Solar System Owner's Manual



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Introduction

Congratulations on your decision to install a Solar Photovoltaic (PV) System with P&N Rogers Electrical Contractors Pty Ltd. Your choice will help reduce greenhouse emissions from conventional fossil fuel generation as well as provide signi cant savings on your future power bills. We thank you for being a conscientious citizen of the planet.

Please take your time to read and understand the provided Owner Manual. The manual will provide you with important information regarding safety, operation and maintenance of your system.

We strongly advise keeping this manual and any additional documents provided in a safe place for future reference.

strongly

Contact Information

2.1 Installation Company

Company Name P&N Rogers Electrical Contractors

2.2 Accredited Installer

Name James Fawbert. Jack Stone. Nicholas Hunter

Precautions and Warnings

Your solar power system is designed for automatic operations with no need for user interaction. It is safe when installed and operating correctly. However, given the D.C. and A.C. voltages present in the system, signi cant inherent danger still remain.

Please read and understand all safety instructions, warnings and cautions before using the system.

3.1 Warning Symbols

The following symbols will appear in this manual. They are used to indicate potentially hazardous situations where necessary precautions should be taken.





General Safety Warning: Failure to follow recommended procedure could Electrical Safety Warning: Failure to follow recommended procedure could result in injury

3.2 Important Safety Information

- Do not attempt to service your solar system unless you are a licensed electrician and your work is carried out in accordance with local and national electrical codes and standards.
- Any low voltage (LV) work must be undertaken by a suitably licensed electrical worker or contractor. LV is speci ed in the Australian Standards as any voltage equal to or higher than 50V AC or 120V DC.
 Do not touch any electric components, e.g. wires, connection terminals junction boxes or plug connectors.
- Do not open any components of your solar system unless adequately licensed to do so.
- We strongly advise against climbing onto the roof to clean or inspect solar panel modules. This should only done
- by professionals with appropriate training and safety equipment.
 Observe all safety signage and warnings associated with the system. Ensure these signs remain in place and
 visible.
 - Familiarize yourself with the Shutdown Procedures and Earth Fault Alarm event actions. This involves understanding the relevant components and signage for these emergencies.
- In case of re, shut down the system if safe to do so. Circuit breakers must remain o until the re is extinguished.
- Note that a small, non-lethal electrical charge may exist at the base frame or module frames even when the system has been shut down. Inform all necessary roof workers before commencement of works.

•

Emergency Procedures

In the event that a system fault occurs or the system is required to be shut down for maintenance, the following procedures provide immediate actions to be taken.

WARNING:

Procedures must be followed in the steps listed. Arcing and potential re may occur if steps are not followed sequentially.

4.1 Earth Fault Alarm

Under normal operating conditions, the DC circuitry of the PV system is insulated from the earth. A system fault that short circuits the DC circuitry of the PV system and earth will activate the Earth Fault Alarm.

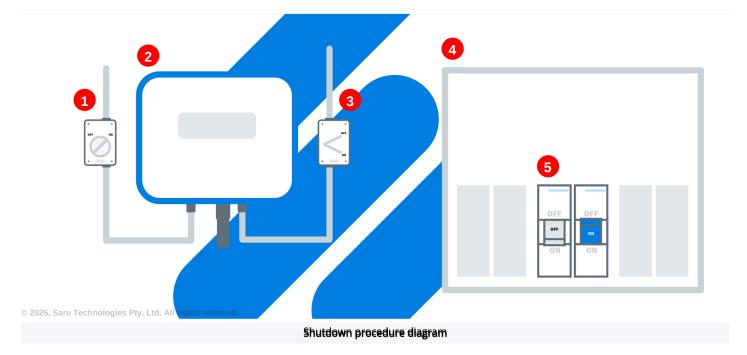
The Earth Fault Alarm is broadcasted in some or all of the following ways (depending on your inverter):

- Red LED illuminated on the inverter
- A message displaying "Earth Fault" on the inverter display
- An audible alarm tone from the inverter
- External email alert

Respond immediately with the following course of action:

- 1. Follow the shut down procedure as described in Section 4.2 Shutdown Procedures of this Owner's Manual.
- 2. Limit access to all parts of the PV system.
- 3. Call P&N Rogers Electrical Contractors Pty Ltd on 0246470800 / 0433896768.
- 4. Do not re-start the PV system until advised by a quali ed CEC installer or P&N Rogers Electrical Contractors Pty Ltd technician.

4.2 Shutdown Procedure



| Number | Description | |
|-----------|------------------------------|--|
| 1 2 3 4 5 | PV DC Isolator | |
| | Inverter | |
| _ | Inverter AC Isolator | |
| | Switchboard or Meter box | |
| | Main Switch (Solar Inverter) | |

Follow these steps in order to completely shut down the solar PV system and isolate the solar array:

- 1. Locate the Main Switch (Solar Inverter) in switch board or meter box. Turn switch OFF.
- 2. Locate the Inverter A.C. Isolator adjacent to the inverter (where installed). Turn switch OFF.
- 3. Locate the PV Array D.C. Isolator which may be adjacent to or within the inverter. Turn switch FPFF.

MARNING:

Electrical current may still be present in the system even when the system has been shut down. The system should continue to be treated as live.

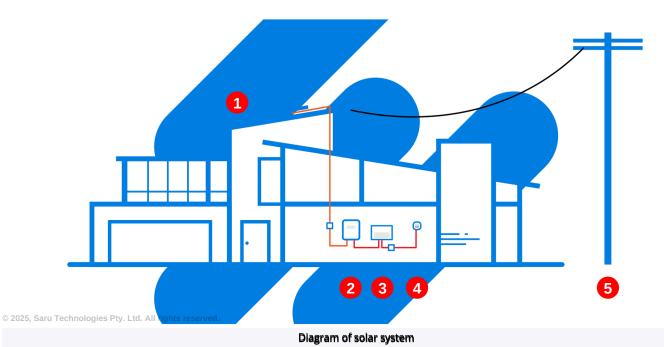
MARNING:

Do not attempt to turn o a solar power system if any of the components of the system are water or storm damaged. Contact your electrician or installer.

System Description

Your installed system is a grid-connected solar photovoltaic (PV) power system. Solar irradiation will be converted to electricity which is either used on your property and/or exported to the electrical grid.

The following illustration provides an overview of the di erent parts involved. Refer to Section 5.3. for further information on your component speci cations and function.



NumberDescription1 2 3 4 5Solar Panel ArrayInverterInverterSwitch BoardMeterInverterInverter

| Address | |
|-----------------|--|
| Site contact | |
| Email | |
| Contact number | |
| Energy retailer | |
| DNSP | |

5.2 PV System Summary

| Турге | Grid-connected |
|-----------------------------|----------------|
| NV box imum System Output | 6.6 kW |
| Estimated Annual Production | 10614 kWh |
| Panel Module Rating | 440W |
| ihverter reating | 5000W, |

5.3 Components

5.3.1 Solar PV Modules

Solar PV modules, also known as solar panels, convert solar irradiation (photons) into direct current (DC) electricity. The modules are securely mounted to your roof (see Section 5.4) to maximise exposure to sunlight and production of electricity. The wiring con guration for the modules (see Section 5.4.) is designed to meet the required voltages for your inverter.

| Brand | Jinko Solar Tiger Neo |
|--------------|---------------------------|
| Model | JKM440N-54HL4R-B |
| Power rating | 440W 22.02% 99% for |
| Efficiency | the rst 1 year(s) |
| Degradation | -0.4% per year to year 30 |

Detailed speci cations of your solar PV modules can be viewed in Appendix A.

5.3.2 Inverter

The inverter functions to convert direct current (D.C.) electricity from the PV modules to alternating current (A.C.) electricity which is compatible with the electricity supplied to your house from the grid. This is the form of electricity used by your common household appliances.

The A.C. electricity from the inverter is fed into the main switchboard, which in turn is connected to the grid. The inverter manages the electricity generated by the PV modules, utilizing it in the household for demand and exporting to the grid with excess supply.

| Brand | Solis | |
|------------------------|-----------------------------|--|
| Model | S6-GR1P5K-S (AS4777-2 2020) | |
| AC output power rating | 5000W | |
| Efficiency | 97.7% | |

Detailed speci cations of your inverter can be viewed in <u>Appendix A.</u> Refer to the supplied User Manual (<u>Appendix B1</u>) for operating information.

5.3.3 Isolators

Isolators, or switch disconnectors, are manual switching devices used to disconnect (isolate) a certain part of the circuit in your solar PV system. It is important to note that operating an isolator does not completely de-energise the entire system.

AC Isolators

The PV Array A.C. Isolator disconnects the inverter from the A.C. switchboard and subsequently the grid. The AC isolator is installed adjacent to the inverter and should be disconnected rst before the DC isolator during shut-down.

| Model | Clipsal |
|------------------|---------|
| AC rated voltage | 400 V |
| AC rated current | 40 A |

DC Isolators

The PV Array D.C. Isolators disconnects the solar array and stops the supply of electricity from the PV modules to the rest the system. Unless speci ed otherwise, there will be two DC isolator switches connected for each solar array. One installed adjacent to the inverter and the other close to the solar array. This will allow for access to disconnect the solar array from both the ground and roof levels.

| Model | Inverter Integrated |
|------------------|---------------------|
| DC rated voltage | 1000 V |
| DC rated current | 32 A |

5.3.4 Cabling

Specialised cables are used to connect the PV modules to the inverter and then the switchboard. These cables are appropriately marked as solar cables and are insulated or installed in conduit. They will remain safe when well maintained and without mechanical damage. PV system cables should be treated as live even when the system has been shut down appropriately.

| Brand | Electra |
|----------------------|------------|
| Model | Solar Twin |
| Current Rating (A) | 40 |
| Voltage Rating (V) | 1500 |
| Eable Diameter (mm²) | 4 |

5.3.5 Electricity Meter

The electricity meter is the device that measures the amount of electric energy consumed by your household. It is used by your electricity retailer for billing purposes. If you have an old electro-mechanical meter (spinning disk meter), your electricity provider will replace this with a bidirectional meter to be able to record electricity both imported and exported. Electrical distributors require that the solar system remain disconnected until the correct metering is installed and tested.

Electricity exported to the grid will be credited to your bill at your arranged feed-in tari. Please note that you must contact your electricity retailer to arrange a feed-in tari contract.

5.4 System Con guration

5.4.1 Solis S6-GR1P5K-S (AS4777-2 2020)

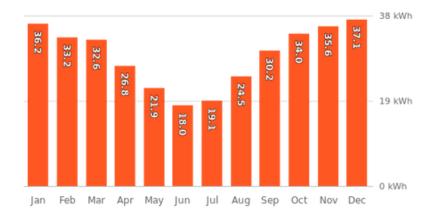


System Performance

During daylight hours, your system will generate electricity from the sunlight. The amount of electricity produced will depend on the characteristics of your system and variable factors such as cloud cover, seasonal solar angle variation and shading on your solar array.

6.1 Production Estimates

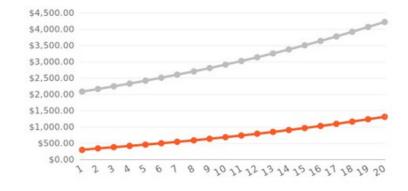
Weather data at your location has been used to simulate your system's production. The following estimates provide a basis for what you can expect from your system in an average year as a daily average per month.



Monthly Production estimate

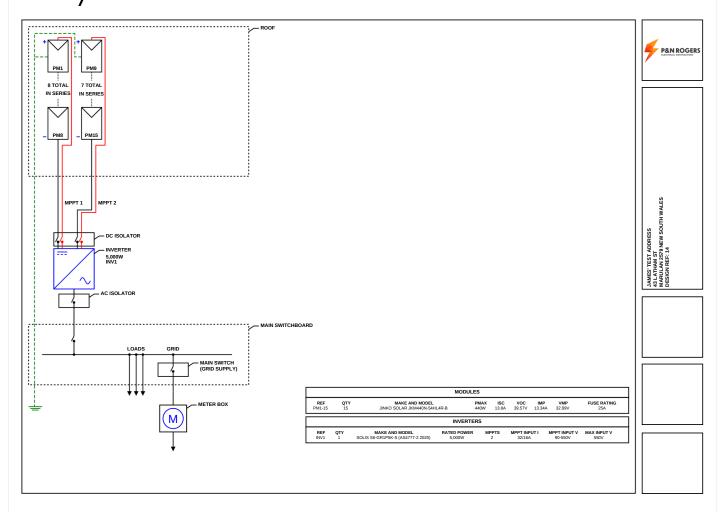
6.2 Estimated Savings

The electricity produced by your system and consumed will o set the electricity otherwise imported from the grid. This will reduce your electricity bill. Excess electricity from solar will be exported to the grid and provide credits to your bill. Based on your electricity bill and solar system, the following graphs provide a breakdown of your expected savings.



Annual Electricity Bill

Connection Diagram





Equipment Supplied

8.1 Bill of materials

| Item | Component type | Brand | Model | Quantity |
|------|----------------|-------------|-----------------------------|----------|
| 1 2 | Solar panel | Jinko Solar | Tiger Neo JKM440N-54HL4R-B | 15 |
| 3 | Inverter | Solis | S6-GR1P5K-S (AS4777-2 2020) | 1 |
| | Cable | Electra | Solar Twin | |



Maintenance Information

Solar PV systems are designed to operate with minimal maintenance. However, performing regular maintenance and inspection of will help ensure optimal performance and minimise downtime due to component failure. All maintenance and repair work should be conducted by either your system's installer or another CEC accredited installer.

All works on your system should be recorded in the maintenance log (Section 9.3.1.).

⚠ IMPORTANT:

Do not attempt to service the system unless you are fully qualified to do so. Servicing any electrical connection be done by a licensed electrician.

9.1 Recommended Maintenance Schedule

Australian Standards recommend that your PV solar system should be professional serviced on an annual basis. The following schedule provides a summary of the required actions during maintenance and its recommended frequency. Further maintenance may be advisable according to the component manufacturer's documentation.

| Maintenance action | Recommended frequency | Action |
|---|-----------------------|--|
| Solar PV Modules | | |
| Check for debris around/under PV modules | Quarterly | Clean debris from site Trim trees, if required |
| Check trees for shading | Quarterly | Clean panels – use water at mains pressure. |
| Check cleanliness of PV modules | Quarterly | Further inspection of modules with visual |
| Visually check PV modules. Defects include: | Annually | defects for performance and safety issues. Replace modules if required. |
| a. Fractures | | |
| b. Browning c. Moisture | | |
| penetration d. Frame | | |
| corrosion | | |
| Inverter | | |
| Under daylight conditions, check inverter is operating correctly – Green LED | Weekly | Contact quali ed technician where red LED error |
| For internet connected inverters | Quarterly | Update contact details. Contact quali ed technician in case of fault. |
| a. check system operation, data logging and communication on manufacturer's web portal. | | technician in case of fault. |
| Ensure contact details are up to date for inverter fault noti cations to be delivered. | | |
| Check that the inverter's ventilation lters and fans are clean | Annually | Clean inverter air intake path. |
| Wiring installation Wiring installation | | |
| Verify mechanical integrity of conduits | 5 years | Replace damaged conduits |
| Verify insulation of cables installed without conduit | 5 years | Replace damaged cables |
| Test operation of switches | Annually | Replace faulty switches |
| Check all electrical connections for tightness and corrosion | • | |
| Check junction boxes: | Annually | Reinstall or replace connections |
| | Annually | Replace defective seals and clamps |
| a. Tightness of connections | | |
| b. Integrity of seals | | |
| c. Integrity of cable entrances | | |
| d. Integrity of clamping devices | | |
| | | |

| Maintenance action | Recommended frequency | Action |
|---|-----------------------|--|
| Where tted; verify surge arresters for degradation | Annually | Replace defective surge arresters |
| Electrical characteristics Electrical characteristics | | |
| Measure and record open circuit voltages | Annually | Record measurement |
| Measure and record short circuit currents | Annually | Record measurement |
| Protective devices Protective devices | | |
| Where tted, verify integrity of fuse and fuse holders Verify operation of all AC and DC circuit | Annually | |
| breakers and RCDs Verify operation of solar array isolation devices | Annually | |
| Verify the function of earth fault protection | Annually | |
| Mounting system | Annually | |
| Verify tightness and integrity of bolts and ያለመደግ ያለተያ መቀነር ያለ ያለመደግ ያለ ነው። የተመደመ | | |
| Check for corrosion Other | Annually | Replace defective bolts. Tighten clamps as required. |
| Check labelling is correct and visible | Annually | Replace components as required. |
| Other | | |
| | Annually | Rectify as required |
| | | |

MARNING:

Do not touch or come in contact with a solar module if it is found to be broken or has cracked glass.

Contact may result in a fatal electrical shock.

⚠ IMPORTANT:

We recommend using professional services when working at heights.

Personnel must be trained and hold current working at heights certi cation to conduct maintenance activities on roofs.

9.2 Information for Maintenance Staff

The following information serves as a reminder and should not be taken as substitute for professional training. Workplace health and safety regulations and PV installation codes and regulations precede information provided in this manual and should be adhered in all cases.

DDSCCANNERROPFLIABBLITYY:

Despite the instructions and recommends provided in this manual, the actual use and maintenance of the PV system is beyond the control of P&N Rogers Electrical Contractors Pty Ltd.

9.2.1 Safety Information

A risk assessment of possible hazards should be completed prior to the start of any maintenance work. All necessary precautions should be taken to eliminate or reduce risks involved.

Electricity to the property should be turned o and isolated at the main switchboard. Steps should also be taken to prevent the electricity to be turned on whilst work is in progress; consider use of a safety tag and lockout.

Working at heights

Working at heights is works in any place where a persons could be injured from a fall. Consideration for the surface pitch should be taken when assessing risks.

- All workers conduct activities at height must have the appropriate working at heights training and quali cation.
- Personal protective equipment (PPE) for working at heights should be worn.
- Minimise risks of a fall from heights by having fall prevention controls in place (e.g. edge protection or harness).
- Ladders must extend above the exit landing by at least 1.0 metre and should be set at the correct angle with secure footing. Ladder should only be used for access and not to work o.



Wear head protection Wear foot protection Wear protective gloves Wear high visibility clothing Wear a safety harness

Working in Ceiling Spaces

Roof cavities or ceiling spaces pose major risks due to their environmental conditions and the presence of electrical works.

- Complete a pre-work risks assessment of the roof cavity by inspecting the ceiling space to identify hazards such as
 excessive heat, lack of ventilation, dangerous vermin, sharp objects of asbestos-containing materials
 Wear appropriate safety equipment
 - P1 or P2 face masks that meet Australian Standards AS/NZS 1716
 Appropriate gloves and footwear
 - Long sleeved, loose- tting clothes
- Make sure not to come in contact with, or damage, any electrical cables or equipment

Electrical Risks

Grid-connected solar PV systems are electrical systems that produce potentially deadly voltages and are connected to mains power.

- We strongly recommend the use of opaque material to cover the solar PV modules prior to maintenance work being conducted.
- DC voltages can kill or cause serious injury. Even when the system is completely isolated and all the circuit breakers are switched o there could still be DC voltages present across the solar modules.

9.2.2 Controlling Risks

The following table guide to controlling high-risks hazards associated with servicing solar PV systems. Consideration for each hazard and control measures should be taken before work commences.

| Hazard | Risks | Control Measures |
|--|--|--|
| Working at heights | Falling from ladder Falling from rooftop Falling through ceiling Falling objects injuring persons below | Engineer: Install sca olding around roof top with stair access Engineer: Skylights/brittle roofs to be barricaded or suitable protective overlay provided Substitute: Do not access in inclement weather conditions PPE: Use fall restraint techniques POE: All tools and accessories to be securely tethered to |
| Working in ceiling spaces | Contact with energised conductors Exposure to poor air quality and harmful substances Exposure to extreme heat Contact with vermin, snakes, spiders and insects | Eliminate: Conduct necessary checks without entering ceiling spaces Isolate: Turn o all electricity to the property at the main switchboard. Take steps to prevent electricity from being turned back on whilst work is in progress PPE: Wear appropriate, tted and well maintained personal protective equipment when working in spaces con ned spaces with poor air quality, including: • Respirator • Head covering and goggles • Long-sleeved, loose- tting clothing and gloves |
| Working with and installing electrical equipment | Contact with energised conductors Accidental short circuit | Eliminate: Conduct necessary checks without entering ceiling spaces Isolate: Turn o all electricity to the property at the main switchboard. Take steps to prevent electricity from being turned back on whilst work is in progress PPE: Wear appropriate, tted and well maintained personal protective equipment when working in spaces con ned spaces with poor air quality, including: Respirator Head covering and goggles Long-sleeved, loose- tting clothing and gloves |
| Working outdoors | • Exposure to sun | Eliminate: Schedule works outdoor before 10am and after 3pm Substitute: Rotating tasks that involve direct sun exposure PPE: Wear SPF 30+ clothing and sunscreen |

This document is intended to be a guide for safe cleaning Solar PV Modules and should be used in conjunction with internal Operational Health and Safety (OH&S) and Safe Work Method Statement (SWMS).

| Equipment Required | Roo ng harness Soft bristle brush Lambswool applicator Window squeegee Sponge Hose |
|---------------------|--|
| Electrical shutdown | Follow the shutdown procedure in <u>Section 4.2</u> |
| Procedure | Focus on cleaning a small area at a time. The roof may become slippery when wet. Where possible, dry the solar pv module with a window squeegee once it has been cleaned to remove all residual dirt. |

MARNING:

Solar panels are fragile and can be broken during cleaning. Please do not engage in any of the following activities whilst cleaning your system.

Things to avoid:

- Do **not** use chemicals, detergents or bleaches as cleaning agents.
- Do **not** use mechanical cleaning equipment such as scrappers, blades or steel wool.
- Do **not** aim high pressure water directly towards a panel.
- Do **not** stand on modules during cleaning.
- Do not wash AC and DC switchgear.

9.4 Maintenance Logs

9.4.1 Maintenance Lifetime Log

All maintenance procedures conducted on the system should be recorded in the following log book. Modi cations to the system should also be recorded accordingly.

| Date/time | Company | Name of technician | Action taken and comments |
|----------------|---------|--------------------|---|
| | | | |
| = | | | |
| | | | |
| | | | |
| = | | | |
| | | | |
| | | | |
| = | | | |
| = | | | |
| | | | |
| | | | |
| 9.4.2 Maintena | | | |
| | | | ns to conduct general maintenance. Additional systems designs and components. |
| | · | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for debris around/under PV modules | | |
| Check trees for shading | | |
| Visually check PV modules for defects | | |
| Check trees for shading | | |
| Verify bypass diodes | | |
| Inverters | | |
| Check inverter operating correctly | | |
| Check inverter's ventilation lters and fans are clean | | |
| Wiring installation Wiring installation | | |
| Verify mechanical integrity of conduits | | |
| Verifying insulation of cables installed without conduit | | |
| Test operation of switches | | |
| Check all electrical connections for tightness and corrosion | | |
| Check integrity of junction boxes and connections | | |
| Verify blocking diodes Verify surge arrestors for degradation | | |
| Verify surge arrestors for degradation | | |
| Electrical characteristics Electrical characteristics | | |
| Measure and record open circuit voltages | V | |
| Measure and record short circuit currents | A | |
| Protective devices Protective devices | , · | |
| Verify integrity of fuse and fuse holders | | |
| Verify operation of AC and DC circuit breakers and RCDs | | |
| Verify operation of solar array isolation devices | | |
| Verify the function of earth fault protection | | |
| _Mounting system | | |
| Mounting system Verify tightness and integrity of bolts and other fastening devices | | |
| CEC Accredited Technician: | | |
| SES Accredited Jeshnician: | | |
| SAA Accreditation Number: | | |
| Bate tested: | | |
| Signature: | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for corrosion | | |
| Other | | |
| Check required labelling is correct and visible | | |
| EEE Accredited Technician: | | |
| SAA Accreditation Number: | | |
| Bate tested: | | |
| Signature: | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for debris around/under PV modules | | |
| Check trees for shading | | |
| Visually check PV modules for defects | | |
| Check trees for shading | | |
| Verify bypass diodes | | |
| Inverters | | |
| Check inverter operating correctly | | |
| Check inverter's ventilation lters and fans are clean | | |
| Wiring installation Wiring installation | | |
| Verify mechanical integrity of conduits | | |
| Verifying insulation of cables installed without conduit | | |
| Test operation of switches | | |
| Check all electrical connections for tightness and corrosion | | |
| Check integrity of junction boxes and connections | | |
| Verify blocking diodes Verify surge arrestors for degradation | | |
| Verify surge arrestors for degradation | | |
| Electrical characteristics Electrical characteristics | | |
| Measure and record open circuit voltages | V | |
| -Measure and record short circuit currents | A | |
| Protective devices Protective devices | | |
| Verify integrity of fuse and fuse holders | | |
| Verify operation of AC and DC circuit breakers and RCDs | | |
| Verify operation of solar array isolation devices | | |
| Verify the function of earth fault protection | | |
| Mounting system | | |
| Mounting system Verify tightness and integrity of bolts and other fastening devices | | |
| CEC Accredited Technician: | | |
| SES Accredited Jeshnician: | | |
| SAA Accreditation Number: | | |
| Bete tested: | | |
| Signature: | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for corrosion | | |
| Other | | |
| Check required labelling is correct and visible | | |
| EEE Accredited Technician: | | |
| SAA Accreditation Number: | | |
| Bate tested: | | |
| Signature: | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for debris around/under PV modules | | |
| Check trees for shading | | |
| Visually check PV modules for defects | | |
| Check trees for shading | | |
| Verify bypass diodes | | |
| Inverters | | |
| Check inverter operating correctly | | |
| Check inverter's ventilation lters and fans are clean | | |
| Wiring installation Wiring installation | | |
| Verify mechanical integrity of conduits | | |
| Verifying insulation of cables installed without conduit | | |
| Test operation of switches | | |
| Check all electrical connections for tightness and corrosion | | |
| Check integrity of junction boxes and connections | | |
| Verify blocking diodes Verify surge arrestors for degradation | | |
| Verify surge arrestors for degradation | | |
| Electrical characteristics Electrical characteristics | | |
| Measure and record open circuit voltages | V | |
| -Measure and record short circuit currents | Α | |
| Protective devices Protective devices | | |
| Verify integrity of fuse and fuse holders | | |
| _Verify operation of AC and DC circuit breakers and RCDs | | |
| Verify operation of solar array isolation devices | | |
| Verify the function of earth fault protection | | |
| Mounting system | | |
| Mounting system Verify tightness and integrity of bolts and other fastening devices | | |
| CEC Accredited Technician: | | |
| SEC Accredited Jeshnician: | | |
| SAA Accreditation Number: | | |
| Bigte tested: | | |
| Signature: | | |

| Maintenance Action | Check | Action taken to rectify/comments |
|---|-------|----------------------------------|
| Solar PV Modules | | |
| Check for corrosion | | |
| Other | | |
| Check required labelling is correct and visible | | |
| EEE Aceredited Technician: | | |
| SAA Accreditation Number: | | |
| Bate tested: | | |
| Signature: | | |

Appendix A – Equipment Datasheet

Appendix A1 – Solar PV Module Datasheet

() Jinko Solar ⋅ JKM440N-54HL4R-B



Appendix A2 – Inverter Datasheet

(⊌ Solis · S6-GR1P5K-S (AS4777-2 2020)



Appendix B – Equipment Manual

Appendix B1 – Inverter User Manual

② Solis · S6-GR1P5K-S (AS4777-2 2020)



Appendix C – Warranty Documentation

C1 – Solar PV Module Warranty Documentation

○ Jinko Solar · JKM440N-54HL4R-B



C2 – Inverter Warranty Documentation

(⊌ Solis · S6-GR1P5K-S (AS4777-2 2020)



Appendix F – Disclaimers

F1 – User Manual

The following user manual produced by Pylon is designed to be compliant with Australian Standards AS/NZS 5033:2014 under the Renewable Energy (Electricity) Act 2000 AG and ful I SAA Guidelines in relation to documentation. It is the responsibility of the CEC approved designer to fully complete all necessary sections to ensure compliance.

F2 – Performance Estimate

Energy Output is calculated based on historical solar irradiance at the given location. A typical meteorological year is selected using statistical methods. Factors including panel tilt, orientation (azimuth), and system e ciency are taken into account.

The system design may change based on a detailed site audit. Estimated savings are based on past electrical usage and utility rates provided by the customer. Actual system production and savings will vary based on nal system design, con guration, utility rates, applicable subsidies and your energy usage post-solar installation. Utility rates, charges and fee structures imposed by your utility are not a ected by this proposal and are subject to change in the future at the discretion of your utility. The production calculations in this report are based on historical climate data for the site location and represent typical estimates of future solar production.

F3 – Copyright

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