SOLARLAND
SOLAR POWERED PRODUCTS

Portable Battery Charging Kit

Our portable charging systems have been designed for use in many situations including: ...camping, hunting, fishing, marine, caravan & RV. These kits are ideal for use with radios, portable TV, tent fans, lights & telecommunications.

SLP010-10W/12VDC Portable Battery Charging Kit

Kit includes:

- Solarland™ SLP10-12 multi-crystalline solar panel
- Battery Clamps and leads.
- Packaged individually-Custom packaging available.

Specifications:

- Panel Dimensions: 342mm x 340mm x 25mm

SLP020-20W/12VDC Portable Battery Charging Kit

Kit includes:

- Solarland™ SLP20-12 multi-crystalline solar panel
- Battery Clamps and leads.
- Packaged individually-Custom packaging available.

Specifications:

- Panel Dimensions: 320mm x 580mm x 28mm

How does the solar panel work?

The solar panel converts sunlight energy into dc electric power and can charge a rechargeable battery which supplies power to operate the appliance load, day time charging for day & night time use.

How many solar panels will it take to run my... ?

Power(watts) = Current(amps) x Voltage, Watts x Hours = Watt Hours. As a general rule a user should establish the watts required to run the appliances and multiply them by the expected consumption hours. After these calculations, the capacity of the solar panel/s can be established. For example, if the power load is 117w hours per day & the solar panel is allowed for 6hours of suitable sunlight, the minimum solar panel recommended would be 19.5watt.

APPLIANCE	WATT	AMPS	HOURS	WATT HOURS	AMP HOURS
12V FLUORESCENT LIGHT	8	0.6	4	32	2.4
12V B & W TELEVISION	20	1.6	1	20	1.6
12V RADIO	5	0.4	1	5	0.4
12V FAN	4	0.25	5	20	1.25
12V TRAVEL IRON	120	10	1/6	20	1.67
12V WATER PUMP	40	4	2	20	2.0
ESTIMATED CONSUMPTION				117	9.32

How much battery capacity is required?

Current(amps) x hours = amp hours. Solar power systems are generally sized to give plenty of reserve(autonomy) in the batteries. Power usage should only be 20% per day of your battery capacity. For example, if the power load is 9.32amps/hours per day, the minimum battery capacity recommended would be 46.6amp/hour.