

Aquair® 100 water/wind turbine. 12 or 24 or 48 V battery charging power.

Towed Turbine Generator when sailing. Wind Driven Generator when at anchor.

Hybrid wind and water drive.

Sailing downwind at 6 knots, the Aquair 100 water drive generates approximately 5 amps continuous charge. To obtain 5 amps at 12 Volts of generation from the wind driven version while underway, the wind speed required is typically 30 knots (24 knots plus 6 knots boat speed).

Water mode.

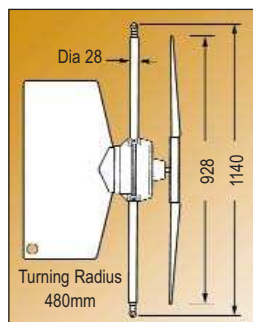
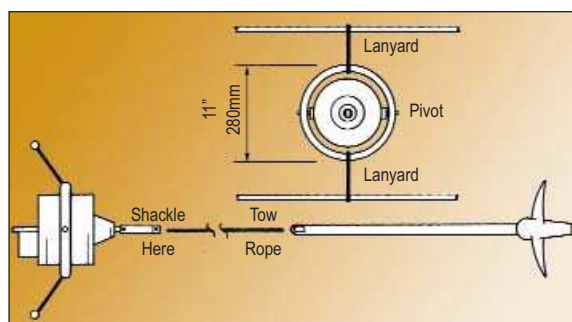
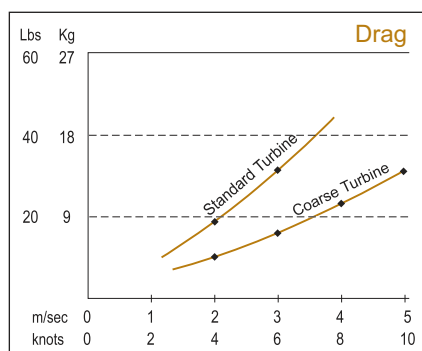
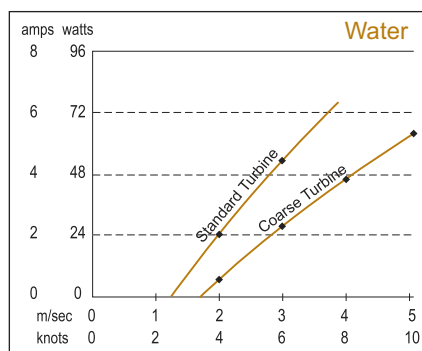
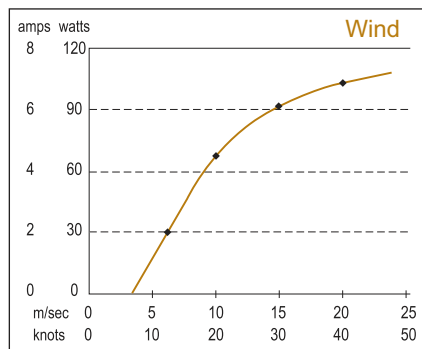
The Aquair 100 is designed for yachts cruising at 4-7 kts. The standard pitch turbine surfaces at 7-8 kts and skips at higher speeds. The coarse pitch turbine suits yachts which sail at 8-12 kts. The shaft connector is designed to break to save the generator and rail if the turbine becomes trapped. At normal cruising speeds the turbine will not noticeably slow the yacht.

Wind mode.

Uses a "rope only", hoist-in-the-rigging system. A halyard lifts the Aquair 100 away from busy 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 short pole is welded, clamped etc. to an existing structure. A single electrical connection then serves wind and water modes.

Advantages.

Use of an 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 choke.



Technical Specifications- water mode:

Power Rating	5 Amps 12V at 3 m/s (6 knots) waterspeed
Voltage Options	12 or 24 or 48 V DC
Output	Rectified DC
Start-up Waterspeed	3 knots
Weight	10kg Generator - 3kg Turbine
Propeller	Standard 7-8 knots or High speed 8-12 knots
Housing	Die cast aluminium (powder coated)
Wind Mode	See Ampair 100