# SOLAR ELECTRICITY

## Your Own Mini Power Station

## Electricity free from the sun

### Install a solar PV system and save money whilst also doing your bit for the environment

### Your Own Mini Power Station

Solar electric panels generate electricity using the photovoltaic (PV) effect. The solar panels are fitted to your roof and convert light into electricity.

In effect, your home becomes a mini power station generating electricity and supplying it to the grid for use by you or your neighbours. How much you can sell to the grid will depend on the size of your system, your consumption and whether it is connected via net or gross metering.

### Net Metering

When you use electricity you are using solar generated power and/or power from the grid if the solar energy is insufficient. If you are using little or no electricity, your solar system is feeding electricity back into the grid and the electricity retailer buys that power from you, at the applicable feed-in tariff. This tariff varies from state to state and can be much higher than the supply rate.

### Gross Metering

In some states, for example New South Wales and ACT, all the solar generated power is fed directly back to the grid and the electricity retailer buys that power from you at the applicable feed-in tariff.

### The Benefits of Solar Electricity

- Clean and free electricity from the sun
- No greenhouse gas emissions
- Reduced or eliminated electricity bills
- Protection against rising electricity costs
- Silent operation with no moving parts
- Easy, quick installation by licensed, accredited electricians
- Increased value of your home or business
- Additional solar panels can be added later
- Long warranties, long life
- Reduced pay-back periods due to generous government incentives

### Installation

Chromagen designers and installers are accredited by the Clean Energy Council which means:

- They have undergone the necessary professional training
- They follow industry best practice
- They must adhere to Australian Standards
- They routinely update their skills and product knowledge

In addition, Chromagen installers are licensed electricians.

### Warranty

All Chromagen solar electric systems come with the following warranties:
Solar modules – 25 year limited warranty
Grid-connect inverter – 5 year warranty
Roof mount framing – 10 year warranty
Installation on site – 1 year warranty

### Energy Efficiency

Customers are also encouraged to employ energy efficiency initiatives to optimise their savings and benefits.

### Your local Dealer / Distributor is:

CHROMAGEN Est. 1962
solar & energy solutions

1300 367 565
chromagen.com.au

# System Specifications

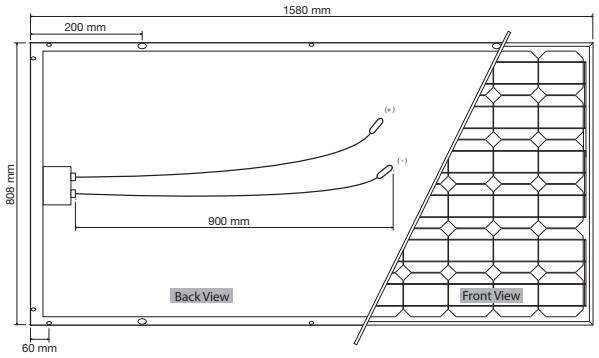
| Electrical Characteristics | | | | |
|---|---|---|---|---|
| Maximum Power | $P_{max}$ | 190W | 195W | 200W |
| Open Circuit Voltage | $V_{oc}$ | 44.8V | 45.0V | 45.6V |
| Short Circuit Current | $I_{sc}$ | 5.78A | 5.85A | 5.66A |
| Maximum Power Voltage | $V_{mp}$ | 35.8V | 36.0V | 37.26V |
| Maximum Power Current | $I_{mp}$ | 5.33A | 5.42A | 5.37A |
| Module Efficiency (%) | | 14.9 | 15.3 | 15.67 |
| Tolerance | | +/-3% | | +/-5% |

Electrical characteristics at Standard Test Conditions (STC), defined as: Irradiance of 1000W/m$^2$, Spectrum AM 1.5, and cell temperature of 25$^o$C.

| Mechanical Specifications | |
|---|---|
| Dimensions | 1580mm x 808mm x 45mm |
| Weight | 15.5 kg |
| Frame | Aluminium-alloy |

## Standards

All inverters are compliant with AS 4777, AS 3100 and have a Certificate of Suitability
All PV modules are compliant with IEC 61730 (class A) and IEC 61215.
All installations of photovoltaic (PV) arrays are compliant with AS/NZS 5033 and AS/NZS 3000 (The Australian Wiring Rules)




| System Characteristics | | | | | | |
|---|---|---|---|---|---|---|
| System size | 1.14 - 1.20 kW | 1.52 - 1.60 kW | 2.28 - 2.40 kW | 3.04 - 3.20 kW | 4.56 - 4.80 kW | 5.13 - 5.40 kW |
| Roof space required | 8m$^2$ | 11m$^2$ | 16m$^2$ | 21m$^2$ | 32m$^2$ | 36m$^2$ |
| 190W number of panels | 6 (1140W) | 8 (1520W) | 12 (2280W) | 16 (3040W) | 24 (4560W) | 27 (5130W) |
| 195W number of panels | 6 (1170W) | 8 (1560W) | 12 (2340W) | 16 (3120W) | 24 (4680W) | 27 (5265W) |
| 200W number of panels | 6 (1200W) | 8 (1600W) | 12 (2400W) | 16 (3200W) | 24 (4800W) | 27 (5400W) |
| Zone 1-3 (kWh per Day)[1] | 4.29 - 5.5 | 5.93 - 7.6 | 9.0 - 11.5 | 11.86 - 15.2 | 17.8 - 22.8 | 19.5 - 25.0 |
| Zone 4 (kWh per Day)[1] | 4.0 | 5.5 | 8.28 | 10.9 | 16.4 | 18.0 |

[1] Output based on optimal installation direction averaged on an annual basis. Performance varies by location. CEC Solar PV Consumer Guide Vol 5 System specifications may change without notice.

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