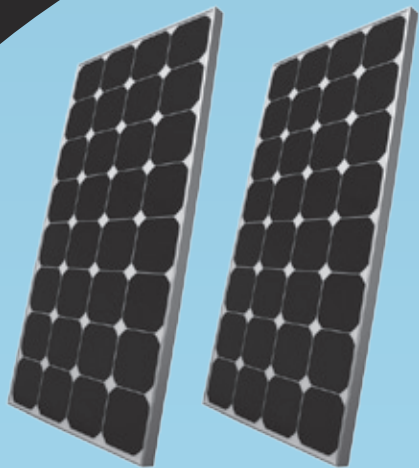




WATERBOY

SOLAR PANELS



The Waterboy-Series of PV modules offer a conversion efficiency of 17-20% due to the unique back-contact technology.

Our monocrystalline silicon solar cells yield a higher voltage per cell, therefore 32 cells are sufficient to provide the same voltage as traditional 36-cell modules.

As a result, BWSolar modules are lighter and smaller. In combination with an extremely low voltage-temperature coefficient, this guarantees a superior battery charging performance, even at high operating temperatures.

Exceptional low-light performance and broad spectral response further enhance energy delivery in all weather conditions, year round.

Warranty

- ◆ Warranty: 2 years
- ◆ Performance guarantee:
 - 10 years (90% power output)
 - 20 years (80% power output)

Details according to warranty issued by BW Solar

WB - 90SP

High Efficiency PV Module

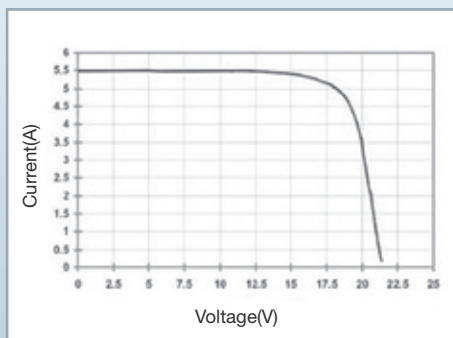
Features

- ◆ Photovoltaic modules made with unique SunPower cells.
- ◆ Cells with high conversion efficiency of up to 20%.
- ◆ Due to the high efficiency, the modules are smaller in size than modules made with conventional cells.
- ◆ Modules are made with high quality materials which lead to the high reliability of the module.
- ◆ Designed to charge 12 to 48 volt batteries for off grid remote power systems.
- ◆ Manufactured in ISO9001 certified factory.

Applications

- ◆ Water pumping
- ◆ On and off-grid home solar systems
- ◆ Street and camp lights
- ◆ Traffic signals
- ◆ Medical facilities in remote areas
- ◆ Microwave/radio repeater stations
- ◆ Battery charging
- ◆ Remote location lighting
- ◆ Water purification systems

IV Curve

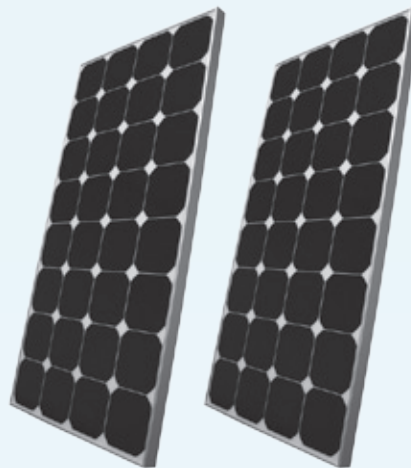


Note: All electrical parameters are rated at standard test conditions (irradiance of 1000W/m², AM 1.5, cell temperature 77°F/25°C)



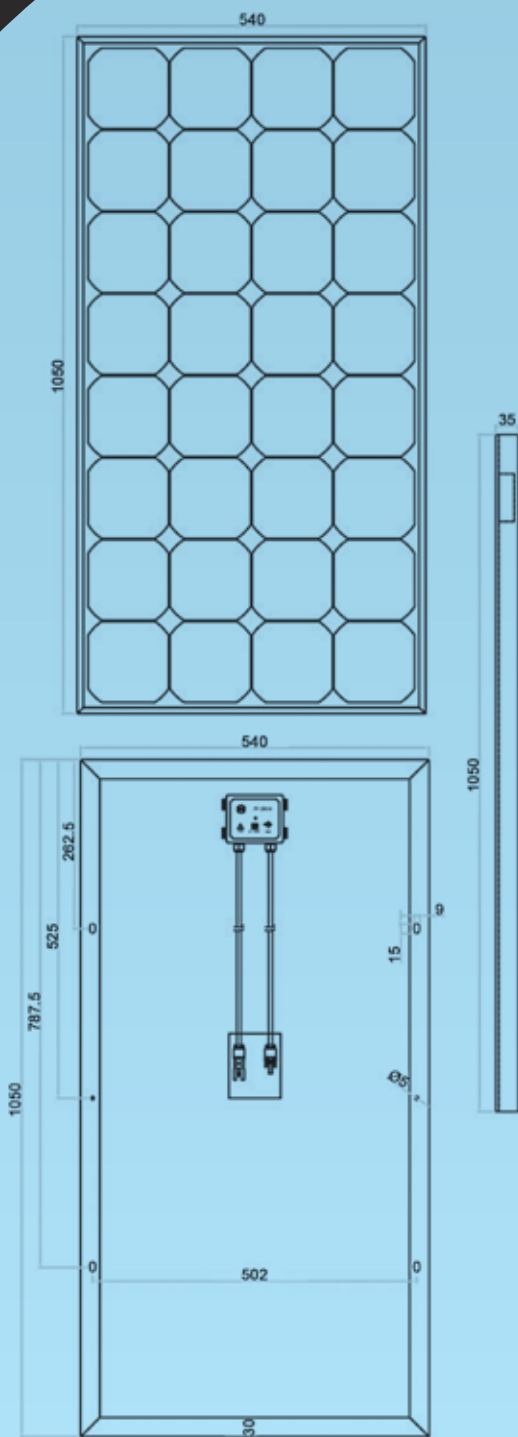
WATERBOY

SOLAR PANELS



WB - 90SP

High Efficiency PV Module



Electrical Characteristics

Max Power	PMax	90W
Max Power Voltage	Vmp	17.6V
Max Power Current	Imp	5.12A
Open Circuit Voltage	Voc	21.4V
Short Circuit Current	Isc	5.50A
Maximum System Voltage		750V
Series Fuse Rating		15A

Temperature Coefficients

- Power	-0.38%/°C
- Voltage	-60.8mV/°C
- Current	2.2mA/°C

Cell Efficiency	19.7%
Number of Cells in Series	32
Max Power Tolerance	±5%

Mechanical Characteristics

Weight	7.6kg
Dimension	1050*540*35
Frame	>10um clear anodized