

neo⁴¹⁰ CAT



Design Philosophy

If you really enjoy sailing fast but also having good company onboard with the right comfort for everybody, this is the solution you were looking for. The technology used, Carbon-Epoxy-Infusion, guarantees a robust and light structure with the best sailing performances and the best ratio between load capacity and total weight. The small displacement allows the adoption of a slender hull shape thus reducing the wave drag for best sailing performances. The high bridge deck clearance allows a slam free ride in rough seas. Full carbon high aspect ratio daggerboards offer excellent upwind performance and possibility, when lifted, to get close to the beaches. The retractable bowsprit (2m) allows a larger area of the head sails and, at the same time, a minimum required space for maneuvering and mooring. The folding transoms offer protection during navigation and extra area for swimming activities.

Sail Plan

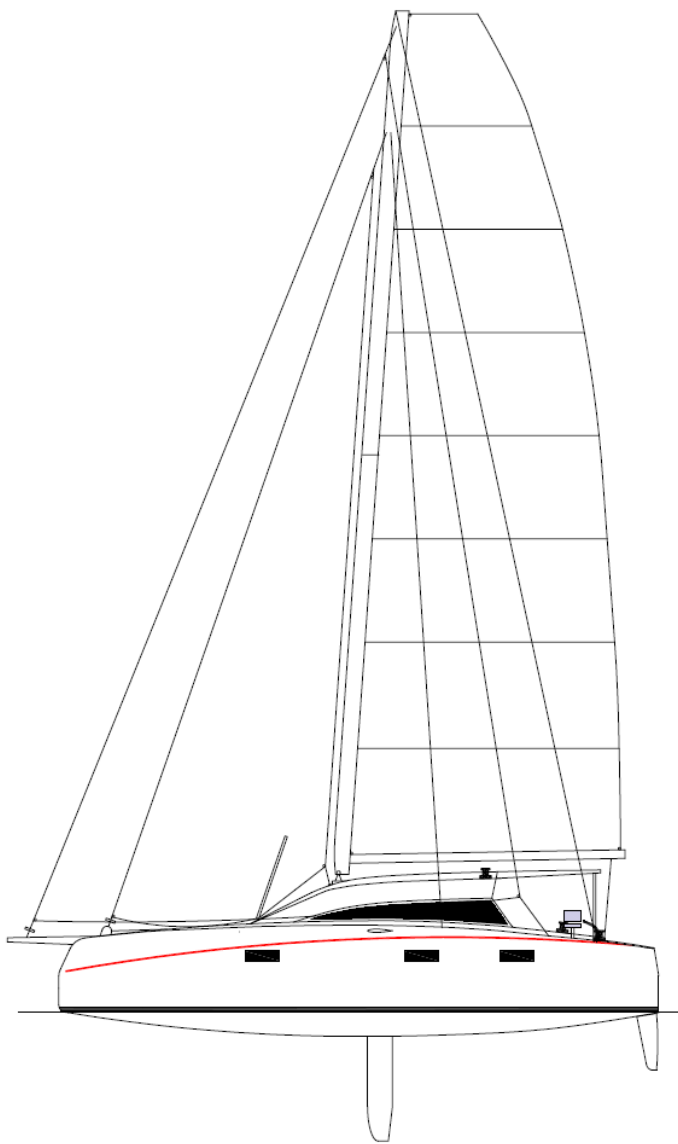
Standard configuration has a fixed mast but a rotating wing mast is also available for additional performance. Both solutions are based on carbon fiber, for minimum weight and have the same height to allow same sail area.

Auxiliary Propulsion

In line with the minimum weight design philosophy, the standard solution has two retractable outboards. The main reasons for this unusual solution are: 1) Weight reduction compared to diesel engines; 2) Elimination of parasite propeller drag while under sailing; 3) Better comfort for the reduction of noise and vibrations during engine navigation; 4) Easy maintenance to the engines that can be easily disembarked; 5) Simple future conversion with electric outboards.

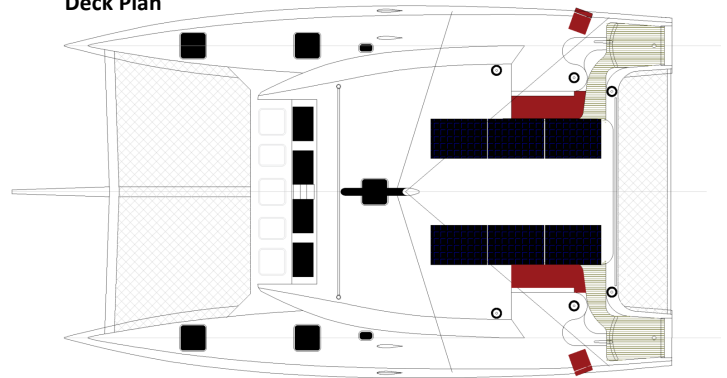
The main objections to the use of gasoline outboards instead of inboard diesel engines are higher fuel consumption and the lower reliability. Both points are overcome by the fact that a light twin hull configuration has, by itself, a reduced drag when cruising close to its critical speed compared to the drag that a monohull has, and the fact that the redundancy of two engines well compensates the lower reliability.

The position of the outboards is close to the center of the rotation of the displaced volumes, therefore the possibility of loss of thrust of the propeller in rough seas is greatly reduced. Finally, the fuel tanks, as well as all the connecting tubing, are placed outside any internal living space.

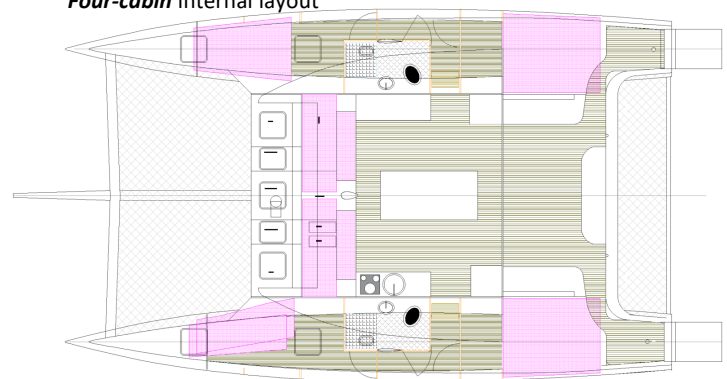


Costruction	Full Carbon
Hull Lenght	12.48 m
Beam overall	7.65 m
Beam centerlines	6 m
Draft hull/rudder/daggerb.	0.5/1.2/2.7 m
Bridgedeck clearance	0.8 m
Air Draft	20.8 m
Mast Lenght	18.0 m
Weight empty/light	4.3/5.2 t
Water tanks	400 l
Fuel tanks	2 x 110 l
Main Sail area	72.0 m ²
Jib (selftacking)	33.0 m ²
Code 0	90.0 m ²

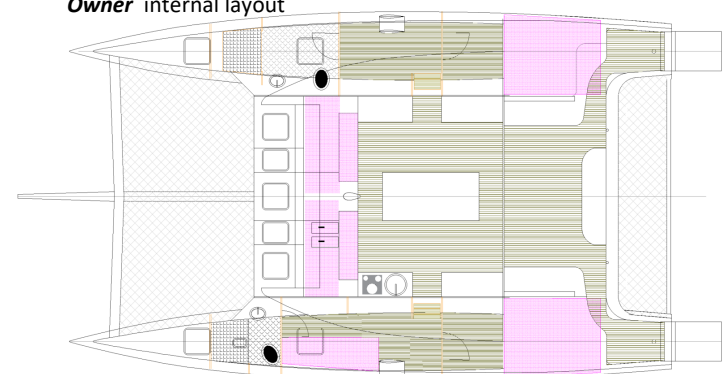
Deck Plan



Four-cabin internal layout



Owner internal layout



Safety

The CE certification category is A. Thanks to the exceptional strength of the carbon fibers, the structure is designed to safely handle upwind sailing in rough sea without the need to slow down as instead required in many other catamarans.

The catamaran is designed to be unsinkable in both right and up-side down floating positions.

The beam-to-length ratio is higher than that of most catamarans on the market ensuring high stability even in light displacement mode. For the option with the rotating wing mast, a device fitted in the mast foot provides the measurement of total force applied to the mast. This is a key information directly related to the total force on the sail plan and relative stability margins.

Rudders and Steering System

Two full carbon high aspect ratio rudders allow best maneuverability and max upwind performance. The small chord and the compensation allows the use of simple tillers for excellent speed of response to the control. Much appreciated in race pre-starts or when flying on one hull. A conventional wheel is also available installed in a position that allows 360° visibility as well as possibility to steer away from the sun and bad weather. An option with kickup rudders is also available to allow getting ashore on slopes without cranes or travel lifts.