Harvesting the Sun's Rays!

Shining the light on solar and inverter alternatives

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The developments in technology of solar panels and their increased popularity of late has been an ultimate blessing for the market and we, as consumers, are reaping all the benefits. We now have more choice of panels, we benefit from lower prices (compared to 10 years ago) and the solar products available now are so efficient that many campers can get away with a relatively small sized solar panel. Everyone's needs are different of course!

To help with matters of reliable portable power, the massive improvements to deep cycle battery technology has come a long way too. Pair a good solar panel up with a good quality battery and most campers can go days without needing to plug into 240V or needing to dust off their portable petrol generator. And if the sun keeps shining, days can easily turn into weeks and the power is FREE!

That's right - once you have invested in a good quality solar panel system and reliable deep cycle battery, then the system will pay for itself in no time at all. Solar power is taking over in such a way that many campers are even leaving their petrol generators at home. After all, most campers spend big money setting their vans up to be self-sufficient and part of the process was choosing the most power efficient appliances possible. To the likes of 12v TV's and radios, 12v laptop chargers, USB devices and the increasingly popular LED light conversions in their vans.

There are of course some appliances that just can’t handle 12v - things like your microwave, electric kettle, air conditioner and perhaps electric oven. In reality (most cases), these power hungry devices are only used sparingly for short periods of time. Well, perhaps the air con might get a good workout in the Top End. But most of these things rarely get more than an hour or two use here and there. A petrol generator is a wise investment but still a lot of money for something you may only use now and then - although to be fair it’s a great back up for those occasions where the sun just will not play the game. This just proves the argument that no system is ever perfect.

We travel full time with three kids, we have an off road Jayco Camper. We have all the usual electronic gadgets, television, two laptops, iPad, camera, mobile phones etc. We also have a portable washing machine (with our kids we reckon this is a must). We love discovering remote bush camps and often find ourselves in places where we rely on our solar panels and deep cycle batteries. We have not yet found ourselves struggling for power.

Space and weight are premium considerations for us as we travel, we simply don’t have the space to carry anything that’s not necessary. To be honest, I can’t remember the last time we needed to start our petrol generator.

When it comes time to run our washing machine, charge our laptops, fans and even run our coffee maker (yes, we carry one of these with us - we love our coffee!) - we use an inverter (an Ecobox 1500 Solar Generator). The beauty of using an inverter is that we do not require separate fuel, our solar panels keeps the battery charged during the day and we have a whopping 1500W of pure sine wave power available when we need it (using the Ecobox 1500).

We can also plug other 12v accessories into it like our compressor fridge and aux lighting. We can charge our iPad and mobile phones via the USB outlets. Many similar inverters on the market also offer this but you do need to be careful running sensitive appliances from non-pure sine wave inverters. We can see instantly how much current we are drawing from our battery and how much power we have left via the LCD screen.

I’m not saying that petrol generators don’t have their place, but before investing big $’s have a think about just how often you will require 240v for longer periods of time. If it’s not all that much consider a solar system with an inverter. They can make sense if you set yourself up right!

What are the benefits of a solar/inverter system:

- Efficient way of charging batteries
- FREE power from the sun
- No need for fuel
- Negligible noise
- Can use almost anywhere
- Very little maintenance
- Less weight/space
- Better for the environment

The cons:
- Relays on the sun to work
- Not efficient during long periods of cloudy weather
- Need a reliable and adequate battery bank to supply the power
- Limited by the size of inverter you buy as to what appliances you can run off it

For more information on selecting a suitable deep cycle battery consult your local auto electrician. Have your needs worked out because they are bound to ask what you do (what you intend on running and for how long etc). Buy the best you can afford and make sure that your solar set-up is going to handle the charging requirements of your batteries.

To see more details on the Ecobox system check out:
www.ecobox.com.au
Phone 02 7774 5354
or email info@ecobox.com.au

Images clockwise order. Using an inverter for small appliances, Bush Camping situations, where solar power is becoming very popular. A good quality solar panel can provide ample power FREE from the sun. A 1500W inverter such as the Ecobox 1500 can charge multiple accessories at once without solar power and all 12v battery.