



all metal construction  
air cooled motor  
IP 54 (dust and splash water)



[www.all4solar.com.au](http://www.all4solar.com.au) (V1.8)

\* Prices incl. GST subject to change without prior notice.



## 4/6/12/16 HP electric inboard direct drive

100 % emission free and powerful electric **direct drive** inboard motor for **maintenance free** operation. Advanced technology complies with the highest requirements to quality, reliability, speed and thrust. Invest in the most sustainable propulsion system for your boat. This engine comes „plug and play“ with a programmable digital controller, digital power display, lever, engine mounts and shaft coupling. If no thrust bearing installed, the prop shaft can be directly connected to the engine shaft (25mm) with a rigid coupling or universal joints (please mention with order). Standard supplied with flexible coupling.

2,3,6 or 8 KW nominal power output! With 60-150 NM torque and low revs these engines are powerful propulsion systems which can be used with propellers from 10 to 15 inch. Powered by a **brushless DC low rev motor**. All engines are assembled ready to run in Australia.

	2 KW 48 V 4 HP 700 rpm	3 KW 48 V or 72 V option 6 HP 750 rpm	6 KW 72 V 12 HP 1000 rpm	8 KW 72 V 16 HP 1250 rpm
Complete Inboard Motor Kit	\$ 3290.00 incl. GST \$ 2990.90 excl. GST	\$ 3608.00 incl. GST \$ 3280.00 excl. GST	\$ 5280.00 incl. GST \$ 4800.00 excl. GST	\$ 5995.00 Incl. GST \$ 5450.00 excl. GST
Options:	Battery 4 x 12 V or 16 cell lithium Solar 48 volts Battery charger	Battery 6 x 12 V or 22 cell lithium Solar 72 volts Battery charger	Full variable power regeneration \$ 300.00	For props from 10 to 15' Universal joint available

Inclusions and options (all wired, setup ready to go)	2 / 3 / 6 / 8 KW
Joystick lever and digital display (Volts, Watts, Battery capacity, Current)	Included
Weight (including controller unit)	25/28/42/45 kg
Main fuse (ANL fuse block and fuse)	included
Key switch, security switch, display (battery voltage)	Included
Engine mounts rubber 8 mm female (4 x)	Included
Flexible shaft coupling (16-35 mm / 25 mm standard)	Included
Battery voltage (DC) lead acid / lithium	48/48/72/72 V
Max. current	50/75/90/120 A
Rotation per minute at output shaft max.	750/850/1000/1250
Torque	60 /80/120/150 NM
Power regeneration (full variable 0 - 100% with dial)	Option
Power output nominal	2/3/6/8 KW
Battery main switch	included
AGM lead acid batteries	Option
Lithium iron phosphate batteries (LiFePo4 )	Option
Grid battery charger 240 VAC - DC	Option
Solar system & battery charge controller	Option

## all4 solar electric inboard direct drive runtime

Runtime based on good quality AGM batteries at 20-30 C temperature and with only the motor connected to the battery pack. AGM batteries only allow a discharge upto 60% of their capacity in 2 hours which is reflected in the calculation. With the voltage drop of AGM batteries, the power output of the motor can drop depending on the state of discharge, also the efficiency varies with the speed. This is reflected in the calculation below.

The runtime can be extended, if the batteries are charged f.e. with solar panels while the motor is running.

LifePo4 batteries (lithium) will offer around 3 times the output / runtime with the same weight as AGM batteries. Lithium batteries increase the output of the motors by upto 10% due to the higher voltage on discharge compared to AGM batteries.

The information provided is an indication only and can vary for each setup.

Power AGM	<b>2 KW 48 V (2.1 KW input)</b>	<b>3 KW 48 V (3.15 KW input)</b>	<b>6 KW 72 V (6.3 KW input)</b>	<b>8 KW 72 V (8.4 KW input)</b>
4 x 12 volt 100 Ah battery pack	40% throttle 3.4 hours 80% throttle 1.7 hours	40% throttle 2.25 hours 80% throttle 1.12 hours		
6 x 12 volt 200 Ah battery pack			40% throttle 3.4 hours 80% throttle 1.7 hours	40% throttle 2.6 hours 80% throttle 1.3 hours