



Dear Customer,

Congratulations on your decision to install a Solar Photovoltaic (PV) system. By making this choice you are reducing greenhouse emissions by reducing your reliance on conventional fossil fuel power generation. Over the lifetime of the system, considerable amounts of CO2 emissions will be saved as well as significant savings on your power bill. Your Solar PV system is comprised of high quality components to ensure many years of safe, reliable power production at your home.

Installation Steps:

1. Our installer will have explained to you how your installation was to take place and will have carried that out to the required Australian Standards and Clean Energy Council guidelines.
2. They will also have tested and commissioned the system operation and will have taken you through the basic operation of the PV Solar System and answered any queries you may have regarding that.

Next Steps:

1. In order to have your new meter installed by your distributor (Energex – Brisbane Metro or Ergon Energy- Regional) 3 Key documents need to be in place;
 - Network Connection Agreement – you will have received this from your Distributor, it should have been signed and returned to your distributor.
 - Business to Business Agreement between your Electricity Retailer and your Distributor – If you have concerns about this document please contact your Electricity Retailer.
 - Electrical Work Request – will be submitted to your Distributor by your installer immediately upon the completion of your solar installation.
2. The timeframe from Solar Installation completion by our technicians and having your meter installed by your Distributor does vary and can not be influenced by us, please refer to your Distributor's website for current waiting times.
3. Your new PV Solar Power System will have been wired to the existing meter set up and unless advised by your installer, will be left on.

As your feedback is important to us we may contact you in the near future to understand more about your experience of our service. Should you not want to be contacted by Jasmin Solar in the future, please advise our installer.

Please take your time to read the following information. Should you have further questions not answered in this folder and / or wish to discuss any aspect of the installation please contact us on 1300 591 415.

Yours faithfully,

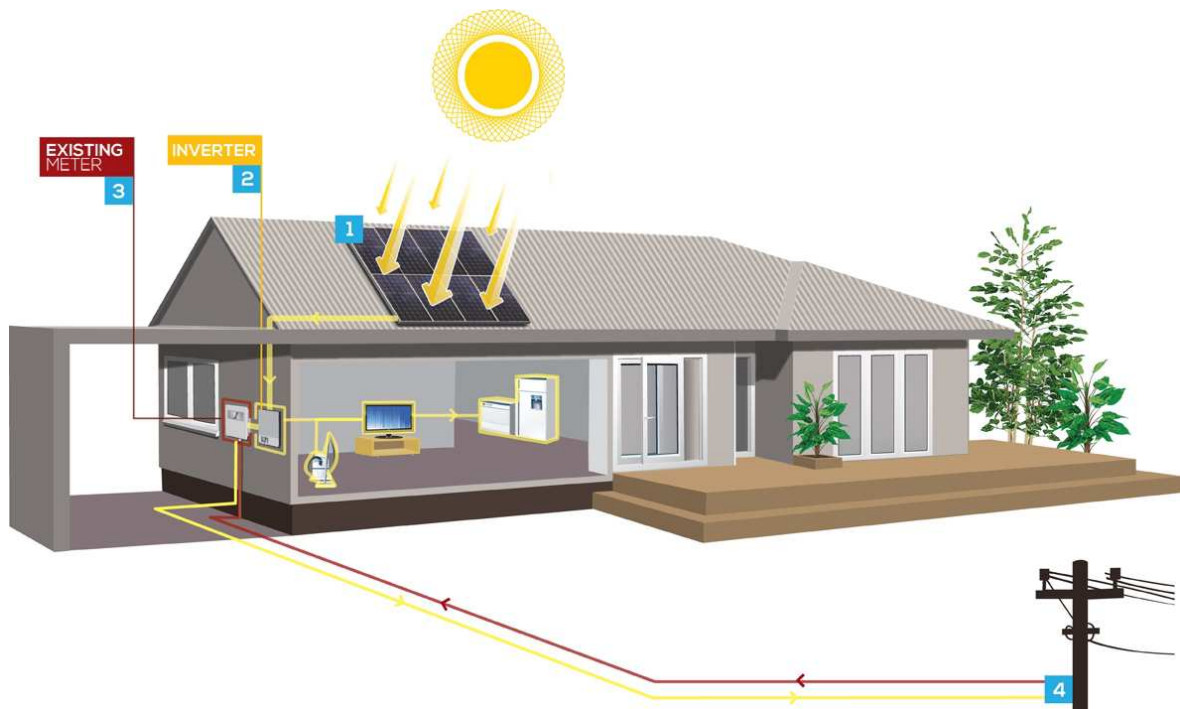
Jasmin Solar Pty Ltd



System Description

Your Solar PV system is designed to automatically convert sunlight to electricity. Your solar modules are connected in series, creating voltages of up to 500v DC (depending on the configuration and sunlight intensity), which is converted to 230v AC by your inverter. This electricity is then fed into your household switchboard/meter. The converted power will then flow to the household loads and appliances. If more power is produced than what is consumed in the house, the excess power will flow back into the grid. If more power is required than what the Solar PV system can produce, the balance is made up from the grid.

The Solar system generates electricity in proportion to the amount of sunlight on the solar modules and the module temperature. There is no generation at night. The peak power generation is on a clear cool day when the sun is at a perpendicular angle to the solar modules. Clouds, seasonal variation of solar angle, array soiling, non-optimum orientation and any incidental shading decreases that performance.

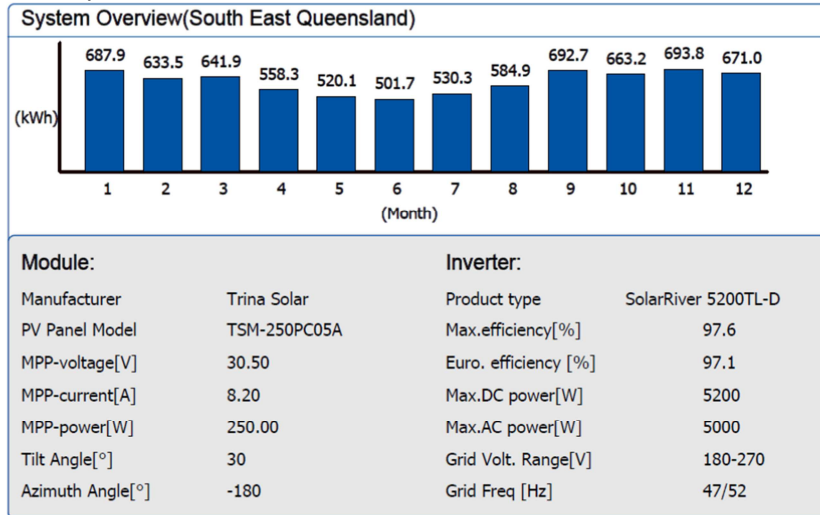


Please note that the inverter includes safety protection devices, which will isolate your solar system, should the grid voltage or frequency fall outside a specific range. This feature protects the inverter from grid spike or surges and also protects the grid line workers who may periodically need to carry out maintenance work on nearby power lines.



Performance Estimate

Typical 5Kw Solar PV system



Installation, Product & Warranty Information

All products supplied meet the necessary Australian standards and are approved by the Clean Energy Council (CEC).

Photovoltaic Modules (Solar Panels)

- 10 year product warranty
- 25 year performance guarantee
- Inverter
- 5 – 10 year product warranty (Please check invoice)

Roof Mounting System

- 10 year product warranty

Installation

- 1 year warranty

Further information on product specification and warranty (in addition to the applicable terms and conditions and installation conditions), can be found in the rear of the folder.

Inverter (make and model): Location:

Panels (make and model): Location:

Universal Roof Mounting System:

Commissioning date:

Warranty Claims

In the unlikely event that you need to make a warranty claim please contact Jasmin Solar Pty Ltd. Alternatively contact the manufacturer as per the information provided.



System operation

Start-up Procedure

Steps to Start inverter are as following:

Step 1: Turn on DC switch(s) adjacent inverter

Step 2: Turn on AC Isolator adjacent inverter

Step 3: Turn on Solar Supply Main switch and/or AC isolator adjacent inverter

Shut Down Procedure

In case of emergency or maintenance

Shutting the system down is the reverse of the Start-up procedure

Step 1: Turn off Solar Supply Main switch in switchboard and/or AC isolator adjacent inverter

Step 2: Turn off AC Isolator adjacent switchboard

Step 3: Turn off DC Isolator adjacent inverter

Verifying Correct System Operation

To check that the system is functioning correctly, attend the inverter at midday and check if the green LED is illuminated and display is working. If there is a problem, an error message will be shown on the display and the red LED illuminated. Further information can be found in section 9 of the supplied Samil user manual. The display will also show current power output and array voltages. If any value is zero there may be a problem. Please restart the inverter by following the shut-down and start-up procedure. If this fails to resolve the problem please contact Jasmin Solar.

Earth fault alarm

In the event of an earth fault alarm, the red LED will be illuminated and a message displaying Earth Fault will be shown on the display. Shut down the PV system as per the shut-down procedure and contact Jasmin Solar.

System Failure

If the system appears to be not functioning, i.e blank screen and no LED lights. This may occur in areas of volatile grid supply. Please verify that all isolators are in the on position. If the screen remains blank, switch all isolators off by following the shut-down procedure. Leave inverter in the off position for 5 minutes then re-energise by following the start-up procedure. If the inverter is still not functioning please leave the system shutdown and contact Jasmin Solar.



On Going Maintenance

Australian Standard AS/NZS 5033:2012 recommends your PV Solar power system be maintained on an annual basis. Solar systems are low maintenance, partly due to the lack of moving parts. Regular periodic inspection will help ensure your system continues to operate safely and performs efficiently. You should also consult your inverter manual for any additional requirements.

Installation of a roof mounted PV system may also require additional maintenance for the roof and / or measures for access to conduct maintenance tasks. Please refer to your roofing manufacturers guidelines.

Energy production may lose 4-8% output from dirty panels if cleaning is not carried out. Flushing down with a water hose or cleaning with a sponge and soapy water may become necessary if bird droppings etc build up on the module. Detergents should not be used. Once clean, a visual inspection of the modules for defects such as cracks, chips or discolouration should occur. The array frame should be inspected for rust, corrosion and rigidity and the log book completed after every inspection.

WARNING: Do not attempt to clean or come in contact with the surface of a solar module with broken glass. This could result in a dangerous electric shock. Solar modules remain live during daylight hours, even when the DC isolator is open.

CAUTION: Appropriate precautions must be taken when working at heights. Do not attempt to access the roof unless the precautions to prevent falling from heights are in place. Jasmin Solar Pty Ltd recommends that only a CEC Accredited Electrician who has been trained to work at heights conduct any roof top maintenance. Pressure washers must not be used.

Periodic Maintenance considerations should include:

(As per AS/NZ5033:2012)

- Safety warnings and manufacture's recommendations
- Cleaning of the PV array might be periodically required in locations where it is likely to collect dust, shading materials or salt build up.
- Periodic inspections should be carried out to check wiring integrity, electrical connections, corrosion and mechanical protection of wiring.
- Verify open circuit voltage and short circuit current values
- Verify functioning of earth fault protection
- Measure I-V characteristics
- Check PV array mounting structures
- Test operation of switches regularly
- Check for module defects (Fracture, moisture, penetration, browning, etc)

IMPORTANT NOTES.

- Warranty claims will be void if unauthorised persons open or modify components



Solar PV System Quality Assurance and Compliance Checklist

-
- 1 Orientation Facing E NE N NW W
- 2 Tilt (>10 & <30)
- 3 Installation complies with CEC design criteria & applicable standards
- 4 Array supports & frames are installed to manufacturer's instructions
- 5 Roof penetrations are suitably sealed & weatherproofed
- 6 Weatherproof isolator mounted adjacent to the array
- 7 Electrical standards (AS3000 & AS3008) compliant
- 8 PV Array Installation standard (AS5033) compliant
- 9 Inverter installed in accordance with manufacturer's Instructions
- 10 DC isolator mounted close to input of inverter
- 11 Isolator mounted on the output of inverter
- 12 Lockable AC circuit breaker mounted within switchboard as main switch
- 13 Electrical standards (AS3000 & AS 3008) compliant
- 14 Grid Connect installation standard (AS4777.1) compliant
- 15 All required 'signage' positioned as required and engraved accordingly
- 16 Confirmation of adequacy of earthing
- 17 Confirmation of adequacy of protective bonding
- 18 Confirmation of isolator and wiring polarity
- 19 Confirmation of satisfactory voltage levels at array
- 20 Confirmation of continuity of conductors
- 21 Confirmation of Inverter anti-islanding operation
- 22 Earth Loop Impedance satisfactory

Signed by Installer to confirm the system complies with all applicable standards and guidelines.

Installation Address.....

Installer Name & CEC Accreditation Number...../.....

Installer signature and date...../.....