# UW<sup>™</sup>100



### **UW<sup>TM</sup> 100 underwater micro hydro turbine** 100W continuous battery charging power in 4m/s (8kts) flow

**Powerful** - generates 2.4 kWh per day from 400mm deep fast flowing streams.

**Protected** - optional stainless steel propeller guard prevents fine rope, fishing line and debris from blocking the turbine.

Applications - designed for fast flows in fresh water or salt water. **Robust** - alternator body is filled with oil for pressure equalisation and to reduce internal corrosion. **Durable** - the stainless steel shaft is triple-sealed for optimum protection.

**Proven** - for 20 years and used worldwide **Dependable** - will not burn out or overpower at any water speed.



#### Key specifications

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Max power rating	100 watt at 4 m/s waterspeed
Voltage options	12 , 24 or 48 V Dc
Output	2 phase AC - external rectifiers
Start-up waterspeed	1.5 m/s (2.9 knots)
Turbine diameter	312mm
Weight	10kg
Propellers	standard 1-4 m/s (2-8 kts) low RPM. 4-6 m/s (8-12 kts)

#### Charge controller regulator

**Power Regulation** - The 100 series regulators give the owner options to add solar panels and charge up to three separate battery banks all from a box no bigger than a paperback book.

**Support** - The UW100 comes with a 2 year warranty as standard well as AmpairCare<sup>tm</sup> - your access to lifetime worldwide technical support.

#### Performance







#### UW100 propeller guard





## **UW**<sup>™</sup>**100**













#### Installation options



**Standard** - shroud prevents fine rope, fishing line or debris from winding around shaft and damaging seals. Starts at 3 knots (1.5 m/s). Clockwise & counter clockwise propellers available.

Low RPM - designed for very fast flows or high speed boats. Delays charging and reduces drag until greater waterspeeds are reached.

**Prop Guard** - the optional stainless prop guard protects against debris.

Ampair Energy Ltd Milborne Business Centre Milborne St Andrew Dorset DT11 OHZ UK Tel: +44 (0) 1258 837 266 Fax: +44 (0) 1258 837496 sales@ampair.com www.ampair.com **Mounting and Protection** - because of the wide variety of locations mountings are normally fabricated locally. To assist we offer 48mm dia  $\times$  1.2m long mounting poles complete with cast socket to mate with the UW. Matched clamps are available for fresh water use. Zinc anodes are available for salt water.

**Food Grade Version -** the standard versions is a cosmetic grade oil. A version of the UW100 is available for use in potable water systems such as reservoirs.

**Fixing Pole** - fabrications can be made of steel. Side plates or angle brackets can be made to suspend the UW from an overhead beam, wires or a sliding pole arrangement.



CD 3208 / 1.0