

"The Aquair 100 gave reliable charging for two Atlantic crossings, and was the perfect power solution in areas where solar panels would not perform". "I highly recommend Ampair's Aquair charger, even for smaller cruising boats".

Rory McDougall
www.roryandcookie.com

Hybrid wind & water power for long distance sailing

The Aquair 100 has been reliably powering boats over long distance crossings and at anchor for 35 years. Mounted to the stern of the boat and trailing a towed water turbine on 30 metre line, the unit provides over 6 Amps continuously at 7 knots. At anchor, the unit can be converted to run as a wind turbine. Unlike our competitors, Ampair have maintained a very small form factor for the Aquair making it the smallest hybrid generator on the market. If you are making an ocean crossing the Aquair 100 is perfectly suited.

Water Mode - The Aquair 100 is designed for yachts cruising at 4-15 kts. The standard pitch turbine surfaces at 7kts and skips at higher speeds, a coarse pitch turbine is used on yachts which sail at 8-12 kts. At 7kts the turbines drag is 17 lbs: it will not noticeably slow the yacht. The standard stainless steel gimbal ring mounting provides a simple and automatic alignment method and can be rigged into the push-pit or mounted in the optional frame for boats without a push-pit. The shaft connector is designed to break to save the generator and push pit if the turbine becomes trapped.

Wind Mode - Using a "rope only", hoist-in-the-rigging system (HIR). Halyard lifts the Aquair 100 away from busy the cockpit into clear air. No noise or vibration to worry about! A pole mount option is available for yachts with stern gantry or similar. A single electrical connection can then serve the unit in both wind and water modes.

Advantages - Use of the Aquair 100 greatly reduces the frequency of engine running to recharge service batteries. The turbine generates sufficient power to run an autopilot, maintain navigation equipment or support a fridge. It produces

a continuous output of up to 6 Amps at 12 volts. Its permanent magnet alternator with built in rectifiers has no commutator brushes and the windings cannot overheat so it requires no thermal cut-outs or protection.

Regulator - The Aquair 100 can be used without a regulator in water mode as you can just pull in the line if the batteries are charged, if you prefer autonomy and will also use the turbine in wind mode any of the 100 series regulators can be used.

