

Solar Power Story

By Ray Hart Bsc 2007

The year is 1999 and my daughter has just been born. I was walking back from the hospital one day while she was in the incubator and the thought crossed my mind that if the International Space Station can run on Solar Panels why can't things here on the ground. After all, we run calculators on them. I decided to keep a look out and buy a calculator or two and find out how much electricity one tiny Solar Panel produced.



ISS NASA.GOV



Calculator

It wasn't too long before I was talking with some friends and they recommended a shop where Solar Powered battery rechargers could be bought. It wasn't very long before I bought three types to see how effective they would be.



Battery rechargers

I decided to buy a larger solar panel, one that could output 12V. I also bought a portable power pack meant for a car/caravan and an inverter (a device to change 12V to 240V).



Larger solar panel

After some experiments and putting various wires and plugs together I managed to recharge a mobile 'phone and a palmtop computer. On a very good day I was able to run a laptop computer on it for a short time. One cloud and it all went out and only one thing was able to be charged at a time.



Mobile phone, laptop, radio

I decided to put a car battery in the circuit to smooth things out so that when a cloud came the power supply would still keep going. I put the battery in the shed at the bottom of the garden, had the solar panel hanging on the outside of the shed and a long wire through a gap in the kitchen window through into the front room and tried to run the laptop on it. Unsuccessful, but I was able to run a radio from it. I found there was a low voltage problem.



Car battery

We decided to buy a large 40Watt PV Solar Panel, the type that generates electricity. We didn't know where we were going to put it yet but we went for it.



Solar panels on shed

It arrived and we decided to put it on the shed roof, not directly South facing but close enough. We were amazed at the results.

It now took a day to recharge a car battery fully. We were so amazed we decided to buy another one. We also decided to buy another car battery so that while we used one the other would be charging.

We bought various car cigarette lighter attachments so that we could by-pass the inverters we already had and supply items straight from that supply rather than transform up to 240V and back down to whatever voltage the item needed.



Cigarette lighter accessories

To read more Solar Power Story, a 15 page booklet is available from Ray Hart rayhart@h2rh.co.uk 0117 9879601

Priced £2

Solar Panels are available from www.sunshineenergy.co.uk/solarpanels

Training courses to use them

www.sunshineenergy.co.uk/training

To find out more visit

www.sunshineenergy.co.uk



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