Azura's aim is to deliver rapidly deployable, scalable ocean energy solutions that drive sustainable power generation and ensure water resilience in global Blue Economies.

Azura Technology Specifications

General Information

Technology type: Point absorber

Operating principal: Converts multi-directional wave motion into mechanical / hydraulic energy, which is then converted into electricity and / or desalinated water.

Technology Maturity: TRL 8

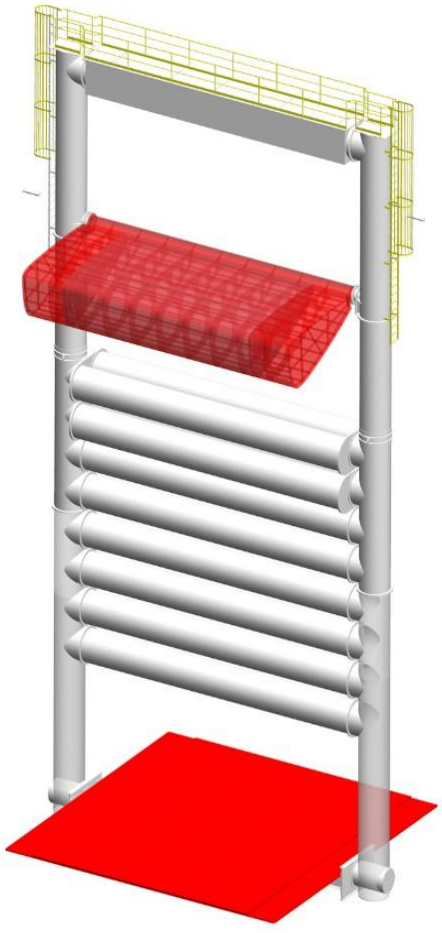
Technology Applications/Target Markets:

- Electricity: offshore and onshore (microgrids)
- At-sea desalinated water

Intended deployment environment: Can be optimised for most deployment sites subject to wave conditions and depth.

Wave Energy Converter (core device)

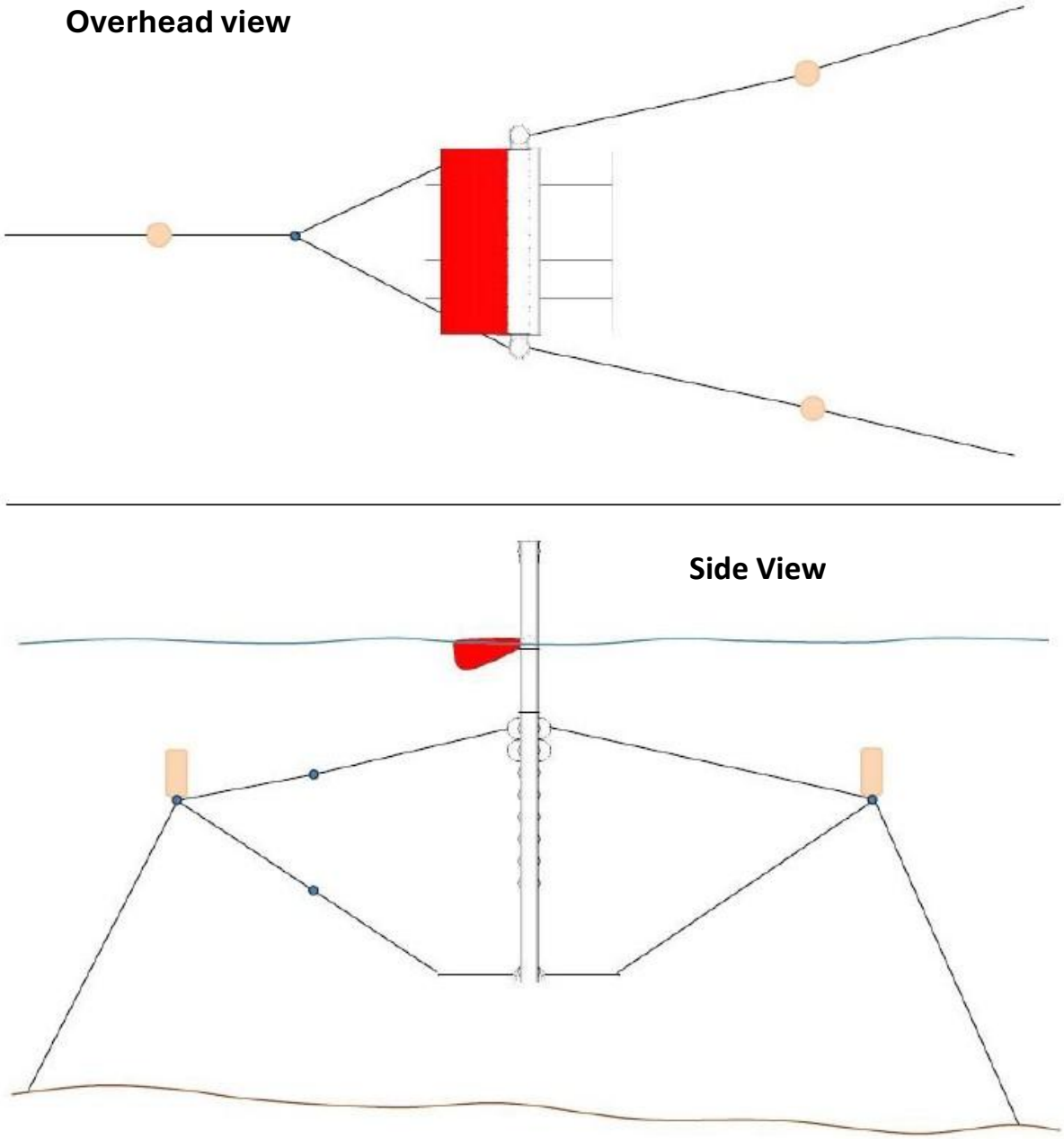
Dimensions: **Height, total:** **Width, total:** **Height, above sea level:**	 28.8 m 15.0 m 7.0 m
Mass, weight:	110T - 230T
Material:	Steel with re-cycled materials under development.
Corrosion protection:	Paint / Anti-foul
Optimal operational envelope (wave height x period):	0.5m at 4sec - 7.5m at 16sec
Survivability limits:	Designed to survive extreme weather events and high wave loads: 7.5m at 9 second intervals while still producing power.
Power Take-off (PTO) type:	Hydraulic
Energy conversion:	Direct mechanical / hydraulic to electrical energy conversion.
Rated output:	50-100kW dependant on model and site conditions.
Annual energy production:	250,000kw/hrs to 450,000kw/hr dependant on model and site conditions.
Grid connection interface:	50Hz / 60Hz up to 14kV
Operational range, ambient and water temperature	-10°C to 45°C ambient 1°C to 45°C water



Buoyancy system & ballast:	360-degree rotation float with oscillating structure. Tuneable ballast seawater.
Control & Monitoring:	Full remote monitoring of all key components through fibre and cellular connections which provides early fault detection and remote monitoring. Full remote updating of the control system is available wherever in the world the device is deployed.
Redundancy, failure modes:	Most critical systems have redundancy built in ensuring limited at-sea interventions.
Mooring, configuration & space requirement:	Three-point mooring with subsea buoys and anchors specified by site conditions *[see mooring illustrations on page 4]*
Anchor type and seabed:	Seabed mooring with flexible tethers
Design life:	25 years
Environmental impact considerations:	▪ Zero emissions ▪ Anticipate minimal marine life disturbance [*Tethys – database of environmental impacts from marine energy]*. ▪ 98% recyclable, biodegradable hydraulic oil ▪ Marine impact reports available upon request
Transport requirements:	Device is transported in standard 40' containers (100kw x 9) and one 40' open top container
On-site assembly requirements:	Laydown area with crane or rough terrain forklift.
Installation method:	Towed to site by tug or larger dive boat horizontally on up righted onsite with ballast after mooring and umbilical has been fitted.

Scheduled maintenance intervals:	Biennial service and biannual inspections. Daily remote monitoring. 12-year lifespan prior to major overhaul.
Access requirements:	Access via enclosed ladders by vessel. Opening hatches in top compartment with built in lifting facilities.
Safety & compliance:	A Schnieder Modicon M580 Controller will be used on board the Azura. These are IEC 61000-6-5 and IEC 61850-3 compliant for the power generation market. Inverter compliant with local regulations.
Decommissioning:	Disconnect umbilical and mooring, de-ballast and tow to harbour. Remove mooring hardware from site.

Mooring System



- 100kW device requires approximately 30m of water depth.

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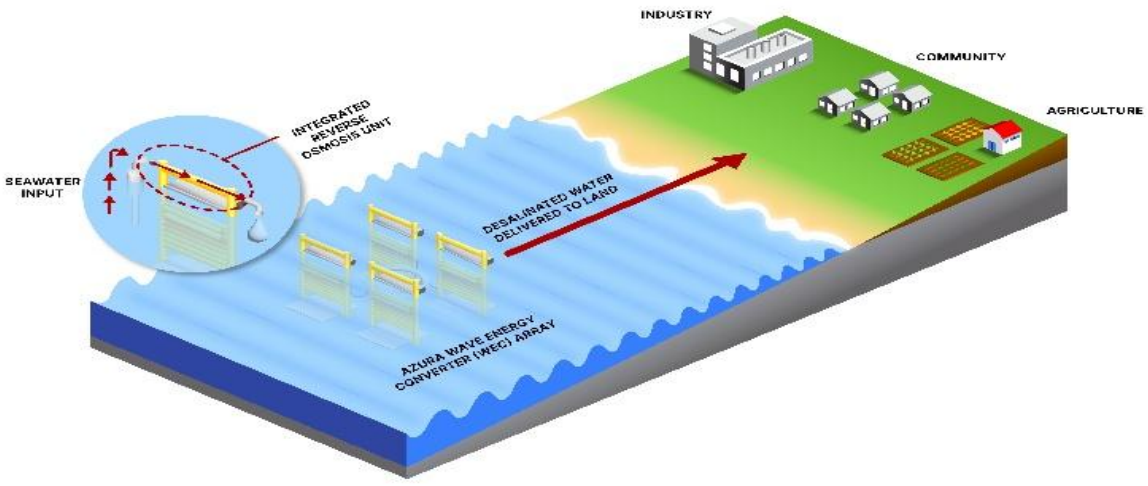
Market Application: At-sea Desalination System

System description	Onboard hydraulic drive reverse osmosis unit
Deployment requirements	Towed to site horizontally by tug or larger dive boat then up righted onsite with ballast after mooring and outlet connected.
Energy conversion	Direct hydraulic power created by the device powers the RO unit directly.
Water production	75m3 to 150m3 per day subject to site conditions
Seawater Intake	Direct subsea intake
Water storage & distribution	Pumped to holding tank or directly to shore
Brine discharge	Direct to turbulent area below sea level. Determined by site specific conditions.
Water quality	Drinkable to local standards
Monitoring	All critical sensors and operations are monitored remotely
Maintenance	Biennial service and biannual inspections. Daily remote monitoring. 12-year lifespan prior to major overhaul.
Scalability	Additional devices can be added, to increase water production, subject to resource consent and available area.



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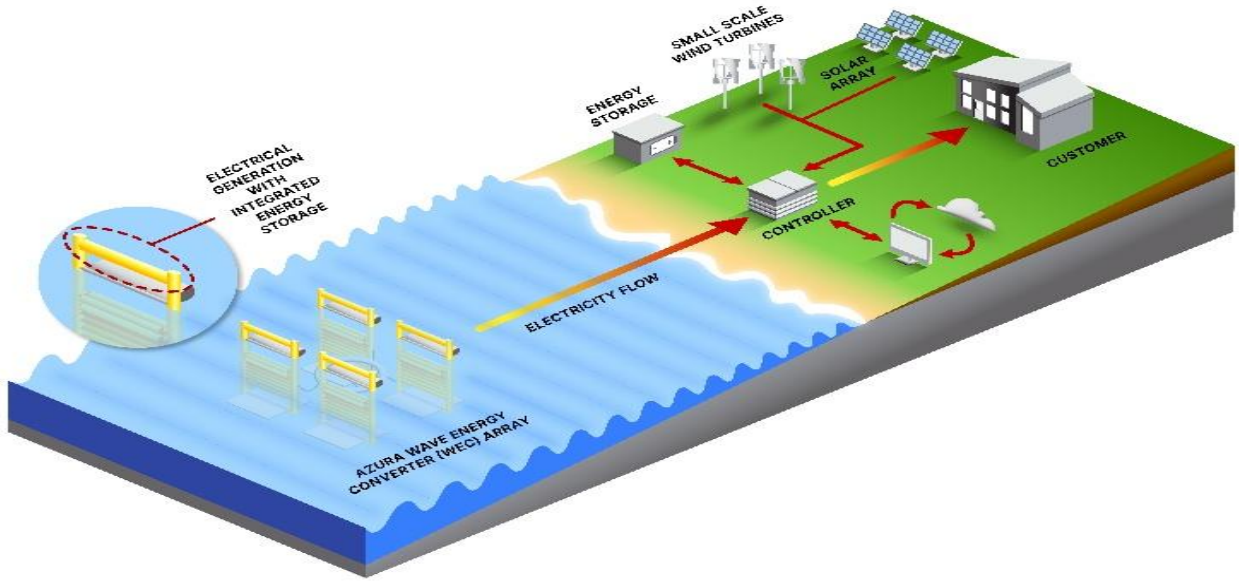
Market Application: Microgrids	
Microgrid compatibility	Azura WEC integrated with onshore solar PV, small-scale wind turbines, battery storage and diesel generators for microgrid solutions.
Integrated battery storage	Up to 160kw/hr battery storage
Ocean energy generation	250,000kw/hrs to 450,000kw/hr dependant on model and site conditions *(per core device)*
Electrical output	50Hz / 60Hz up to 14kV grid compliant.
Controls	A Schnieder Modicon M580 Controller will be used on board the Azura. These are IEC 61000-6-5 and IEC 61850-3 compliant for the power generation market. Inverter compliant with local regulations. Fully compliant with microgrids
Ocean-shore interface	Direct to shore with compliant cable. Buried or armoured casing required by local regulations. Subsea junction box available for arrays.
Scalability	Additional devices can be added, to produce additional electricity, subject to resource consent and available area.



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