

22 February 2017

Why You Shouldn't Buy a Cheap Solar PV System

Written by Infinite Energy

You wouldn't walk into a dealership and immediately purchase the cheapest car, so why do some consumers choose to purchase the cheapest solar PV system available?

While it may seem like a great idea initially (who wouldn't want to save \$2,000 to \$4,000 off a major purchase), the



truth is those who purchase cheap solar systems are often stung by much higher costs in the long run, or they are left with a system that doesn't generate anywhere near as much as they expected.

To find out why purchasing the lowest priced system on the market may not be your best option, read on.

Your System's Components Will be Low-End

Cheap solar PV systems are usually cheap in components, as well as price. If the 5kW PV system you're considering is well below the market average, we encourage you to look closely at the products being offered.

Warranties

For example, at first glance Australian Premium Solar seem like a reputable panel brand, they're 100% Australian owned, have a dedicated testing facility located in Queensland, come with a 12-year product warranty and an industry leading 30-year performance warranty.

However, if you dig a little deeper you'll discover despite some ambiguous marketing, APS panels are not manufactured in Australia, their 12-year product warranty does not include labour or transport costs, [and their 30-year performance warranty is void if you do not service your panels yearly.](#)

This is not an isolated problem either, with Universal Solar Group solar panel's performance warranty [becoming void if servicing is not completed once every three months, along with an additional service every one and five years](#).

Solar Panels

If substandard plastic/glue is used in your panels, or if poor manufacturing processes are followed, a process called delamination can occur. This refers to the bond between the plastic and glass of your solar panel detaching, allowing moisture and air to enter the panel, causing corrosion and failure.

In addition, poor panels also suffer from micro cracks and other cell damage which will quickly decrease the overall efficiency of your solar cells.

Many solar panel manufacturers also fabricate [efficiency](#) and [power tolerance ratings](#) to make their products appear of a higher quality. Before purchasing seemingly impressive panels, ensure their stats have been verified by independent testing authorities such as the [PHOTON Laboratory](#) and the [CSIRO](#).

Inverters

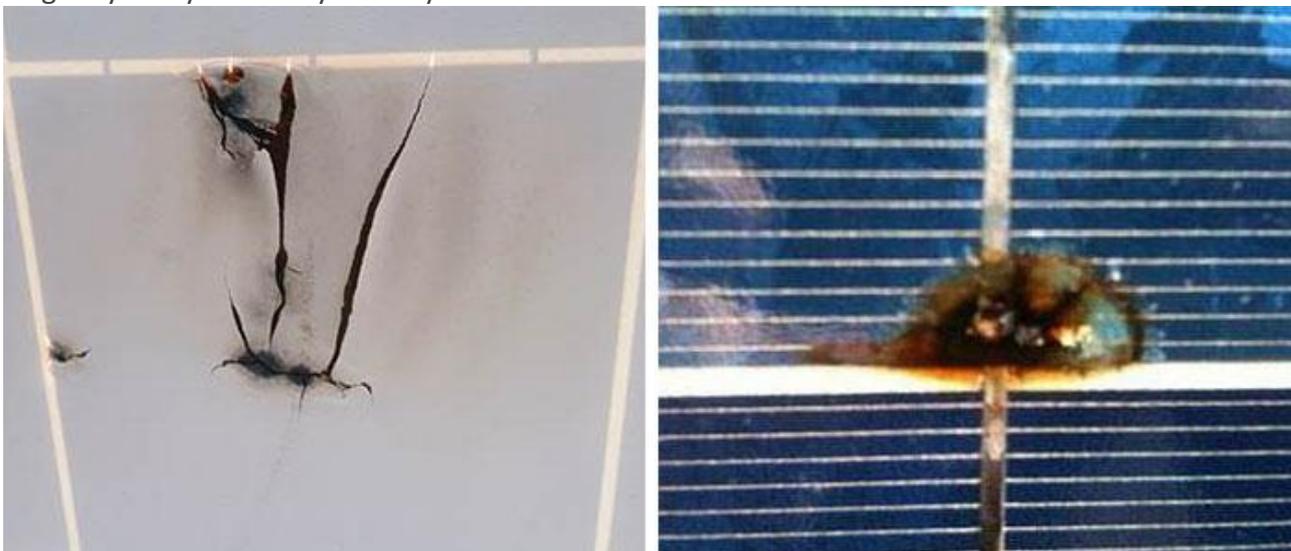
The solar inverter lies at the heart of your system. This sophisticated piece of electrical equipment is responsible for the conversion of DC electricity to AC electricity; controlling the voltage of the system to extract the maximum power available; and reporting on the solar system's performance.

As a result, inverters are where the most faults in a solar PV system occur. Cheaper inverters usually fail after just five years, putting your whole investment at risk, with replacements costing thousands of dollars.

Balance of System

Cheaper PV systems also cut corners by using non-genuine, plastic Balance of System components. This includes MC4 compatible imitations rather than genuine [Multi-Contact M4 Connectors](#), and plastic housed DC rooftop isolators, which not only fail much quicker but can also [pose fire risks](#) given the heat and intense UV we experience in Australia. Infinite Energy only stock aluminium enclosed DC rooftop isolators which are supplied by NHP and made in Finland.

While higher quality BOS components may result in your system being more expensive, they guarantee you longevity and your family's safety.



Delaminating panels

Purchasing the Cheapest System May Impact Your Returns

In addition to reducing carbon emissions, most homeowners purchase a solar PV system to save on their electricity bills. [Because payback periods for solar PV systems can be anywhere between 2-5 years](#), it might end up being a few years before you're able to directly pocket any savings.

Therefore, your solar PV system will essentially only save you money if it continues to perform after the payback period. While purchasing a good quality system may cost you more initially, you have the peace of mind that it will continue to perform and save you money long into the future. The cost of replacing faulty parts in the future will be substantially more expensive, and completely nullify any savings you may have made in the short-term.



Burnt out connectors

Your System's Cheap Price May Be Compensated by Dodgy T&Cs

If a price seems much too low compared to what other providers are offering, it's a good idea to take a look at the solar provider's Terms and Conditions. T&C's can be a minefield of dodgy ['Gotcha' Clauses](#), where solar providers make up for the money they're not getting selling their systems.

Some clauses we've seen in the past include:

Solar Provider X engages Installation Contractor X as your agent. Installation Contractor X is liable for any damage or defect in installation of your system.

In this clause, your solar provider is passing all liability onto the contracted installer. This means if something goes wrong with your installation, your solar provider is absolved of all wrongdoing, and is not required to offer you any assistance or reimbursement. You'll have to take on the contractor (if you can find out who they are) by yourself.

Solar Provider X limits its maximum liability to \$100 only & will not be liable for any consequential damages.

Despite how careful and experienced your solar installers may be, accidents can occur from time to time. Choosing a reputable solar provider with a whole of system warranty like Infinite Energy means you're fully covered in the event of any damage that occurs during installation.

However, if you decide to go with Solar Provider X and something goes wrong, you'll only receive a maximum amount of \$100, regardless of how severe the damage is.



Junction Box failures

How to Choose the Right Solar PV System

Like any major purchase, don't let price be your one and only deciding factor when investing in a solar PV system.

Take the time to research your solar provider, including how long they've been in business, if they're [a CEC accredited retailer](#), if they offer a whole of system warranty (this is in addition to your component's warranties), their T&Cs, and the component they offer.

We receive numerous phone calls from people whose initially cheaper systems simply don't work. At the time of purchase, they thought they had a safe warranty, however their provider has since gone out of business or due to a loophole in their T&C's, refused to honour any warranty.

This means they have no chance at a replacement, unless they want to pay to ship their panels and/or inverter back to China for an exorbitant fee. As a result, many are forced to remove the system and start again.

The saying "The bitterness of poor quality remains long after the sweetness of low price is forgotten," rings especially true in the solar industry.

Purchasing a solar PV system is more complicated than simply buying something like a microwave or TV, it is a power station attached to one of your most valuable assets – your home, and the quality of a good panel or inverter is something only money can buy.