



About Fliteboard

Fliteboard is an electric powered hydrofoil that gives the sensation of flying over water. Carving effortlessly, Fliteboard gives you the freedom to ride anywhere, without wind or waves. Emission free, wake free and virtually silent, ushering in a new category of environmentally friendly powered watercraft.

Noise Free - Quiet electric motor won't disturb the environment.

Emission Free - Guilt free zero emission propulsion system.

Wake Free - Fly above the water without a splash.

Purposeful design

Every detail of Fliteboard has been refined for maximum performance, durability, beauty and enjoyment.

Fliteboard has been recognised by the global design community, winning prestigious awards around the world including: The Good Design Awards, IDSA, Australia by Design "Innovation of the year", The German Design Awards and the 'Best of the Best' Red Dot Award.

The Good Design Awards Jury said of Fliteboard: "Stunning design all round. Every single aspect of this product has been meticulously thought out" and "This is without doubt a world-class sporting product and a brilliant example of a good idea turned into an excellent product through professional design."

Effortless propulsion

Fly quietly above the water between 1–2 hours, (80kg rider) with Fliteboards' dynamic eFoil propulsion system. Travel for over 30kms per charge, or reach speed up to 50km/h.

Unibody fuselage – The highest performance eFoil design

Unlike all other eFoil systems the Fliteboard motor is built into our patented unibody hydrofoil fuselage. This importantly positions the thrust directly behind the front wing, instead of above the fuselage in a separate enclosure. There are FIVE main benefits to the Fliteboard propulsion system including:

- A) Far superior stability. Rather than the motor pushing like a lever from 10cm above the front wing, the thrust is pushing directly behind the front wing. This results in much more consistent wing balance, regardless as to the amount of thrust being applied.
- B) Because Fliteboard uses one fuselage and motor structure instead of two, our system has less wetted surface area, which means less drag and greater efficiency.
- C) The Fliteboard unibody fuselage is made from one piece of aluminium. This creates a strong and watertight enclosure and reduces potential for breakage by combining metals and plastics with fasteners as used by other systems. Because aluminium is an excellent heat conductor, the Fliteboard motor is efficiently cooled through the aluminium when operating in the water.
- D) The Fliteboard propulsion system uses a reduction gearbox, which generates greater torque from a higher spinning motor. This means we can use a smaller diameter motor. As a result the Fliteboard fuselage has the smallest diameter in the market with only 60mm diameter. This results in better Hydrodynamic efficiency and therefore performance.



- E) Another advantage of the unibody fuselage is a longer effective mast length. This allows riders to ride higher above the chop and carve tighter turns with greater lean angles. There is greater flexibility in variation of ride height without the motor breaching the surface.

Flitebox

The most user friendly eFoil system.

The patented Flitebox system is the waterproof box at the top of the mast that houses the motor controller and other electronics. This totally unique system has many advantages:

- A) The motor controller is permanently connected to the motor. This means that the user does not have to connect the 3 phase connectors each time they set up the board (which is the case with other eFoil systems).
- B) The Flitebox includes an aluminium heat-sink connected to the aluminium mast. This uses water flowing over the mast to cool the motor controller very effectively. Other eFoils use a water cooling system that sucks water up from the bottom of the mast. The problem with this system is that sand can get sucked into the water cooling tubes and block the cooling, which can result in an overheated motor controller. This can result in a blown motor controller, motor, or even a fire in the motor controller. There have been many reports of these problems with other eFoil systems that use water cooling. The patented Fliteboard cooling system is much simpler and has so far proved 100% reliable. We rarely see a motor controller over 40 degrees which is very good and improves efficiency.
- C) Without the Flitebox system the motor controller and other electronics are in the board. This means that when something goes wrong, the board needs to be sent for service and this is expensive and time consuming. In comparison only our eFoil system would need service if there is an issue. Every component inside the eFoil is plug and play and most components can be replaced within 10 minutes. The only exception is the motor itself which would require about 35 minutes service to replace.

Efficiency, runtime and range

The above features result in incredible efficiency. An 80kg rider can ride a Fliteboard for up to 1 hour 30 minutes or 30km range using our standard setup (including with prop guard), with our 2.1KWH Explore Flitecell. Therefore we offer up to 60% better efficiency, run time and range – considering a similar 2.1KWh battery.

Flitecell - The most robust marine battery

Flitecell represents very significant R&D battery development, and we believe is the safest in the market. Our patent pending battery enclosure has remained waterproof after drop tests from 2m which is very impressive. We also include many other innovations and safety systems, which are yet to be announced.

Flitecell Explore

40 AH
2.1KWh capacity
50.4v Nominal



High Voltage 58.8v, Low-Voltage 42v

Run time

1hr 30mins* *based on 80 kg rider

- CNC machined aluminium and high temperature polymer case for unmatched durability and waterproofing
- Highest density Li-Ion cells
- Superior safety, life-cycle and power to weight ratio
- 100% pure nickel terminations for low resistance
- Two stage fusing - Master and cell level
- Custom BMS (Battery management system) - Multiple and redundant safety features

Flite Controller - the smallest and smartest in the market

Our custom designed waterproof handheld remote provides intuitive control. Virtual Gears provide the smoothest possible power delivery. The high contrast display shows a range of sophisticated ride telemetry by collecting data from GPS, dual IMU (accelerometer), other sensors and the state-of-the-art battery management system.

- Magnetic Charging. No plugs to connect, just snap on the charging magnet
- Throttle resolution 1,000 points
- Magnetic actuator (hall sensor) for precise throttle control.

The Flite Controller is the smallest, lightest and smartest in the market.

Flite Controller includes many important features that are not present on any other eFoil system including:

- A) multifunction display with GPS + bluetooth connectivity that provides real time data for speed, distance, max speed, elapsed time, remaining time, efficiency in Watt Hours per Kilometre, battery current, battery temperature, motor controller temperature and RPM. The system constantly displays remaining charge, with alerts at 50%, 10%, high current or high temperature.
- B) With the above features Fliteboard uses an onboard trip computer that calculates remaining time and distance in real time. No other eFoil system includes such a system.
- C) Flite Controller uses a patent pending priority system for throttle control. This system uses the combination of trigger and 20 power levels changed by buttons - to provide a "cruise control" function. This means that riders don't need to balance the throttle trigger while trying to balance the hydrofoil. It makes for a MUCH easier learning experience.

Smart electronic safety systems

Fliteboard uses a magnetic 'virtual leash' system requiring users to arm the motor by waving the handset over a pad on the nose of the board in order to operate the motor. This stops accidentally bumping the trigger and launching the board by accident which could be dangerous. In addition, the Fliteboard includes an accelerometer to constantly measure the board angle. If the board angle is abnormal (for example in the event of a crash) The motor will instantly cut off. This system is also used to stop the motor from being used if it is out of the water.



Flite App, data logging and software updates

Fliteboard logs and stores around 30 data parameters 5x per second. This data can be made available to Fliteboard or service centres for diagnosis of any issues. The recently launched Flite App for iPhone will allow users to download, visualise and share their ride data, and also provide software updates. Fliteboard is constantly working on new features and improvements which can then be upgraded to customers boards via the Flite App, just like upgrading your iPhone or Tesla software. Many new features are planned that will be released over the next 12 months. No other eFoil system uses data-logging and software updates via an App.

Wing design - created by world leading experts

Fliteboard wings have been developed by a team of US based hydrodynamicists that include America's Cup Foil designers. This results in far superior stability and ride characteristics than the competitor eFoil. Interchangeable wings allow you to easily customise your ride. Built from high compression carbon fibre for maximum stiffness and strength.

Cruiser wings

For early and stable foiling.

Maximum efficiency for slow to medium speed cruising and heavier riders. Suited to tight turns at lower speeds. The best option for waves. The Cruiser wing offers early lift and stable foiling at lower speeds, great carving ability for riding swells. The Cruiser wing works well for riders of all weights.

Flyer wings

For speeds up to 40 kph. Maximum efficiency for medium to fast speeds, and lighter riders. Suited to fast turns and higher speed, and long range exploration. The Flyer wing offers less drag and requires higher speed to generate foiling lift. Once foiling this wing provides greater top speed and responsive turns.

Newton-Rader propellor

Engineered for maximum thrust and efficiency for a range of wings, rider weights, and speeds

Sophisticated design, aesthetics and finishes

Fliteboard has been designed for a high end market and uses specialist materials and finishes such as Ash veneer, Italian Carbon Innegra, Carbon fibre weave, and hard anodised aircraft grade aluminium. Fliteboard has recently been shortlisted for the Good Design Awards for Industrial design excellence.

The Flite network

Fliteboard was the first eFoil company to offer a formal School program - Fliteschool. Our reseller programs offer marketing support, access to training and spare parts, volume discounts etc. Maintenance is simple and can generally be provided by Fliteschools and resellers who have some basic technical ability.

Customisation

The largest range – customised and configured by you

Fliteboard offers a large range of boards,, finishes, mast lengths (60 & 75cm), wings (Flyer & Cruiser), batteries (Flitecell Explore & Flitecell Sport) and chargers.

Fliteboard offers an inflatable board for use on yachts (Fliteboard AIR), in schools or watersports centres.

All boards and components are plug and play.



Fliteboard is made to order based on user preference and skill level.
Modular interchangeable components, over 200 configuration possibilities.
Easy to transport, set-up, and customize to suit your individual style.

Configurations options to suit any rider

- 3 x board styles (Fliteboard AIR, Fliteboard, Fliteboard PRO)
- 4 x board finishes (Ash, White Carbon Innegra, Black Carbon Innegra) / Fliteboard AIR (Grey Selytech Composite Super LightDrop Stitch Fabric)
- 2 x mast heights (750mm + 600mm)
- 2 x wing options (Flyer & Cruiser)
- 2 x batteries options (Flitecell Explore & Flitecell Sport)

Materials

Innegra / Carbon Innegra

Carbon fibre Innegra™ is the lightest fibre commercially available, it is even lighter than water. Due to its low density it is suited for lightweight composites, ropes, and netting. Innegra is more UV stable than Kevlar.

Our Carbon Innegra boards are designed and made in Italy and is of the highest quality composite material fibre weaves available. Fliteboard Cruiser, Flyer and Stabilizer Wings are compression moulded using quality carbon fibre materials, resins, high density foams.

Aircraft grade aluminium

- We choose aircraft grade aluminium for for the mast and engine for strength, stiffness and heat transfer ability. We chose aluminium because Fliteboard Masts are hollow to allow for cabling from the computer to the motor and carbon masts of this size and thickness are more likely to snap. We have also used a specially developed anode to reduce corrosion.

High quality wood laminates and composites

The Fliteboard Ash is hand cut from a real wooden veneer called Ash timber. real Ash veneer. Ash was chosen for its strength as well as its pale colour and beautiful texture. The Ash veneer is hand cut, laid, sanded, sealed and vacuum bagged.

Advanced Inflatable materials

- SCSL (Selytech Composite Super Light)
- Newly developed double layer drop stitch
- Reinforced by pre-laminated double layer coating
- Stronger and stiffer, and up to 35% lighter
- The best weight down construction (less by 35% compared to the SDL)
- Improved anti-air loss technology
- Highly stable and durable for airtight, stiffness, torsion in hard and tough condition
- Fire Retardant Antimicrobial, Oil Proof, Anti Stain, Acid and Alkali Resistance
- Durable with UV-Protective, Anti-Oxidation and Temperature Resistance
- Stainless steel inserts in the fuselage reduce the risk of cross threading and wear overtime.



Fliteboard range

Fliteboard AIR

The Inflatable Fliteboard AIR is designed for easy learning, transportation and durability. This makes it perfect for families, yachts, watersports centres and resorts.

Fliteboard AIR shares the same quality eFoil power system, hydrofoil wings, controller and battery as the Fliteboard and Fliteboard PRO. Components are interchangeable allowing customers to purchase a 2nd board at a later date for a different riding experience using the same power components.

The Fliteboard AIR board comes in at 175 litres of volume, giving it almost twice the volume of the standard Fliteboard, but with only slightly heavier weight. The additional volume is similar to that of a small - medium SUP, which is great for heavy riders or beginners, and makes it possible for riders to start on their knees or standing.

The board comprises 2 components. The inflatable section of the board is made of high quality drop stitch construction, designed for high pressure inflation up to 18 psi. The carbon fiber core of the Fliteboard AIR houses the battery and connects the eFoil, and provides strength and stability.

The Fliteboard AIR comes with a shorter 60cm eFoil mast (75cm is standard on other Fliteboards). This allows for more forgiving learning and use in shallower water. (Note: the 75cm mast cannot be used with Fliteboard AIR.)

The Fliteboard AIR offers the same great feeling of flying over water as the other Fliteboards. It has the advantage of being highly durable and more resistant to dings and damage than the carbon / epoxy Fliteboards. Fliteboard AIR provides a greater level of safety for beginners who might fall on the board. And of course Fliteboard AIR packs down to a small size for easy transportation when not inflated.

The full Fliteboard AIR package comes in 3 travel cases. One for the board and pump, one for the eFoil, charger and wings, and a case for the battery.

6'6" x 30" 175 litres

Fliteboard

Suits riders from beginner to advanced.

Enough volume and deck area for early planning and easy pop-up, yet still highly maneuverable and easy to transport.

5'8" x 28". 100 litres

Fliteboard PRO

For experienced riders that want the smallest board possible. Lightweight and responsive.

5' x 24.5". 70 litres



Quotes from Founder & CEO, David Trewern

"Riding a Fliteboard provides that feeling of presence that busy people are often seeking; the feeling of really being in the moment and being part of nature. It's challenging and gets your heart rate up, but it's easy to access. We've taught hundreds of people in under an hour, from kids to people in their 70s".

Customer quotes

"The most magical gadget on the planet".
Tobias Lukte, Shopify.com founder

"The best truly new thing I've seen in ages, and so impressively executed".
Xero.com founder Rod Drury

"Probably the most incredible thing I have ever tried!"
Jon Olsson, Feestyle Skiing World Champion

"Its amazing. It feels like you're flying."
Nico Rosberg, F1 World Champion

"Awesome. Had a blast. Liked feeling the silence. Really really loved it"
Mark Webber, F1 driver

"Every single aspect of this product has been meticulously thought out."
Dr. Brandon Gien, Founder and CEO of Good Design Australia,
Senator of the World Design Organization (WDO)

"Been one of best purchases of my life."
Mark Richards, CEO Grand Banks Yachts & Skipper Wild Oats XI,
9 times Winner Rolex Sydney - Hobart

"Totally love the product. Outstanding experience, high quality, love for detail."
Frank Thelan, Investor

"Thanks for this magic board, it's an unbelievable and fantastic feeling to ride."
Anton, Captain of MY CHARADE

"The iPhone of Jetboards"
Jetsurfing Nation

"Similar to Snowboarding. The feeling of freedom and carving. It's sick!"
Dan Luger, Professional Rugby Player

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