

Ready for solar? Or looking to change things up?

Whether you have previously installed solar or never installed solar before, this helpful guide will ensure you have all the bases covered. We have prepared a table below with helpful references for usage vs. system requirements.

These can change from property to property based on the level of desired self sufficiency or in other terms, as close to the lowest electricity bills as possible - or simply a reduction in electricity costs.

	Residents	Daily usage	Solar Size	Battery Size
Small	1 to 2	Up to 10kw	6.6kW	10kW
Medium	3 to 5	Up to 20kW	9.975kW	15 to 20kW
Large	6 to 8	Up to 30kW	15.2kW	25 to 30kW
Extra Large	8 +	40kW +	20kW +	35 to 40kW +

Solar Panels, what brands we use!

Panels circulating the market in 2026 are of great quality and reliability, we have listed these below. Due to the nature of the solar industry many panel brands revert to 'out of stock' and need to be swapped for an alternative brand. Having the right information, helps make the process smoother if your installation is affected.



One of the world's most recognised solar brands, Jinko's Tiger Neo uses advanced N-type TOPCon cell technology for high efficiency, excellent low-light performance, and an ultra-low annual degradation rate of just 0.4%. Backed by a 25-year product warranty and 30-year linear power warranty, it's a proven, reliable choice for Perth homeowners.



Risen Energy has been supplying panels to the Australian market since 2008 and is a well-established Tier 1 manufacturer. Their 475W N-type TOPCon panel delivers strong performance in Perth's sunny conditions with excellent resistance to light-induced degradation and a 25-year product warranty with 30-year performance warranty. A solid, trusted option at a competitive price point.



Ulica is a budget-friendly Tier 1 manufacturer with a long history in the Australian market. Their 475W N-type mono-facial panel offers strong efficiency and good reliability for homeowners looking to maximise system size and output at the best value. Comes with a 25-year performance warranty.

How large can I go?

While many homeowners want the largest system possible, several factors influence what can be safely and practically installed on your roof:

Roof Space & Layout: The physical size, shape, and number of usable roof faces directly limits how many panels can fit. Obstructions like skylights, whirlybirds, vents, chimneys, and satellite dishes all reduce available space. Multiple small roof sections can also make efficient layouts difficult.

Roof Orientation & Pitch: North-facing panels at the right pitch generate the most output in Perth. East/west orientations are still viable but may affect system design and inverter sizing. Roof pitch also affects panel spacing requirements for maintenance and airflow.

Structural Capacity: Older roofs or those using lighter framing may have limits on how much additional load they can safely carry. A structural assessment may be required for very large systems.

Network Connection Rules: Western Power may require a technical review or impose conditions for systems above certain sizes, which can add time and cost to the approval process.

Shading: Trees, neighbouring structures, or parts of your own roof casting shadows can significantly impact performance and influence where, and how many panels should be placed and whether optimizers should be considered.

Optimisers, why might you need them?

In Perth's mostly clear, sunny conditions a straightforward north-facing roof with no shading may not need them. But for roofs with any complexity or shading, optimisers can make a meaningful difference to your system's annual output. They also provide panel-level monitoring so any underperforming panel is easy to identify.

Inverter size, does it matter?

The inverter is the brain of your solar system, converting the DC power generated by your panels into usable AC power for your home. Choosing the right inverter size at the time of installation can save significant cost and hassle down the track.

Oversizing your panels relative to the inverter In Perth it's common and accepted practice to install more panel capacity than the inverter's rated output. For example, pairing 6.6kW of panels with a 5kW inverter. This is because panels rarely produce their maximum rated output simultaneously, and the oversizing means you harvest more energy during the shoulder hours of morning and afternoon when the sun isn't at peak intensity.

Why inverter size matters for future expansion If you start with a 5kW inverter and later want to add more panels, you may find the inverter is already at its maximum input capacity. Upgrading to a larger inverter later means additional cost and potentially new grid approval paperwork. Choosing an inverter with headroom from the start or a model designed for easy expansion, keeps your options open.

Battery readiness Not all inverters are battery-ready. If you plan to add a battery storage system in the future, it's important your inverter is either hybrid-capable (designed to manage both solar and battery) or can be paired with a battery system without a full replacement. Retrofitting a battery to an incompatible inverter often means replacing the inverter entirely, which is an unnecessary cost.

Backup circuits & blackout protection Some hybrid inverters offer the ability to run selected "backup circuits" during a blackout. This process keeps essentials like lights, the fridge, or a modem running even when the grid goes down. However, this capability depends on the inverter model selected at installation. Also worth considering the load required to run the desired circuits, and if the selected inverter is capable of covering the load. It may be necessary to size up the inverter to ensure all backup circuits desired can operate within the limits of the inverter.

Technology - what brands we align with...

The logo for SofarSolar, featuring the word "SOFAR" in a bold, blue, sans-serif font.

Established in 2013 and active in the Australian market since 2016, SofarSolar has grown into a globally recognised brand with over 37GW shipped worldwide. Their residential single-phase range delivers up to 98.4% efficiency with natural convection cooling; meaning no fans and quieter operation. Hybrid models are available for battery and backup circuit integration, making SofarSolar a solid mid-range option that balances performance, reliability, and value.

The logo for SolaX Power, featuring the word "SOLA" in a bold, black, sans-serif font, followed by "X" in a large, yellow, stylized font, and "POWER" in a smaller, black, sans-serif font below it.

Founded in 2012 and one of the earlier adopters of hybrid inverter technology in Asia, SolaX Power has been serving the Australian market since 2014. Their range covers standard string inverters through to full hybrid systems with battery storage and backup circuit capability. With over 1.4 million residential storage systems deployed globally and a strong warranty offering of up to 12 years, SolaX is a capable and feature-rich option for homeowners with an eye on future battery and EV integration.



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Are there add on's to consider?

Backup / Blackout Circuits Blackout protection is a feature that allows your solar and battery system to continue powering your home during a grid outage. Rather than losing electricity when the grid goes down, your system can keep critical appliances and circuits running for things like lighting, power points, and your fridge. When your battery has blackout protection enabled, the process is completely automatic. The moment your battery detects a grid outage, it switches into backup mode and starts supplying power to your nominated essential circuits. The transition happens quickly, typically within just a few seconds, though the exact switchover time can vary between different battery brands. It's worth noting that enabling blackout protection isn't simply a software setting, it requires dedicated electrical work to separate and rewire your essential circuits.

Blackout circuits are also customised to each home, number of phases and the load each appliance or circuit requires. This means the inverter size may need to be increased to allow for a whole house backup or partial backup, depending on the appliances and circuits of the home.

EV Prewire Planning to go electric? An EV prewire prepares your home for a future EV charger without installing one yet. While our electricians are already on-site and working on your switchboard, we run a dedicated cable and circuit to your garage or carport, this is the most labour intensive part of any EV charger installation. When you're ready to install your charger, it becomes a simple low-cost job.

EV Installation Charge your electric vehicle at home, on your own schedule. We install a dedicated EV charger in your garage or carport, wired directly to your switchboard for safe, reliable charging. Paired with your solar system, you can charge your car on free, clean energy generated right from your roof, maximising the value of your solar investment. You can either source the relevant charger yourself, or we can quote to supply one for you.

Will my switchboard require work?

Before your solar or battery system can be connected, your switchboard must meet current Australian wiring standards. This is a requirement of the installation, not optional and it's something we will assess before finalising your proposal.

A compliant solar or battery installation requires dedicated circuit breakers for the inverter, battery (if applicable), and in some cases a generation meter. If your switchboard is already full or close to capacity, there may simply not be enough physical space to add what's needed safely. If your switchboard requires an upgrade, we will include this in the proposal pricing for you.

Many Perth homes, particularly those built before the early 2000s, still have older switchboards using ceramic fuses or early-generation circuit breakers rather than modern safety switches. These boards often cannot accommodate a solar or battery installation without an upgrade.

Current regulations require safety switches on all circuits in a compliant switchboard. If yours doesn't have them, a solar installation is a trigger point for bringing the board up to standard, which is ultimately a safety benefit for your household.

In cases where an upgrade is needed, we will replace the existing board with a modern unit that meet compliance standards. This adds cost to the installation but ensures your system is connected legally and safely.

To get an accurate price, the easy way - we will need:

- Desired solar generation size
- Desired inverter size
- Desired battery size
- Daily average consumption
- Photo of your current switchboard with confirmation of phase connection
- Photo of any current solar installed
- Address of the property with contact information (phone and email)

If you would like to start the process to install a new system on your property, contact us today!

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