



The most powerful electric outboard motor in Australia



Upto 13 KW equals
20 HP 4 stroke

Upto 4 hrs driving with
100 kg battery (lithium)

Upto 21 knts with a
small boat

Save over 50% on
energy costs compared
to 15 HP 2 stroke
or drive at no cost
with solar power!

aqua*watt** ***green electric power

Aquawatt offers the world's most unique high powered electric outboard to date. It's the state-of-the-art green electric outboard motor that has long been awaited for and is now ready and available. The exterior dimensions and housing look just like a petrol outboard engine, with either tiller or remote control features. However, instead of petrol smell or loud noise a high tech AC motor drives this unique system. It's not a trolling motor like offered by other manufactures with low power DC motors. This motor even allows water skiing or can move boats of several tonnes of weight!

▶ Green, powerful, reliable and sustainable

Its distinctive and intelligent power management system recognises which type of vessel is being used and adapts for optimal and maximum performance. The performance and thrust is equivalent to a 15 - 20 HP four-stroke long-shaft outboard motor. Our electric outboard motor is designed and developed for the use on lakes and rivers as well as in saltwater, using a zinc anode.

The connection points are the same as for standard outboards on the market, making it very easy using your existing set up either way. We are very proud that our electric outboard motor differentiates widely from other electric outboards, using a common chassis with parts available worldwide. This makes it attractive for the professional use.

▶ The all-in-one principle

Our 10 - 13 kW electric outboard motor can also be delivered with reduced power output, (4 or 6 kW) for areas with power restrictions.

You can use the Aquawatt green power electric outboard with two different battery set-ups. For a displacement boat, preferable a rather long hull form, the use of AGM (absorbent glass mat) batteries are recommended and is also the most cost efficient version. This setup requires four AGM batteries of 12 volts and a minimum of 100 Ah, as the motor runs on 48 volts. The weight is approximately 250 kg (550 lb.) for the 200 Ah batteries. With this particular setup and type of boat, speeds upto 14 knots are achievable.

The other alternative uses very light lithium batteries. This is an excellent choice for light planning or inflatable boats (RIBs). Speeds over 20 knots are achievable using a lithium battery pack, which is extremely light weight and durable at higher voltage and power rating than lead acid batteries. With the use of a lithium power battery pack (LiPo or LiFe), the output increases to 13 kW instead of 10-12 Kw. We also offer a wide variety of set-up solutions and accessories including chargers, propellers, etc.

Water Skiing with electric power



► The 10 - 13 kW high end electric outboard solution

The aquawatt electric outboard motor comes standard with a 12 kW output on the propeller shaft. The output can be optionally increased to 13 kW by the use of higher voltage lithium batteries (LiFEPO4) and stainless steel three blade propellers.

Power Output	AGM batteries	Lithium polymer
Effective output on propeller shaft	10-11 kW (48 V) (16 hp)	13 kW (54 V) (20 hp)
Battery voltage nominal	48 V	50 V
Battery current @ full load	300 A	320 A
Minimal battery capacity	100 Ah	80 Ah
Static thrust with standard propeller	1120 N 824 lb	1250 N 919 lb
Static thrust with performance propeller	1230 N 907 lb	1500 N 1095 lb
Speed of test boat	14 kts*	21 kts**
Weight of engine	56 kg (124 lb.)	56 kg (124 lb.)

* A 4 m (14 ft.) aluminium boat was used as a test boat. Weight with batteries and skipper approx. 400 kg 885 lb.)

** A 4 metre RIB was used as a test boat with 50V 160 Ah lithium power battery.

You can choose between two different motor versions – remote controlled- or tiller steering.

The setup for remote steering is ready for the use with all standard outboard remote controls with type C2 cables for throttle and gear (f.e. Yamaha). For steering, most common cable steering systems can be used like ABYC P17 standard.

The setup for tiller handle steering is ready to use and works the same as any common petrol out boarder engine.

Open powerhead showing motor and controller



Security switch, tiller and built in control panel



▶ Standard accessories

- ✦ Motor with cables and plug-in connection (Anderson SB 175)
- ✦ Key ignition switch*
- ✦ LCD display* for r.p.m. , battery state, voltage, current, engine hours
- ✦ “man over board” cut-off switch*
- ✦ Zinc anode for saltwater usage
- ✦ 3 blade aluminium propeller 9,25 x 8 (inch)
- ✦ Synthetic Blend Gear Lubricant Oil 1 litre (not for export)
 - ✦ Sierra Hi (80W90)
 - ✦ Caltex Delo Synthetic Gear Lub Oil 75/80W-90
 - ✦ NUCON Gearbox Oil 75W/90 100% synthetic

DO NOT USE OTHER THAN SYNTHETIK OIL – change after first 10 hrs of operation !

* with the remote controlled outboard engine, these parts are separately supplied including a 10 metre (33 ft.) cable for the installation to the cockpit.

- ✦ Installation does not require an electrician license in Australia (50 Volts DC), but we recommend that installations are only done by experienced specialists. Always disconnect power prior to any work!

▶ Optional accessories

- ✦ Steering link rod
- ✦ Variety of special fit propellers
- ✦ Remote control
- ✦ Cables (32.5 mm² / 50 mm²), battery boxes & battery terminals
- ✦ Chargers (12/48 V) & fuses (350 A/160 V DC)
- ✦ Battery packs (48/50 or 4 x 12 V – 300 A/1C) / switch / fuse

Battery packs (examples only)



▶ Running time with various AGM battery capacities

Power <i>The display shows approx 20% more Ah use due to the overall loss on the whole driving system</i>	Battery 12 V 2 x 4 x 245Ah AGM 576 kg (23.5 kw)	Battery 12 V 2 x 4 x 200Ah AGM 472 Kg (19.2 kw)	Battery 12 V 4 x 105Ah AGM 120 Kg (5 kw)
100 % - 12 KW/250 Ah	55 min	45 min	15 min
75 % - 7500 W/150 Ah	1 h : 36 min	1 h : 14 min	22 min
50 % - 5000W/100 Ah	3 h : 30 min	2 h : 03 min	40 min
25 % - 2500 W/50 Ah	7 h : 45 min	6h	1 h : 25 min

▶ Running time with Lithium Iron Phosphate battery

Power <i>The display shows approx 20% more Ah use due to the overall loss on the whole driving system</i>	Battery 50 V 8 x 40 ah 160 kg (16 kw)	Battery 50 V 4 x 40 ah 80 kg (8 kw)	Battery 50 V 2x 40 ah 40 kg (4 kw)
100 % - 12 KW/250 Ah	1 h	30 min	15 min
75 % - 7500 W/160 Ah	1 h : 20 min	40 min	20 min
50 % - 5000W/100 Ah	2 h : 40 min	1 h : 20 min	40 min
25 % - 2500 W/50 Ah	5 h : 20 min	2 h : 40 min	1 h : 20 min

Example: 12 m catamaran/5 tons/5-6 knots = 2000 Wh = 9 hours on 20 kw battery
 12 m catamaran/5 tons/8-9 knots = 6500 Wh = 3 hours on 20 kw battery

Tested at 26 Celsius with 48 V / 50 V nominal voltage

Actual batteries tested and recommended are be published on the website

aquawatt in Australia (Oceania & Asia)

www.aquawatt.com.au

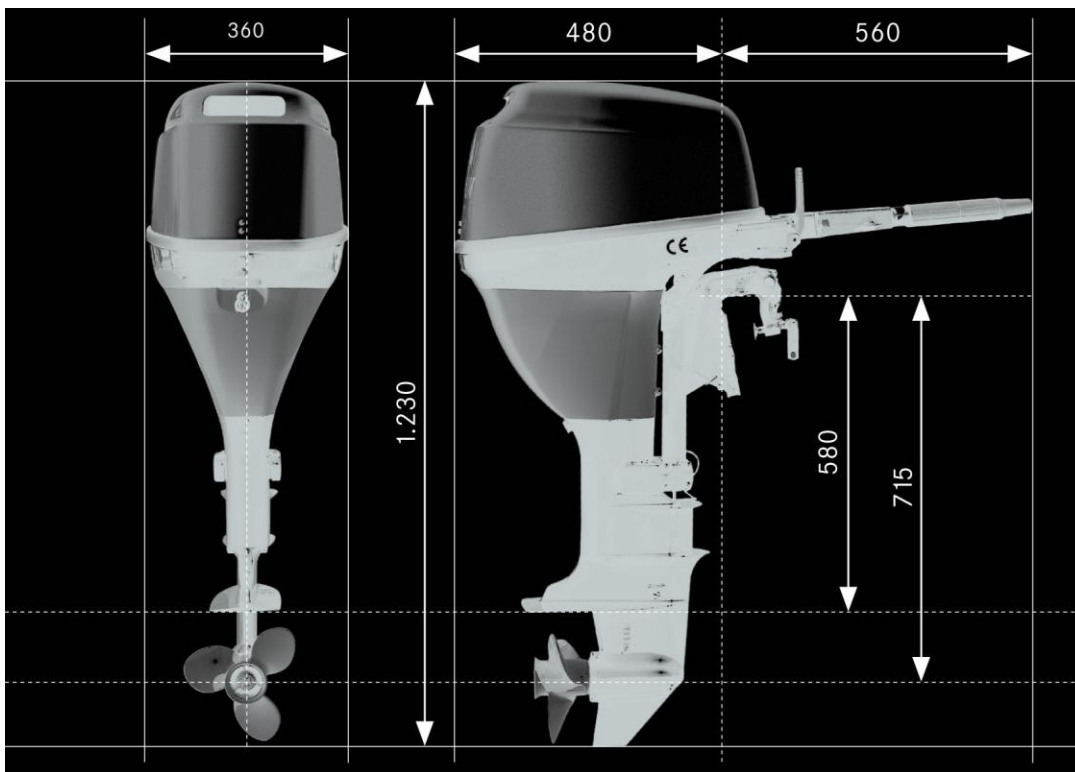
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All information subject to change without prior notice. Type of batteries and accessories can vary based on setup & requirements.

Version 1.8 | January 2011 | copyright by aquawatt / all4solar ™

► Dimensions



Weight: 56-58 kg (motor only) Transom height: 20 inches / 530 - 560 mm

► **For installation, operation and warranties see detailed user manual**

► **For prices and full list of accessories, see product list**

high speed with two motors...



cruising with no noise...



pure elegance...

