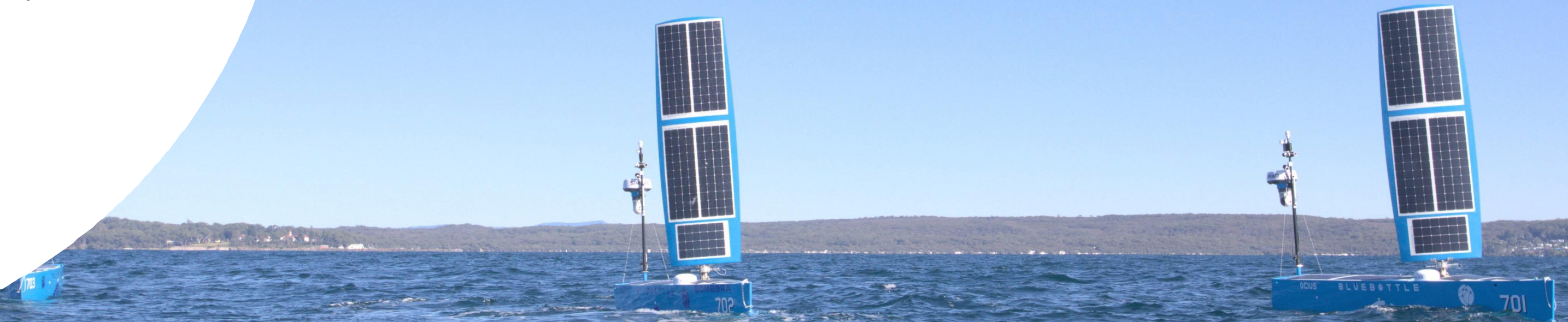


Satellites of the Sea

Ocius Bluebottle Class USVs with superior performance, payload & power



Bluebottle Specifications 2023

ocius.com.au



Innovative autonomous solutions for persistent maritime surveillance

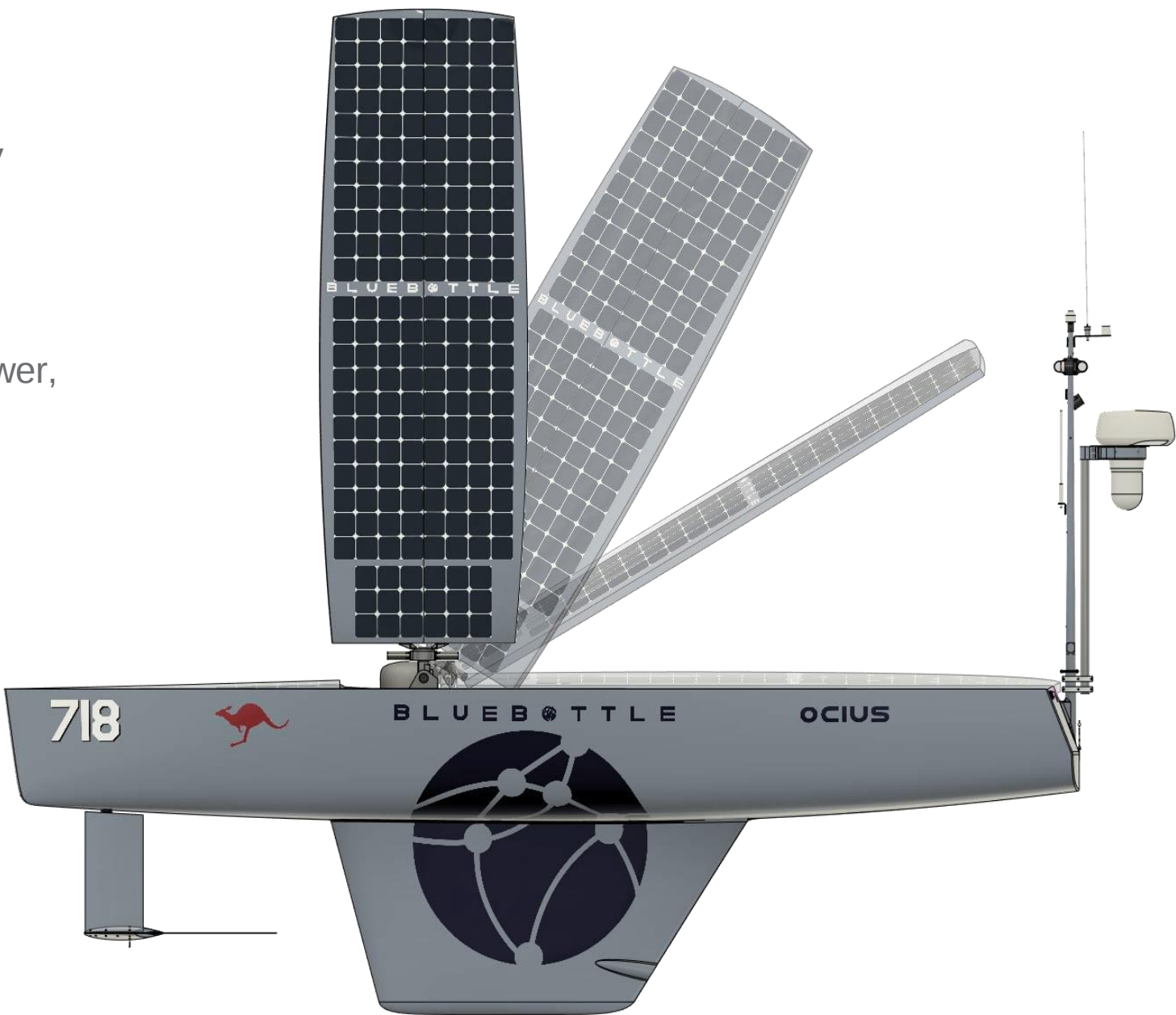
A new generation of USVs

Power large payloads, roam widely, and stay at sea for months at a time. Ocius USVs offer economic and operational advantages over conventional methods in a multitude of industries. Utilising solar, wind and wave power, these vessels can autonomously monitor designated areas for lengths of time.



Discriminators

- Solar + wind + wave power
- Ability to get out of currents
- More payload, power and presence
- Unique solar-sail lowers in storm or for tactical range advantage
- Unique rudder-flipper
- Keel winch to lower sensors to variable depths
- Launch from a conventional boat ramp
- 100% Australian Sovereign Capability
- AMSA approval for unescorted operations



Capabilities

- Advance in all conditions
- 5 knot hull speed
- Launch from boat ramp / ship
- 150W average payload power
- 300kg modular payload
- Intelligent network
- Team behaviours
- Human on the loop, not in the loop 300 - 550kg modular payloads
- Keel winch cassette can be flat packed and shipped for your factory installation of your sensors or arrays ready for fitting into a Bluebottle.

Key Partners

- Australian Defence Innovation Hub
- Australian Border Force
- Marine Parks Australia
- Royal New Zealand Navy
- Defence Innovation Hub
- Defence Science & Technology Group
- Thales Australia
- UNSW
- One2three Naval Architects



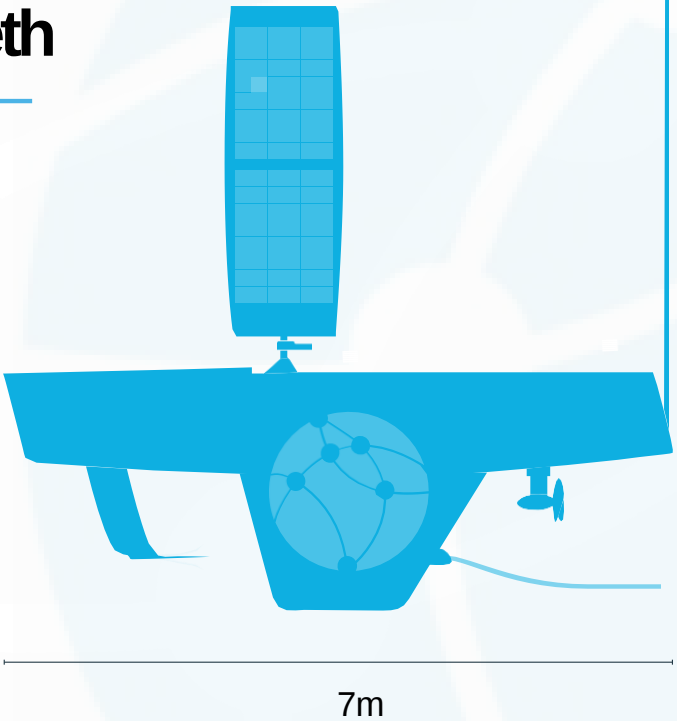
Bluebottle Class Specifications

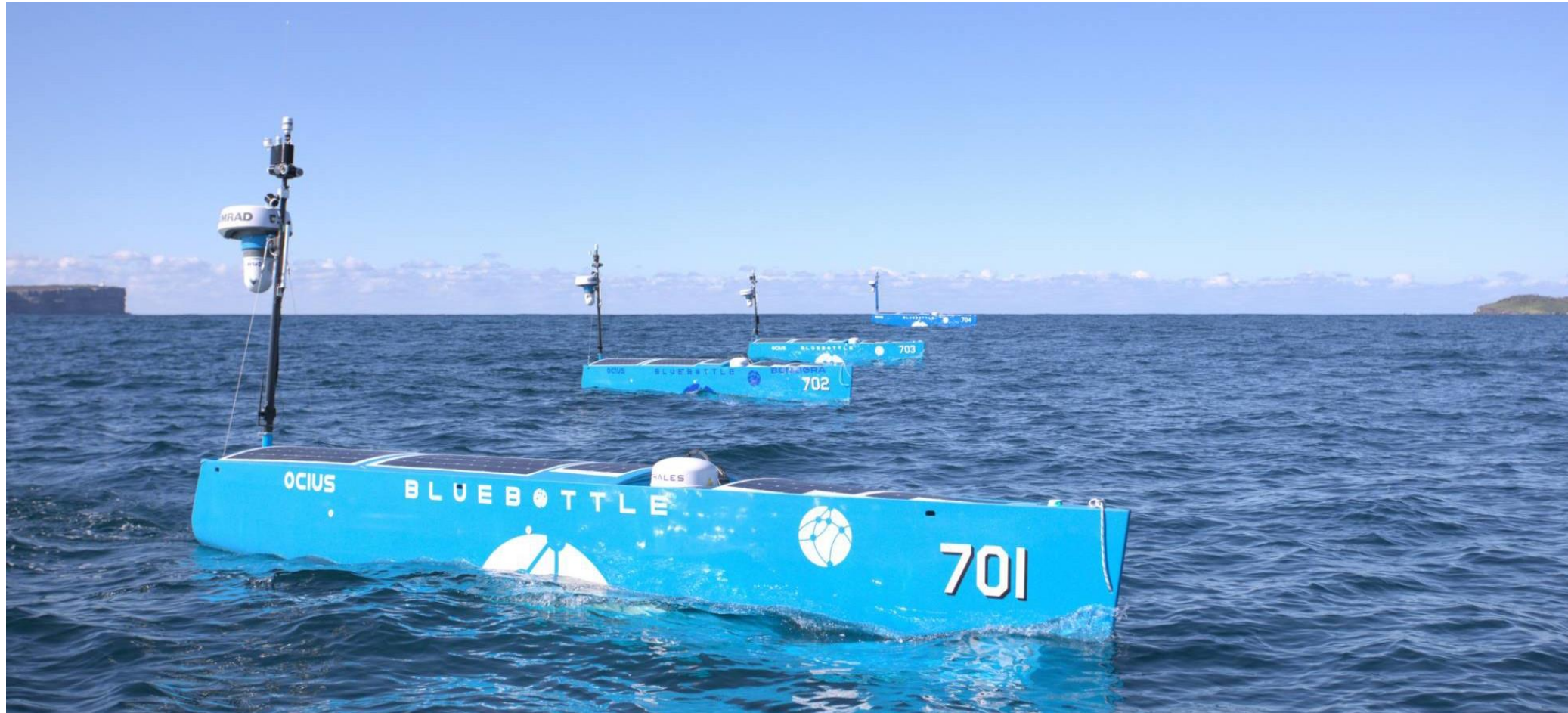
Characteristic / Class	Bathy	Beth
Power	Solar, Wind, Wave, Diesel Hybrid	Solar, Wind, Wave
Length	6.8 m / 22'	6.8 m / 22'
Beam	1.3 m	1.3 m
Draft	1.6 m	1.6 m
Air draft - mast up	6.0 m	6.0 m
Air draft - mast down	2.4 m	2.4 m
Full load displacement	1800 kg	800 kg
Top speed	6.0 knots	6.0 knots
Solar speed	2-4 knots	2-4 knots
Sailing speed in 5 knots of wind	1.4 knots	1.4 knots
Sailing speed in 15 knots of wind	3.5 knots	3.5 knots
Sailing speed in 25 knots of wind	5.5 knots (depending on angle of attack)	5.5 knots (depending on angle of attack)
Operating sea state	5	5
Max sea state	7	7
Wave powered speed	0.5-1.5 knots	0.5-1.5 knots
Energy Storage	21 kWhr Li-Ion batteries plus 5kW Genset with 400L diesel in keel	21 kWhr Li-Ion batteries
Solar power	Up to 1500W	Up to 1500W
Power allocated for payload	Average: 850W for 30 days Maximum: 4 kW	Average: 150W with 8 hrs sun Minimum: 35W 10 days no sun Maximum: 2 kW
Payloads	100 kg off sensor mounting bracket MBES, sidescan sonar, sub-bottom profiler	150 kg dry in payload bay 150 kg wet in keel cassette module or winch
LARS	Boat ramp, or ship	Boat ramp, or ship
Keel winch cassette diameter	N/A	1780 mm
Winch torque	N/A	120 Nm
Trailer footprint	Two per 40' ISO shipping container	Two per 40' ISO shipping container

Bathy



Beth





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