

SOLAR ELECTRIC CATAMARAN

AQUANIMA 45



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1. AQUANIMA CONCEPT

Solar electric yachts are a new class of their own. They offer an unprecedented sailing experience in perfect symbiosis with the ocean. They combine the silence of sails with the convenience of engines. Their propulsive energy comes from the sun and is stored onboard making these boats free energy mobile power plants with minimal maintenance requirements.

Catamarans have been used for millennia around our planet for their unique characteristics: vast decks, high efficiency, great stability inducing limited sea motion discomfort, low draft allowing to reach otherwise inaccessible areas and supreme handling.

Marrying solar electric propulsion and catamaran design represents the quintessence of modern boat design and invites you to a new world of limitless eco-sailing experiences!

The Aquanima 45 Solar Electric Catamarans are designed for offshore sailing with high level of convenience and safety.

Main character traits:

- Comfort: Silent, vibration-free, smell-free, clean bilges
- Spacious: Large deck and vast accommodation layout
- High efficiency: Slender ultra-hydrodynamic hull lines, optimized propellers, cutting edge HIT technology solar panels and 95% efficiency electric motors
- Lightweight displacement: Allows for extra shallow draft
- Unrestricted & Unlimited Range: Limitless sailing round the world at up to 150 nm in 24 hours
- Reliability: 20,000 hours maintenance-free electric motors
- Robust: Premium marine grade 6000 series aluminum hulls
- Operation: Cost-free and highly accessible
- Maintenance: Minimal - No requirement outside regular hull cleaning
- Free power generation 24/7, can supply power to shore and generate revenue as a power station
- Ecological: No GHG emissions, no oil leaks, no noise pollution
- High potential of upgrades with cutting edge technology through software
- Possible incentives by local governments

The Aquanima 45 is offered in 3 versions:

Coupe: Single deck, sleek design with large sun deck area and lounging nets at the bow

Horizon: Single deck with maximized solar roof area offering more shade at the aft and an increased range over 24 hours

Dolce Vita: Fly bridge version featuring a vast upper deck lounge with idyllic atmosphere, 2 additional helms and a sliding upper solar roof

Each version is available in 1, 2, 3 or 4 cabins for a maximum of 8 berths.

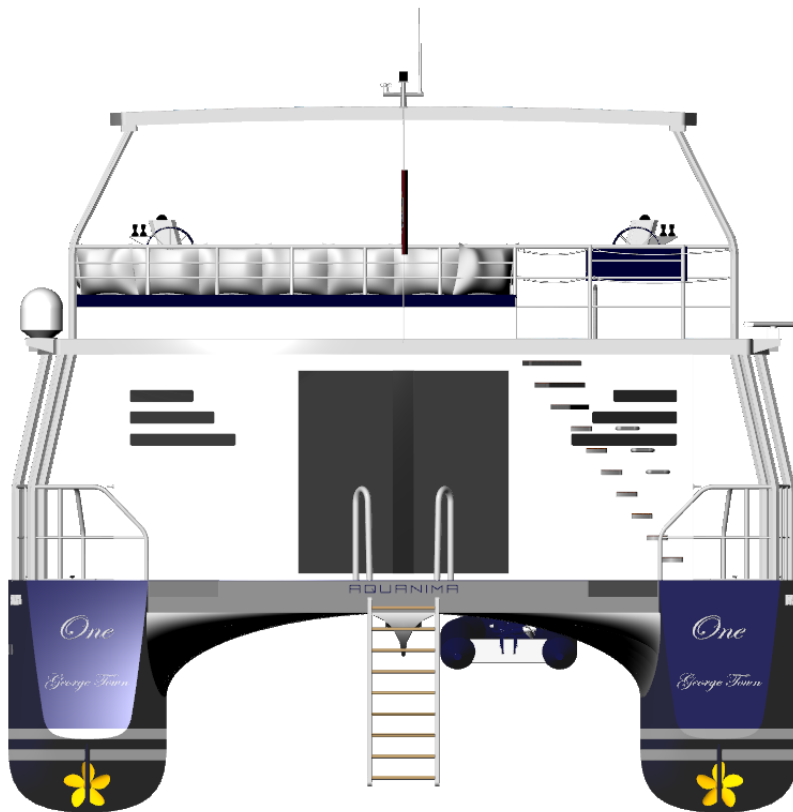
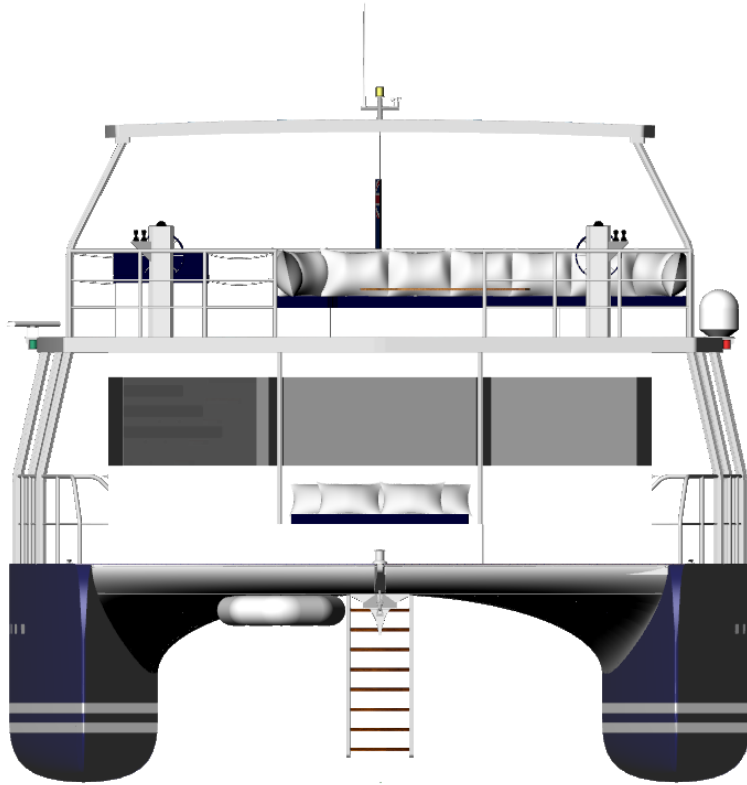
2. DESIGN

Dolce Vita



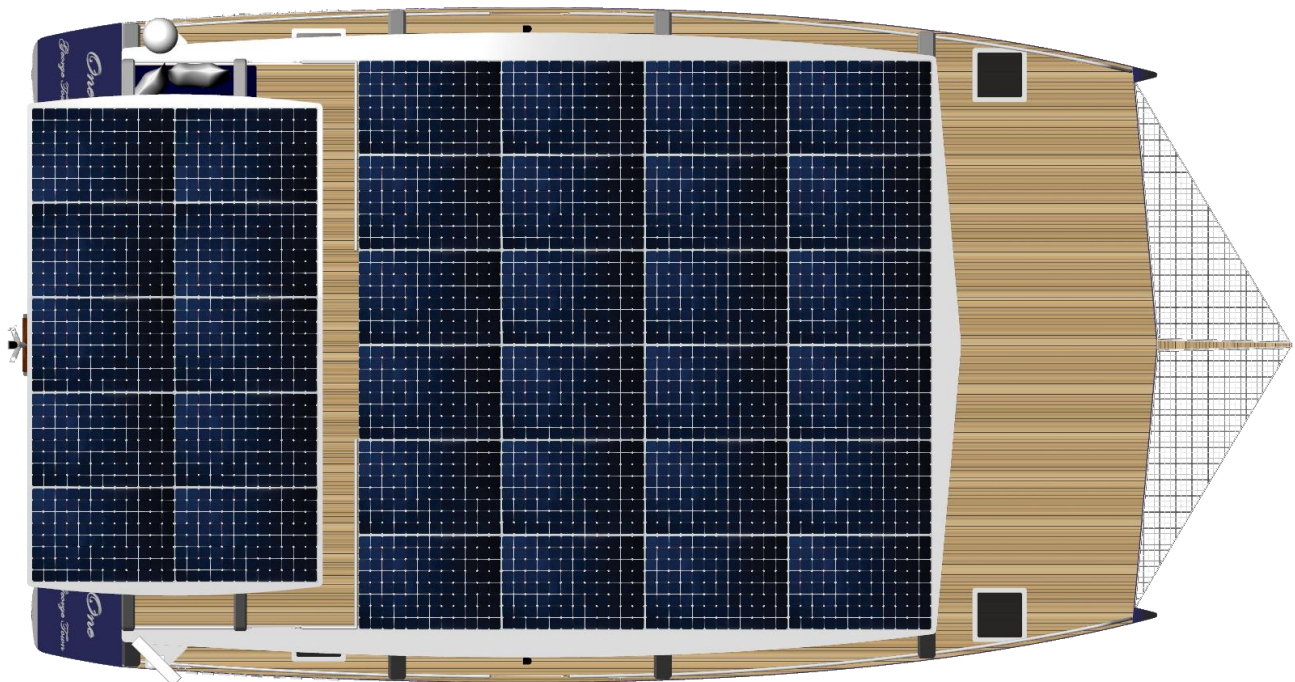
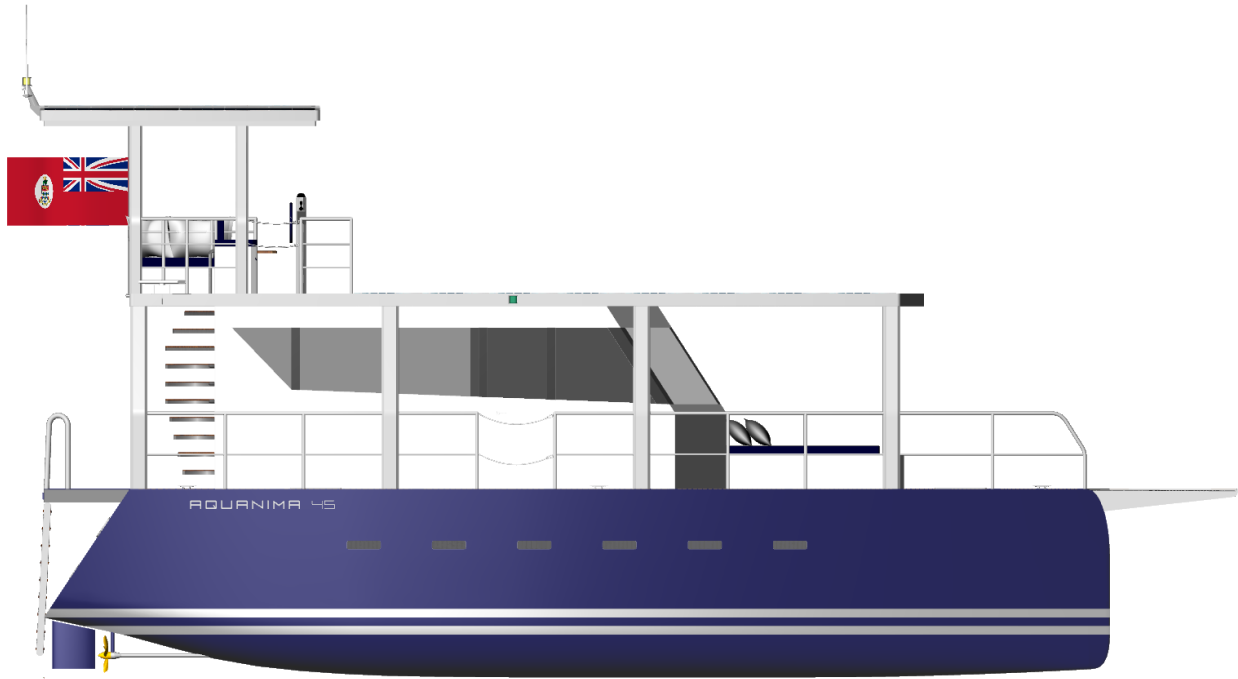
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AVANT GARDE ECO-YACHTING



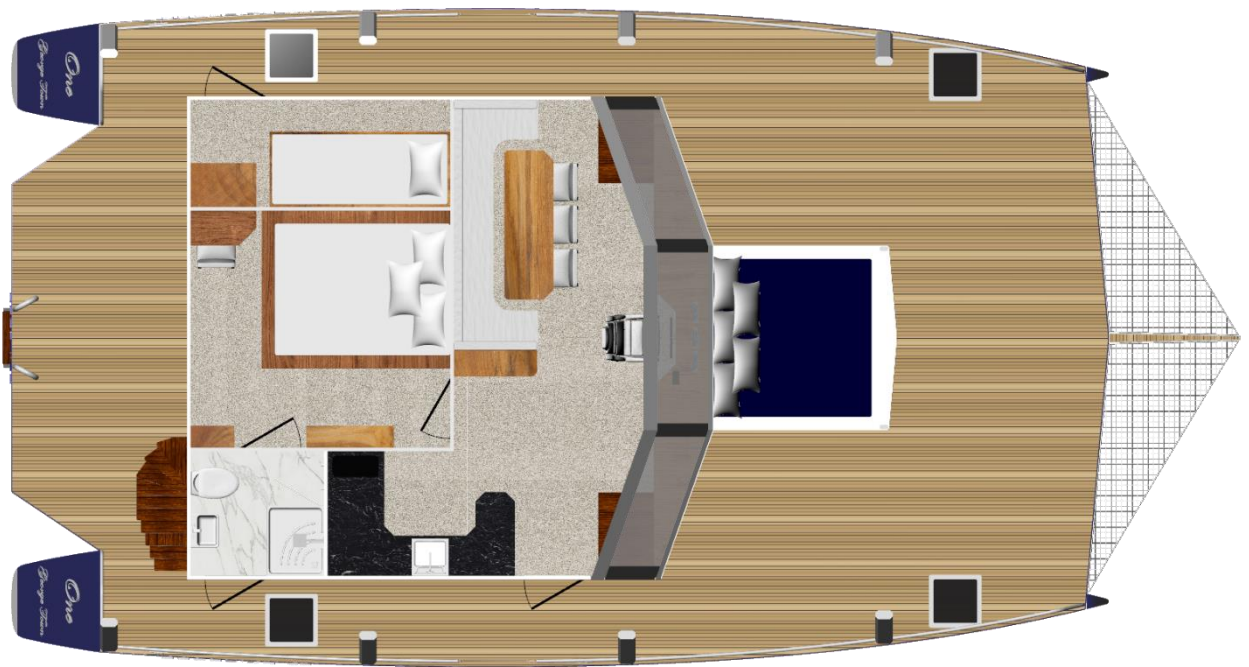
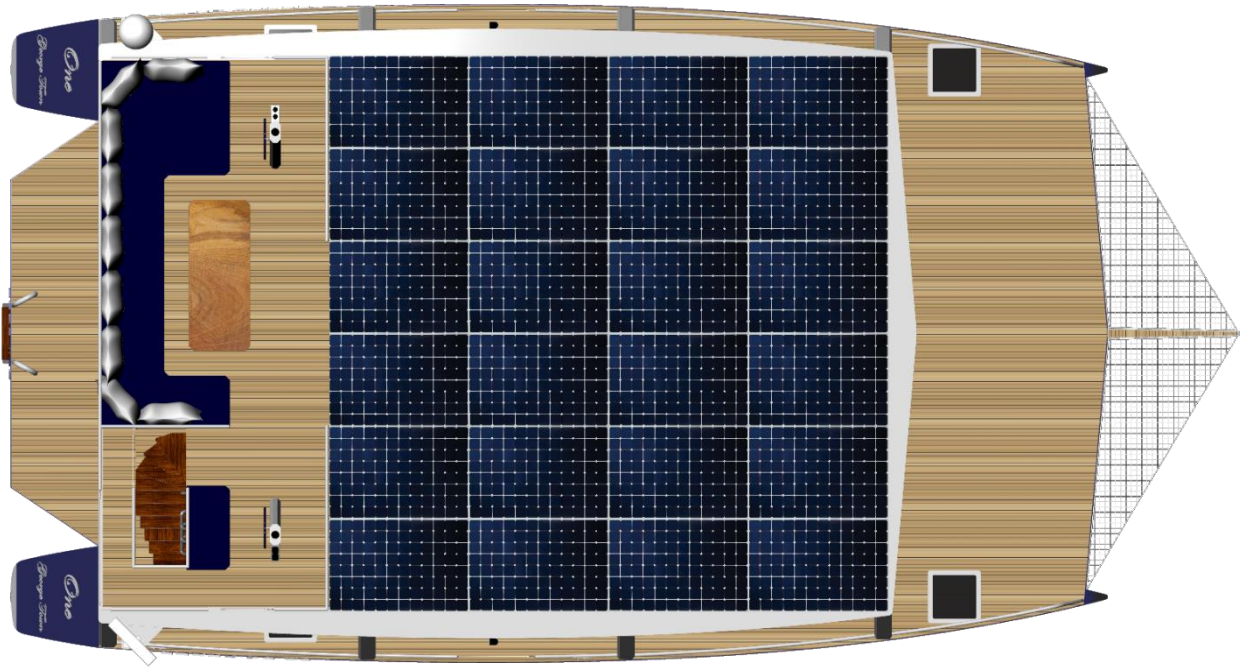
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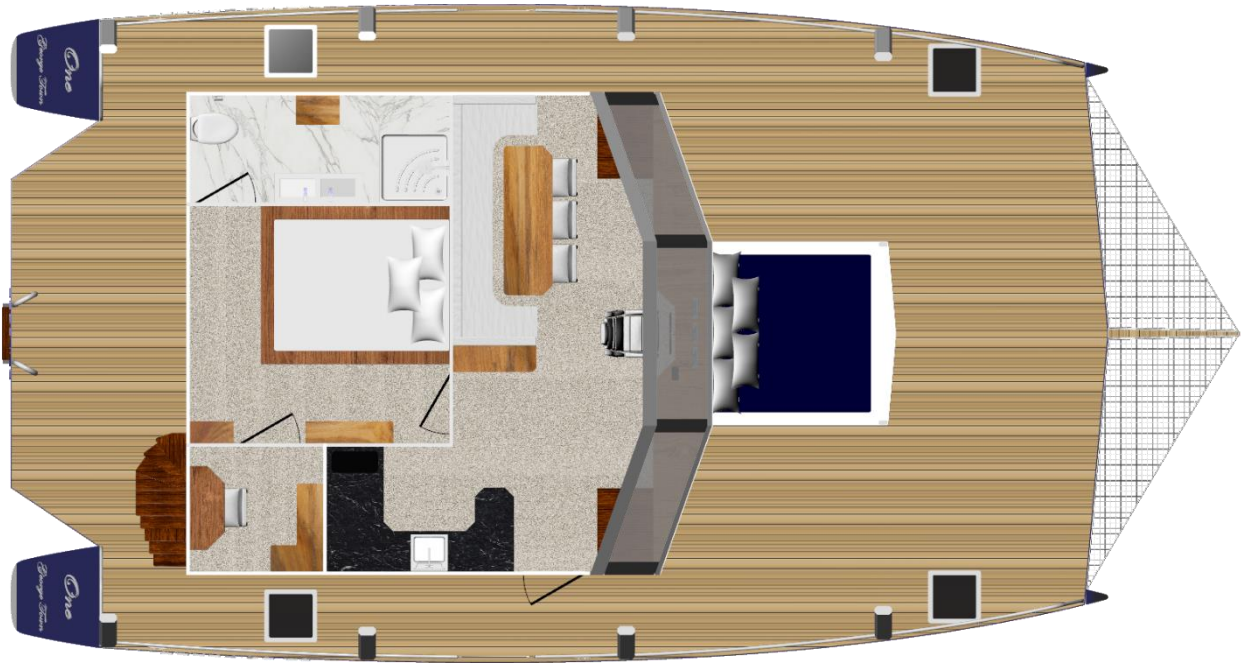
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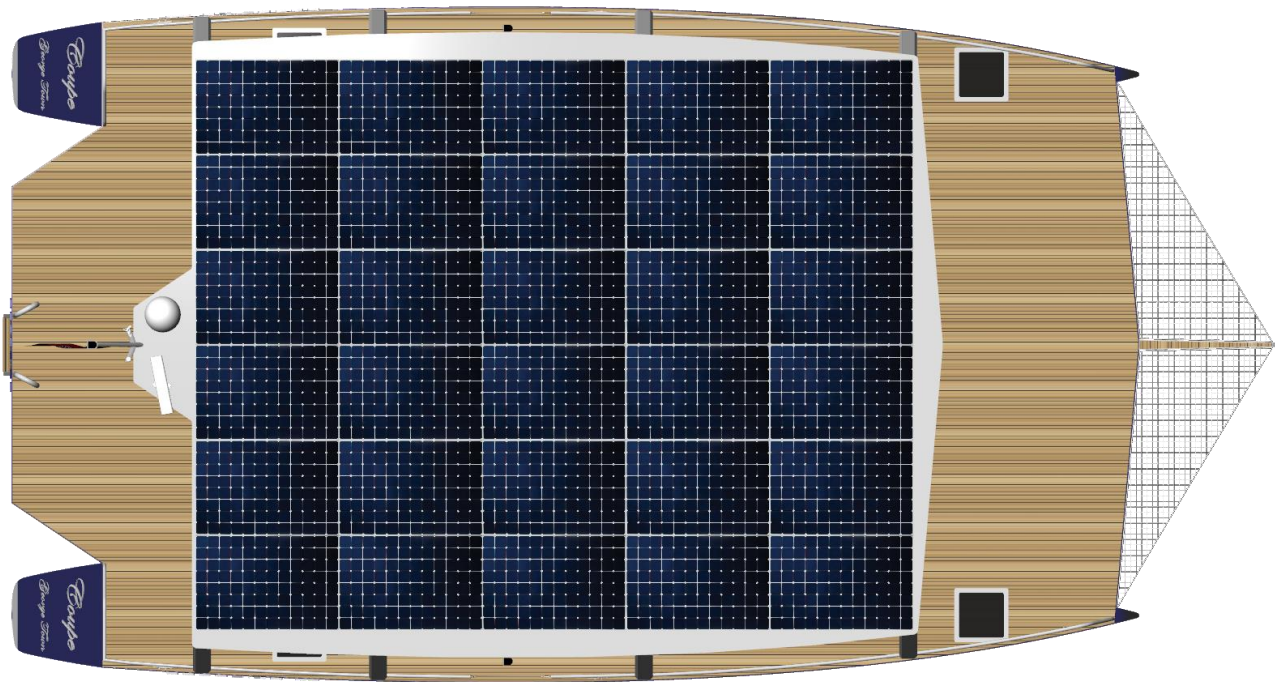
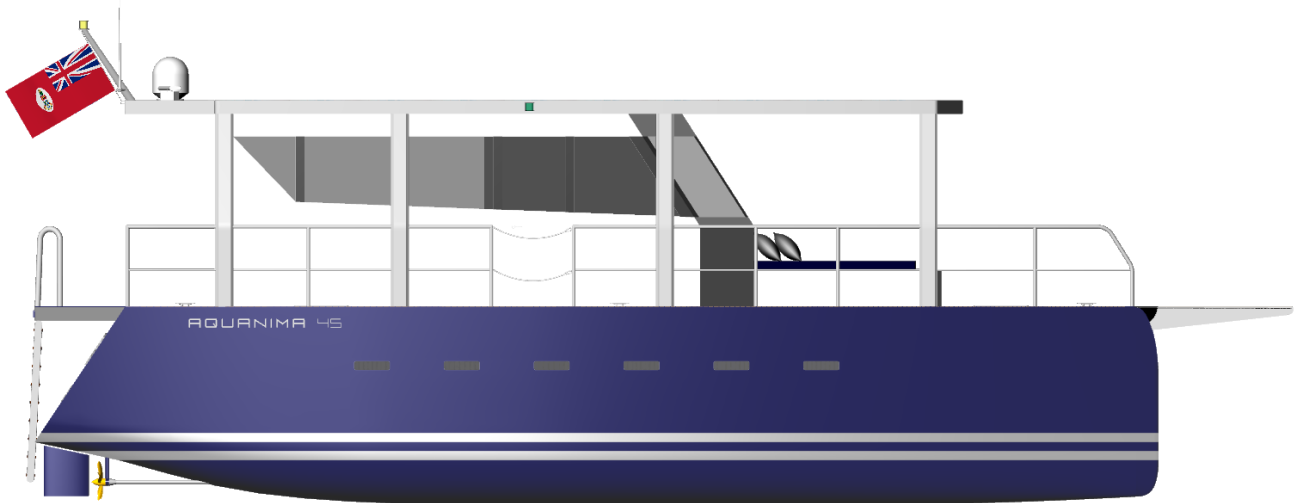


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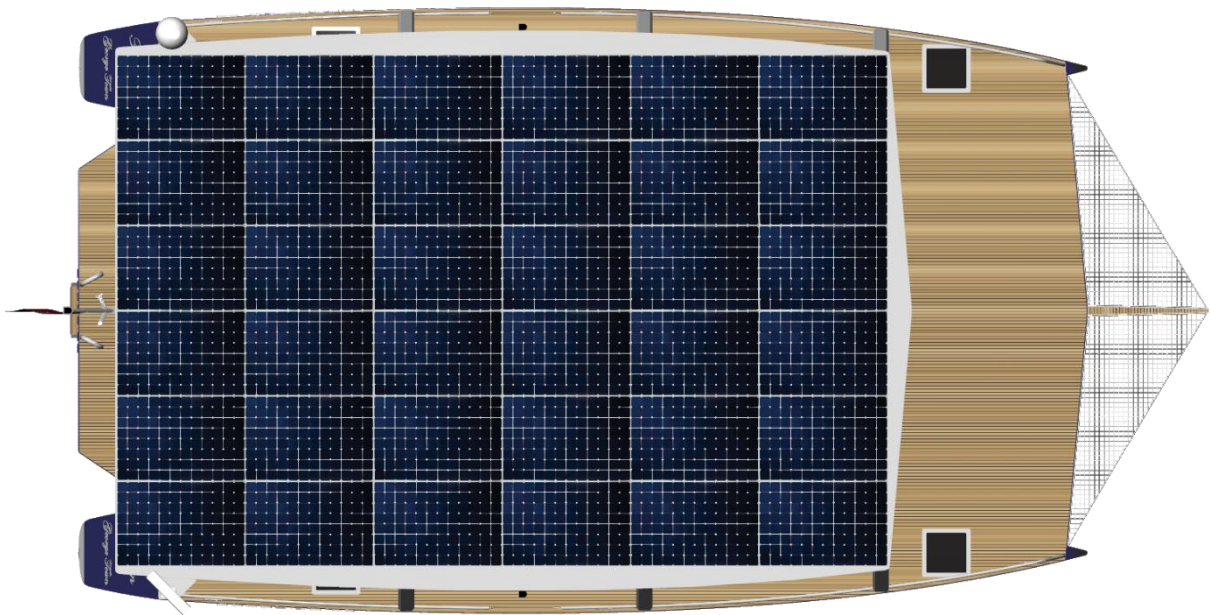
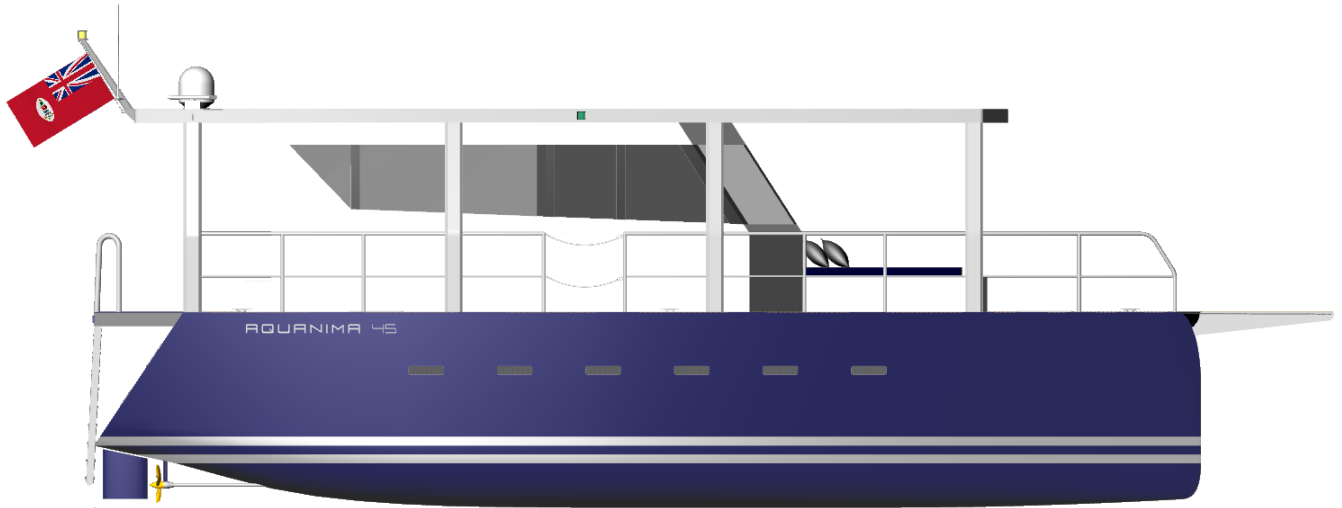
AVANTGARDE ECO-YACHTING



Coupe



Horizon



3. SPECIFICATIONS

The Aquanima 45 catamarans have been developed to meet the following specific requirements:

- Day trips or long cruises
- Adequate continuous cruising speed
- High speed capability
- Unrestricted sailing area, round the world capability with high safety
- Uninterrupted daily operation, round the year
- Ease of drive and system operation

	Coupe	Horizon	Dolce Vita
Length - overall [m]		14	
Beam [m]		7.5	
Hull length [m]		12.5	
Hull width [m]		1.5	
Hull depth [m]		2.2	
Displacement est. [tonnes]	5.5	5.7	6.5
Draft [m]	0.6	0.6	0.65
Deck area [m ²]	85	85	85 +15
Bow nets area [m ²]		4	
Cabin area - deck / hulls [m ²]		33 / 17 (*)	
Berths		1, 2, 3 or 4 (*)	
Capacity (pax)		12	
Speed - cruising / max [knots]	6 / 12	6 / 12	5 / 10
Solar roof area [m ²]	50	60	50
Solar power - max [kW]	10	12	10
Battery capacity [kWh]		48	
Electric motor power [kW]		2 x 20	
Shore feeding power [kW] (*)		2 x 5	
Power outlets		USB, 12V, 24V, 110 / 230V AC	
Navigation		GPS & compass	
Lights - deck, cabin, underwater		LED	
Galley		Stove, oven, sink, fridge, freezer (*)	
Bathroom		1, 2 or 3 / Toilet, shower / bathtub (*), washbasin	
Water capacity [l]		2x 200 tank + water maker (*)	

(*): Optional / Depends on the version

4. SPEED & RANGE PREDICTION

The present speed and range predictions of the Aquanima 45 are based on Computer Fluid Dynamics (CFD) simulations carried out at the Harbin Institute of Technology (HIT), one of the world's most renowned universities in the fields of Naval Architecture and Marine Engineering. The simulations reports will be sent with this quotation.

Below figures are estimates calculated with the battery capacities as indicated in the Specifications and electric motor efficiency of 90%.

	Coupe	Horizon	Dolce Vita
	5 knots		
Propulsion shaft power [kW]	4.5	4.5	5
Actual elect. consumption [kW]	5	5	5.5
Autonomy w/o sun [hours]	9.5	9.5	8
Range w/o sun [nm]	48	48	40
Range over 24 h [nm]	120	140	110
	10 knots		
Propulsion shaft power [kW]	19	19	22
Actual elect. consumption [kW]	21	21	24.2
Autonomy w/o sun [hours]	2.3	2.3	2
Range w/o sun [nm]	23	23	20

6. PRICE LIST

Below prices are for basic version, excluding options.

Aluminium

X 1000 EUR	Coupe	Horizon	Dolce Vita
1 cabin	390	410	480
2 cabins	400	420	490
3 cabins	440	460	530
4 cabins	450	470	540

Fiberglass

X 1000 EUR	Coupe	Horizon	Dolce Vita
1 cabin	350	370	400
2 cabins	360	380	450
3 cabins	400	420	490
4 cabins	410	430	500