

Specification Sheet - eISR 2024

Name	CHELONIA
Length overall	3.1 m
Maximum beam	0.65 m
Hull weight and contained volume	The combined weight of the hull (including the frame) totals 75 kg. The internal volume encapsulates a substantial 883.6 liters.
Position of the centre of gravity and buoyancy	Centre of gravity at $(X1, Y1, Z1) = (-277, 4, 13 \text{ mm})$ and centre of buoyancy at $(X2, Y2, Z2) = (-264, 4, 13 \text{ mm})$; Origin can be taken from the picture below.
Type of propulsion	Biomimetic, non-propeller
Method and type of propulsion	Two pairs of MirageDrives on the top and bottom of the submarine oscillating in a 180° range
Propulsion rpm/cadence	60 rpm
Pedal Cadence and Shaft Gear Ratio	Pedal (Stepping) cadence of 60 rpm and a shaft gear ratio of 1:1
Type of Control of Hydroplane and Rudders	Controlled pitch and yaw rudders with a symmetrical profile abstracted from the humpback tubercles with a length of 0,29 m

