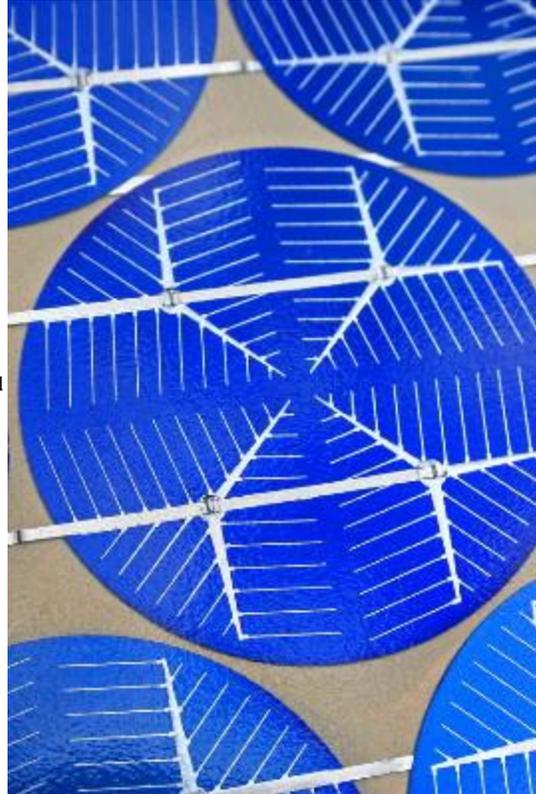


SOLAR SYSTEM PAKISTAN (PVT) LTD

What is Photovoltaic (Solar Panel)?

Photovoltaic cells, commonly known as solar cells, are used to capture the sun's energy and convert it into direct current electricity. This can be used in this form or be converted into alternating current, which is like the electricity that is available from the grid. Of course its purposes are as many as they are for electricity, for lighting, or to run your Fans, computer. This method converts the sun's power into electricity. This is the photovoltaic process.

- Solar cells, or photovoltaic cells are often silicon-based pieces of material that absorb the sun's light. Not warmth, as in the thermal application
- Many of these solar cells are often combined in solar panels
- Numbers of solar panels can be combined and interlinked for greater power
- Solar energy excites the electrons in the solar cell and electricity is produced
- This electricity is in the form of direct current or DC
- DC however is not useable for most common purposes
- So, next DC power is transformed through an inverter to alternating current, or AC at 120 or 220 Volt, a common-use voltage
- A small amount of solar energy is lost in this DC to AC conversion but is now ready for distribution to household appliances night time use and reduced sunlight
- You may be connected to the regular power grid. It may be possible to feed your heavy loads through grid and small appliances through Solar.



Electric energy can be used in several ways, stand-alone or Hybrid System.

Stand-alone

as the term suggests, the stand-alone application is not connected to an energy grid (City Power). It involves a solar panel or panels, directly connected to the appliance or DC to AC Inverter requiring energy. It is particularly useful in remote areas where there is no power grid. Excess solar energy can be stored in batteries for use at night or other low-sunshine times.

Hybrid System

In grid-connected Hybrid system, solar energy is used during the day by the system owner. At night, the owner draws on the previously established electricity grid. An addition benefit of the grid-tied system is that the solar system does not need to be sized to meet peak loads—overages can be drawn from the grid. This system works like a Normal UPS in the Night. Hybrid system is cost effective and can give more backup against power break down (load shedding) and bad weather conditions.

Stand-Alone Off-Grid Hybrid Systems

To meet the largest power requirements in an off-grid location, the PV system can be configured with a small diesel generator/UPS. This means that the PV system no longer has to be sized to cope with the worst sunlight conditions available during the year. Use of the diesel generator for back-up power is minimized during the sunniest part of the year to reduce fuel and maintenance costs.

Solar UPS /Magic Box

The newly developed low cost solar powered solution, the Solar Magic Box, is now available with a promise to bring electric power to every home in the world. It is handy and easy to install, without the need of any expert solar professional. Solar Magic Box is very effective in emergencies, natural calamities as well as in areas without electricity. For places with unreliable electricity supply, the solar magic box is an excellent emergency backup solution. In remote places away from populated areas such as, poultry farms, construction sites, kiosks on road sides, shops and many other places without electricity, the Solar Magic Box is extremely useful. The Solar Magic Box comes with bulbs and a fan which are tested. If you have a mobile phone but no power to charge it, then worry not. The Solar Magic Box comes with a car lighter port in which any car mobile charger can be used. Charge your cell phone in any remote place.

PACKAGES

SOLAR HYBRID PACKAGES

HYBRID SYSTEM	SOLAR PANEL WATTS	SOLAR CHARGE CONTROLLER	INVERTER SIN WAVE	BATTERY DRY VRLA	LOAD *	DC WIRING + STAND	PRICE PKR
SHB 50	50W	20 AMP	1KVA	55AH	1 FAN 2 LIGHTS	✓	49000/-
SHB 75	75 W	20 AMP	1 KVA	100 AH	2 FAN 3 LIGHTS	✓	65000/-
SHB 100	100W	25 AMP	1 KVA	100AH	3 FAN 4 LIGHTS	✓	78000/-
SHB 200	200W	25 AMP	1.5 KVA	200AH	4 FAN 6 LIGHTS	✓	120000/-
SHB 300	300W	25 AMP	1.5 KVA	300AH	5 FAN 8 LIGHTS	✓	155500/-

CELLING FAN ESTIMATED LOAD 100 W , LIGHT 20 W ENERGY SAVER

BACKUP 12-14 HR/DAY (ESTIMATED ON 12 HR SUNSHINE)

The off-grid packages detailed on this page are complete and can be shipped quickly. We also customize complete package systems unique to your needs. Call us to discuss your needs so that we can deliver a system that works for your unique situation.

SOLAR OFF-GRID / STAND ALONE SYSTEM

OffGrid Solar Power System	Solar panel(Watts)	Daily Output based on 7 hrs sun a day	# of Solar Panels	Charge Controller AMP	DC to Ac Inverter	DRY VRLA BATTERY DEEP CYCLE	Price PKR
DC CABIN	100 W	700 W DC	1*100	10A	-	55 A	38500/-
SSP 100	100 W	490W AC	1*100	10 A	1KVA	100A	65000/-
SSP 200	200 W	980 W AC	2*100	20 A	1 KVA	200 A	117000/-
SSP 300	300 W	1470 W AC	3*100	20 A	1.5 KVA	300 A	142000/-
SSP 500	500 W	2450 W AC	5*100	30 A	1.5 KVA	600 A	255000/-

The Solar Hybrid & off-grid packages detailed on this page are complete and can be shipped quickly. We also customize complete package systems unique to your needs. Call us to discuss your needs so that we can deliver a system that works for your unique situation.

OFF-GRID packages does not contain Stand & DC Wiring

DC TO AC conversion loss is estimated 30 % . May vary with quality of wire & inverters

ALL PACKAGES CONTAIN SIN WAVE INVERTER (POWER FACTOR 0.6)

SOLAR MAGIC BOX

PANEL	LOAD	WORKING HOUR *	PRICE
50 W	1 DC FAN 2 DC LED + Mobile Charger	8-10 HR	21500/-
25 W	1 DC FAN 1 LED + Mobile Charger	4-6 HR	14500/-

*These prices do not include shipping, installation or applicable taxes. Prices may change daily. Call Solar System Pakistan (Pvt) Ltd. for current pricing.