



Grid Connect

# Solar Energizer

## Everything you need to plug into the sun

The Solar Energizer is an all-in-one solar electricity kit, designed and pre-engineered for homes and small commercial buildings which are connected to the electricity grid. The systems are modular, flexible, easy to install and include everything needed to silently convert sunlight into clean, green electricity for use in your home or business. Solar Energizer kits are designed to comply with all relevant Australian standards and come in three sizes, so it is easy to find a solar electricity system to suit your lifestyle.

### How it works

A Solar Energizer allow residents to plug into the sun and convert sunlight into standard household electricity. Our systems utilise the latest high efficiency solar module technologies to collect the sunlight and specialised electronic devices to convert and control the flow of electricity.

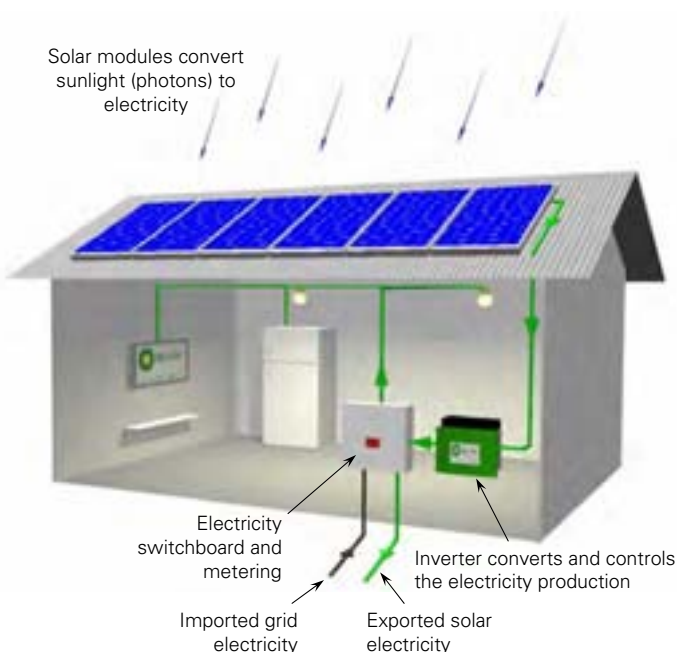
When your Solar Energizer generates more power than your household uses, any excess electricity flows into the grid effectively spinning your electric meter backwards and building a credit against your bill.

The Solar Energizer system now includes a compact wireless display (SolarSight) so you can view and monitor your solar systems performance from the comfort of your living room - or indeed any room!

### How it benefits you

#### Environmental benefits

Solar electricity is the clean, silent energy alternative, helping the environment by preventing greenhouse gases from entering the atmosphere. Installing a Solar Energizer system is also a perfect way to meet rising building energy efficiency standards.



#### Financial benefits

A solar electricity system is a sound financial investment which can significantly reduce electricity bills while also future proofing your home against inevitable electricity price increases by providing a fixed generation cost. Installing a Solar Energizer system will add value to your home or business and is a very attractive asset for prospective buyers.

#### Support for the future

The BP Solar modules used in the Solar Energizer kits are designed to withstand the harshest of weather conditions, including hail, and have an expected working life in excess of 25 years. You can rest easy in the knowledge that the solar modules in your Solar Energizer system are backed by a 25-year power output warranty and are made in Australia.

BP Solar is proud to have more than 25 years experience manufacturing and supplying solar systems in Australia. We can give you the peace of mind you need when investing in solar.



# Grid Connect Solar Energizer

All-in-one grid connect solutions to suit your home

## A flexible design

The Solar Energizer has been designed to suit a wide variety of needs and situations. It is available in a range of sizes, from 1,000 watts up to 5,000 watts, and is expandable as your demand and budget grows.

The innovative mounting system allows the system to be fitted to corrugated metal or tile roofs and to a variety of roof shapes, quickly and simply.

## Everything you need

The Solar Energizer kit includes the following:

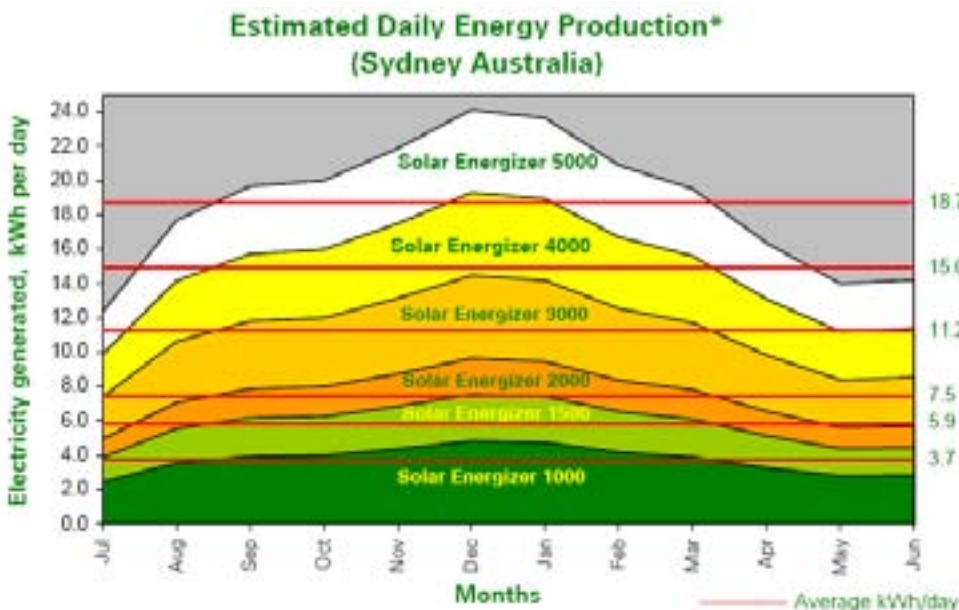
- Complete accessory kit, saving you time and money and ensuring safety and code compliance, including warning labels, DC isolators and quick connect plugs and sockets.
- A range of power sizes to match your electricity demand and budget.
- High quality, certified aluminium mounting structure, which is fast and easy to install to corrugated metal or tile roofs. Optional cyclone rated fixings kits are also available.
- Efficient and fully approved grid connect inverter.
- A wireless display (SolarSight), to view your solar systems performance from inside your home.
- Detailed manuals, including an easy to read owner's manual and a technical manual for installers.



## How much electricity will I generate?

The peak generation of power is on a cool, clear day when the sun is perpendicular to the solar array. Clouds, seasonal changes in the angle of the sun, array soiling, roof orientation, and any incidental shading may impact on the performance.

The graph below can be used as a guide to typical power generation by the various kits sizes, at different times of the year. It allows you to match a system to your electricity demand.



For example, a typical energy efficient home is defined as consuming 7.5kWh per day, and would require a smaller system to cover some or all the energy consumed.

A typical conventional home consumes 18kWh per day and would require a larger system to cover some or all the energy consumed.

For a more detailed prediction, please contact your local BP Solar Dealer by calling 1800 802 762.

\*Calculations based on meteorological data from Sydney Australia at a typical roof angle of 27 degrees, facing due North under average annual solar conditions. Calculation does not include compensation for mounting angle, orientation, dirt build-up, electrical losses or temperature, which may affect total output.

## Solar Energizer system sizes

### Solar Energizer 1000

Nominal solar power output <sup>(1)</sup>	990W
Solar module type and quantity	BP3165N x 6
Expandability (maximum)	1320W (8 modules)

### Solar Energizer 1000E

Nominal solar power output <sup>(1)</sup>	990W
Solar module type and quantity	BP3165N x 6
Expandability (maximum)	1980W (12 modules)

### Solar Energizer 1500

Nominal solar power output <sup>(1)</sup>	1550W
Solar module type and quantity	BP3155N x 10
Expandability (maximum)	1860W (12 modules)

### Solar Energizer 2000

Nominal solar power output <sup>(1)</sup>	1980W
Solar module type and quantity	BP3165N x 12
No expandability	

### Solar Energizer 3000

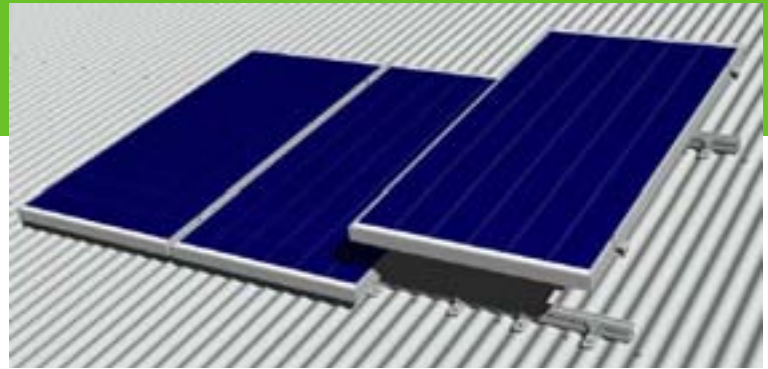
Nominal solar power output <sup>(1)</sup>	2970W
Solar module type and quantity	BP3165N x 18
No expandability	

### Solar Energizer 4000

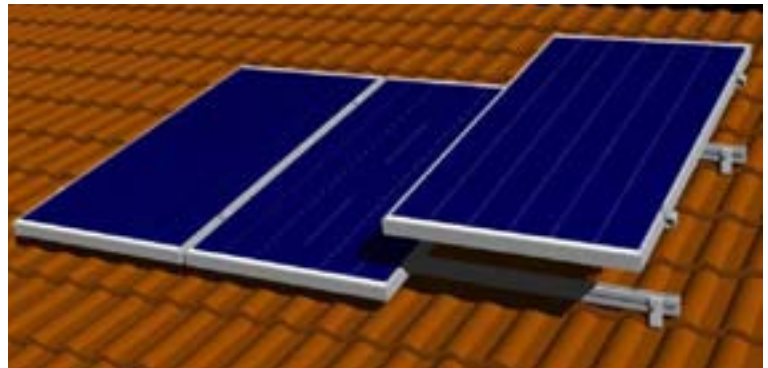
Nominal solar power output <sup>(1)</sup>	3960W
Solar module type and quantity	BP3165N x 24
Expandability (maximum)	4455W (27 modules)

### Solar Energizer 5000

Nominal solar power output <sup>(1)</sup>	4950W
Solar module type and quantity	BP3165N x 30
Expandability (maximum)	6600W (40 modules)



Corrugated metal roof mounting system.

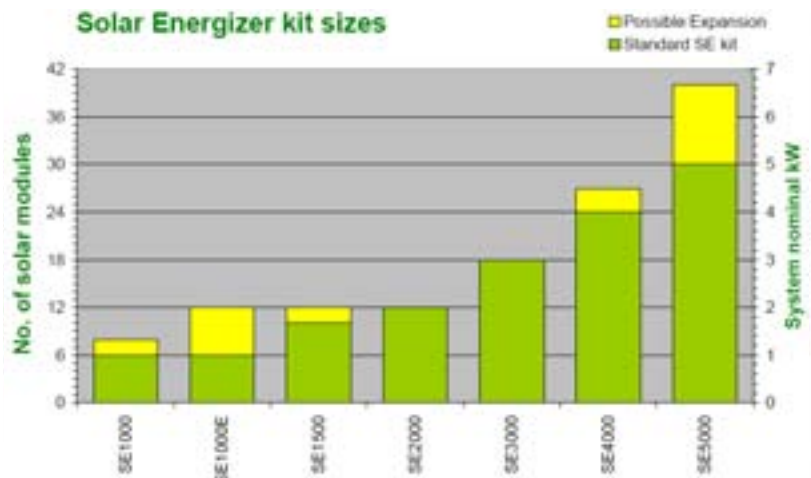


Tile roof mounting system.

## Sales and Service network

Via our extensive Distributor and Sales and Service network that spans Australia and New Zealand, we can supply you with individual products or complete, professionally designed solar electricity systems.

With up to a 25 year power output warranty on our solar modules, we can give you the peace of mind to invest in solar today.



Note:

The graph above indicates the number of solar modules and nominal system size in kilowatts (kW) for the standard Solar Energizer kits. It also indicates the additional number of modules that can be added to the standard Solar Energizer kit.

<sup>(1)</sup>Nominal solar power output is specified as the total nominal DC solar panel output, under standard test conditions, in accordance with IEC61215 (Illumination of 1kW/m<sup>2</sup>, AM density 1.5 and cell temperature of 25°C).



# Grid Connect Solar Energizer

## Solar Energizer mechanical characteristics

### Solar Energizer 1000

Quantity of rail kits	2 x 3 module units
Approximate area/weight on roof	7.8m <sup>2</sup> /150kg
Inverter model	SB1100

### Solar Energizer 1000E

Quantity of rail kits	2 x 3 module units
Approximate area/weight on roof	7.8m <sup>2</sup> /150kg
Inverter model	SB1700

### Solar Energizer 1500

Quantity of rail kits	2 x 3 and 1 x 4 module units
Approximate area/weight on roof	13.0m <sup>2</sup> /250kg
Inverter model	SB1700

### Solar Energizer 2000

Quantity of rail kits	4 x 3 module units
Approximate area/weight on roof	15.6m <sup>2</sup> /300kg
Inverter model	SB1700

### Solar Energizer 3000

Quantity of rail kits	6 x 3 module units
Approximate area/weight on roof	23.4m <sup>2</sup> /450kg
Inverter model	SB2500

### Solar Energizer 4000

Quantity of rail kits	6 x 4 module units
Approximate area/weight on roof	31.2m <sup>2</sup> /600kg
Inverter model	SB3800

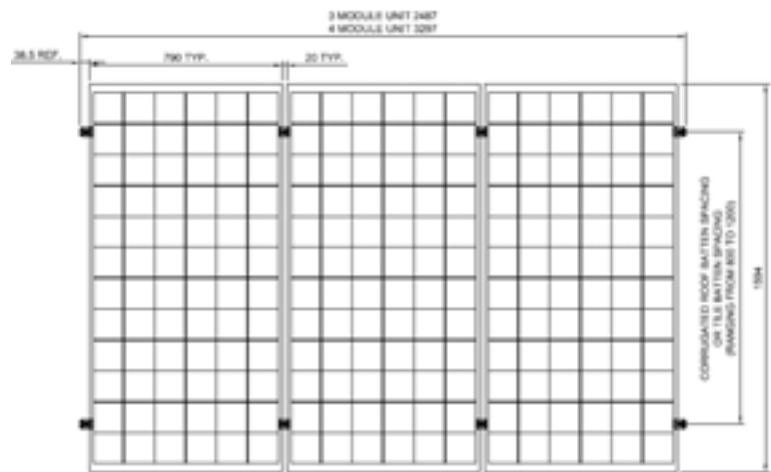
### Solar Energizer 5000

Quantity of rail kits	2 x 3 and 6 x 4 module units
Approximate area/weight on roof	39.0m <sup>2</sup> /750kg
Inverter model	SMC6000



### Other

Inverter output voltage (nominal)	240V AC, 50Hz
Operating temperature	-25°C to 70°C
Minimum distance to any roof edge	900mm
Mounting angle design range	10° to 45°
Maximum wind speed regions <sup>(2)</sup>	
corrugated metal tile	Region C (cyclonic) <sup>(3)</sup> Region B (intermediate)
Solar module warranty	25 year power (see warranty sheet for terms and conditions)
Inverter warranty	10 years (see warranty inverter manual for terms and conditions)



The solar panels attach to mounting rail kits in groups of three or four panels. Note: all dimensions are in mm.

<sup>(2)</sup> Regions based on AS1170. Conditions apply in relation to the effects of terrain categories and topographic multipliers. These can affect suitability for fixing with in the various regions. Each site must be assessed prior to any installation to confirm suitability.  
<sup>(3)</sup> Additional brackets are required for mounting to corrugated metal roofs in Region C (Cyclonic) Terrain Category.

Disclaimer: BP Solar has a policy of continuing product improvement and enhancement. BP Solar therefore reserves the right to change these specifications at any time and without notice and should not be used as the definitive source of information for the final system design.

Additional warranty and technical information may be found on our website or obtained from your local BP Solar Dealer or by calling 1800 802 762 in Australia.