Wave Glider® SV2

San Francisco to Sydney
**PACIFIC CROSSING
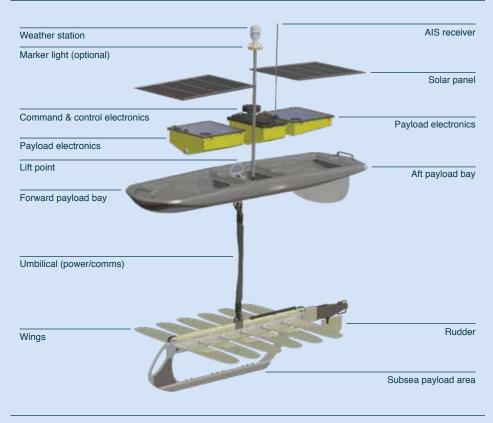WORLD RECORD**
liquidr.com/pacx

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 signifiant onboard processing power, the Wave Glider SV2 is a reliable and flexible long-endurance platform.

Weather station
Marker light (optional)
Command & control electronics
Payload electronics
Lift point
Forward payload bay
Umbilical (power/comms)
Wings

AIS receiver
Solar panel
Payload electronics
Aft payload bay
Rudder
Subsea payload area

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
Radar target enhancer

Transportation & shipping
Air freight compatible
Ships in 3 wooden crates
Crate dimensions: 305cm x 61cm x 61cm (10ft x 2ft x 2ft)
Crate 1: 118kg (260lb)
Crate 2: 98kg (215lb)
Crate 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
Redundant RF beacons
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
Radar reflector, light, and flag

Continuous available power
System max.: 10A
Continous 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 (1.4ft^3)

Peak payload power
40W

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

COMMUNICATIONS

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

Local
802.11g WiFi

All specifications are accurate at time of printing and are subject to change without prior notice.