AUSTRACK CAMPERS
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We would like to help you make the right choice when buying your 12 volt folding solar panel kit. We have put together some helpful information which may help simplify your choice.

Please read the following information but it is an example only . Check the power usage on each of your items used in your own camp to make your own calculation.

This information refers to the power usage for recreational camping needs to recharge batteries powering fridges, lights and basic camping accessories.

A 40lt compressor driven fridge uses approx 35AH per day, 2 x 12V Lights, radio and water pump use approx 10AH per day. This is an approx usage of 50AH per day.

Multiply the days you intend staying by the amount of amps you use a day.

On a 4 day trip this will be 50AH x 4Days = 200AH.

What size battery do you have? How many amp hours is it? Less 30% so you don't over discharge the
battery. If we use a 110AH Battery less the 30% it will give us 77Ah of usable power.

The power required to recharge the battery will be 200AH (4days usage) less the capacity of 77AH (battery power) giving a short fall of 123AH.

We can hope for 8 hours of good sun per day (in good weather). 8 hours x 4 days gives us 32 hours of available sun. To recharge the batteries we will need to obtain 123AH in 32 hours (123AH / 32H = 3.85A) we need 3.85Amps per hour of solar generated power.

Panel size 3.85A x 13.8V = 55.5W (This is in ideal weather and using typical float voltage of a battery 13.8v).

Now we add 40% for losses and other factors including the condition and type of the battery 55.5W + 40% = 77.7W solar panel kit minimum.

This estimate gives you the minimum required to recharge your battery.

This information is an estimate only. It depends totally on weather condition, battery condition, size and the battery being full charged prior to going camping . Please note the battery will not be fully charged after the 4 days and will need to be charged to it reach its full capacity.

We hope this has helped to make your decision easier.