and flag

**Continuous available power**
System max.: 10A
Continuous at 13.2V

**Payload ports**
Float: 3; Sub: 1
8-pin 5/8" wet mateable connector
13.2V, 3A, RS232/422/485, GPS, PPS

**Power expansion ports**
Float: 1
6-pin 5/8" wet mateable connector
13.2V, 6A

**Max. discrete payloads**
2 (Payload boxes in float)

**Max. payload weight (float)**
18kg (40lb)

**Max. payload volume (float)**
40L (1.4ft³)

**Peak payload power**
40W

#### COMMUNICATIONS

**Over-the-horizon**
Iridium® 9602
RUDICS (option)
Cellular (option)

**Local**
802.11g WiFi

#### OPERATION

**Mission control**
Chart-based GUI
Multi-vehicle display
Waypoint & course generation

**Status monitoring**
Text & visual status indicators accessible via web interface
SMS and email alerts
Programmable inclusion & exclusion zones

**Autonomous navigation**
Programmable waypoint course
Follow course and hold/loop
Station keeping at target

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