

Key Characteristics: Vertical Take-off and Landing capability • Hybrid-electric drive • Water landing ability • Practical personal aerial vehicle •

Diolier - Personal Aerial Vehicle for 2030

Personal aerial vehicles could be the answer to congestion on the streets and high levels of CO2 emissions and ambient noise in the cities.

The Doilier project aims at developing a technologically advanced, efficient and environmentally friendly personal aircraft. The vehicle in the high-end luxury market can fly with four passengers on board and features a luxury interior with exotic materials, colour and trim.

Diolier is a personal aerial vehicle with the capability of vertical take-off and landing. Unlike most of the vehicles of this type that are complex to fly helicopters or military-grade machines, Diolier is a tilt-rotor capability aircraft which is very new on the commercial market. It has hybrid electric composition and

uses two of the new Siemens SP260D electric motor, which are 260 KW each. The main energy source is electricity through batteries, which are being charged via a 1MW electric generator attached to turboshaft Rolls-Royce 250. It is 11 metres in length, weighs around 2000 kg in total and has water landing ability with inflatable pontoons which extend under the fuselage.

Flight time is two and half hours. It has 30 minutes of battery time and two hours flight with turboshaft on, using JP4 fuel(or hydrogen for the more advanced concept). The body is streamlined with an organic-minimalism aesthetic design language and technological features as the recently found phenomenon tubercle effect on the wings for better aerodynamics and lower drag coefficient •

