



LIGHTEN  
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INDUSTRY

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LIGHTEN  
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**Your Energy  
Solution  
Anytime,  
Anywhere.**



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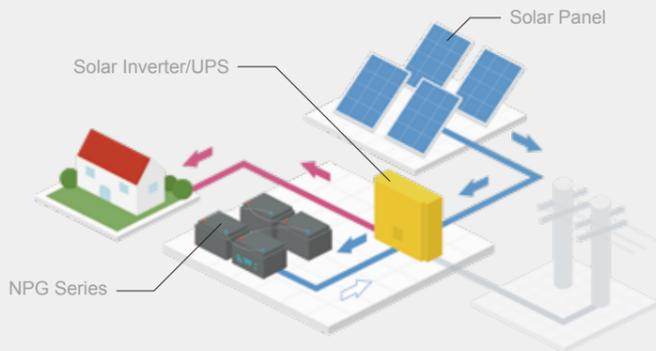
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# Solar Power System



- Off Grid:**
- Inverter output is separated from grid or genset
  - Inverter supplies loads from PV and/or batteries

## Off Grid

Enjoy solar power in off-grid area.

This is independent stand-alone solar power system without connecting to AC grid. Our LWI high performance gel deep cycle solar battery can provide long service life for off-grid solar power solution. Off-Grid solar power system gives you completely self-sustainable solar energy anytime, anywhere.

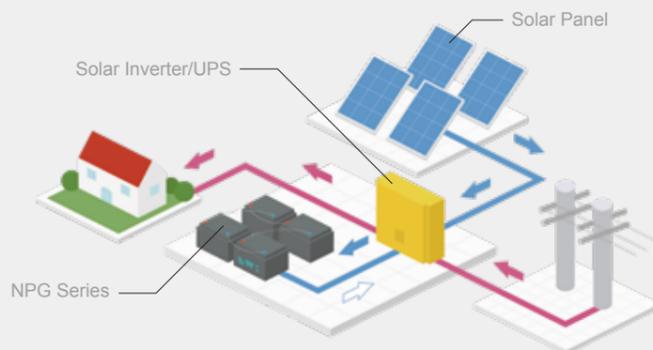
- Extra PV power is used to charge batteries
- Loads will be switched to AC input automatically while needed



## Specifications

Model		SHPV-3600	SHPV-5000	SHPV-6000
<b>Input (PV)</b>				
Max. PV Power	Unit	3600	5000	6000
MPPT Range <sup>1</sup>	V	150 ~ 500	150 ~ 450	150 ~ 450
Max. DC Voltage	V	550	500	500
Max. Current	A	10	20	10 x 2
MPP Tracker Number		1	1	2
<b>Input (AC)</b>				
Nominal Voltage, Frequency	V/Hz		230, 50/60	
Maximum Current	A	15	25	25
<b>Battery</b>				
Nominal Voltage	V	48	48	48
Max. Charging I from PV	A	60	60	100
<b>Output (AC)</b>				
Nominal Power	W/VA	3000	5000	5000
Nominal Voltage, Frequency	V/Hz		230, 50/60	
Over-Load Cap.	%		200	
Waveform			Pure Sinusoidal	
Regulation (Linear Load)	%		± 5	
<b>General</b>				
Temperature Range <sup>2</sup>	°C		-20 ~ 55	
Environment			Indoor	
Cooling			Forced Air-Cooling	
Humidity	%		0~95, non-condensing	
Battery Type			VRLA or LiFePO <sub>4</sub>	
Parallel & 3-phase Operation		Yes	No	Yes
<b>Interface &amp; Mechanical</b>				
Display			16 x 2 Text Display	
Ccommunication Interface			RS485, USB and Generator remote control	
ension (W / H / D)	mm	580/408/168	580/408/168	580/408/168
Weight	kg	22	23.8	24.2
<b>Certificate and Regulation<sup>3</sup></b>				
Safety		IEC 62109-1 & IEC 62109-2		
EMC		IEC/EN 61000-3-2	IEC/EN 61000-3-11	
		IEC/EN 61000-3-3	IEC/EN 61000-3-12	
Grid Monitoring		IEC/EN 61000-6-2, IEC/EN 61000-6-4		
		VDE 0126-1-1/A1, IEEE 519 CEA (2013), IEC 61727, IEC 62116		

\* Note: 1. The input power may be reduced for  $V_{pv} < 265V$  2. AC power may need to be reduced for  $T > 40^{\circ}C$   
3. Specifications are subject to change without prior notice.



- On Grid net metering:**
- Inverter output is physically connected to grid AC
  - Inverter supplies loads from PV and/or batteries

## Solar UPS

Emergency power backup by solar energy.

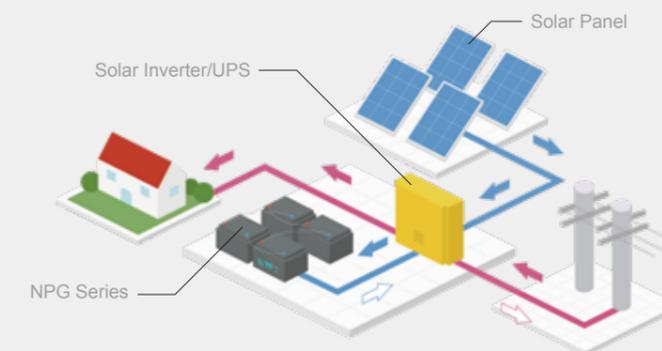
AC loads are supplied by solar power directly in daytime. AC loads are supported by grid only when solar power is weak. The standby battery pack are charged by solar panel in daytime or grid at night. Whenever AC grid is failure (blackout), your AC loads will be always secured by LWI long-life gel deep cycle batteries.

- Extra PV power is used to charge batteries
- Zero feeding to grid
- Loads are powered by inverter and/or grid AC

## Hybrid PV Inverter

Hybrid PV inverter is all-in-one PV inverter combines both off-grid and on-grid application by providing 3 different operation modes : Off-grid / On-grid net metering / On-grid self using for various scenario. This automatic and intelligent PV inverter is high efficient with MPPT solar charger, solar energy is stored and used through long life LWI gel deep cycle battery.

**Application :** Off grid / On grid net metering / On grid self using



- On Grid self using:**
- Inverter output is physically connected to grid AC
  - Inverter supplies loads from PV and/or batteries

## Hybrid

Multifunctional solar power system with battery storage

Hybrid solar power system combines the advantages of On Grid, Off grid and Solar UPS system. AC loads are supplied by solar power directly, the surplus solar energy can be used to charge batteries or sell back to grid. The batteries are charged by solar panel in daytime and AC grid at night. Battery can be used to supply AC loads in day or night whenever grid electricity rate is expensive. AC loads are also secured by LWI high quality gel deep cycle batteries when grid is failure (blackout).

- Extra PV power is used to charge batteries and/or feeding grid
- Loads are powered by inverter and/or grid AC

# Solar Power System



## Specification (Preliminary)

Model		SOPV-6000
<b>Input (PV)</b>	<b>Unit</b>	
Maximum Power	W <sub>P</sub>	6200
MPPT Range <sup>1</sup>	V	150 ~ 450
Maximum Voltage	V	500
Maximum Current	A	10 x 2
MPPT Tracker Number		2
<b>OUTPUT (AC)</b>		
Rating Power	W	6000
Voltage/Frequency	V/Hz	230/50
Maximum Current	A	30
THDi	%	3
<b>Input (PV)</b>		
Temperature Range <sup>2</sup>	°C	-20 ~ 55
Environment		Indoor, IP20
Cooling		Temperature Controlled Forced Air-Cooling
Humidity	%	0~95, Non-condensing
Display		16 x 2 Text display
Communication		RS485, USB, optional CloudLOG™ Monitoring
Dimension (W / H / D)	mm	580/408/168
Weight	kg	20
<b>Certificate and Regulation</b>		
Safety		IEC 62109-1 & IEC 62109-2
EMC		IEC/EN 61000-3-11, IEC/EN 61000-3-12
		IEC/EN 61000-6-2, IEC/EN 61000-6-3
Grid Monitoring		VDE 0126-1-1/A1, IEEE 519 CEA (2013), IEC 61727, IEC 62116

\* Note: 1. The input power may be reduced for V<sub>PV</sub> < 265V 2. AC power may need to be reduced for T > 40°C  
3. Specifications are subject to change without prior notice.



## On-Grid PV Inverter

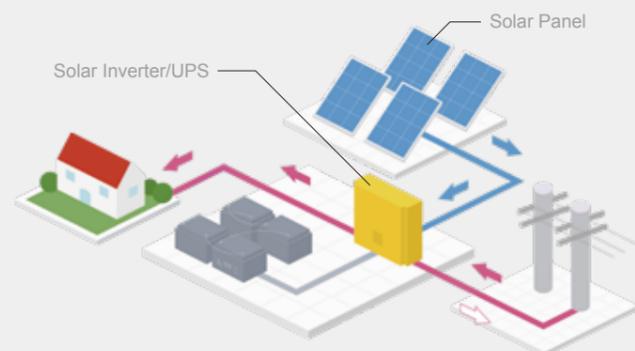
On grid PV inverter is PV inverter designed for on-grid application by providing 2 different operation modes : On-grid net metering / On-grid self using for various scenario. This automatic and intelligent PV inverter is high efficient with MPPT solar charger, solar energy is supplying loads directly or feeding grid without batteries

**Application :** On grid net metering / On grid self using

## On Grid – net metering

save more electricity bill by selling surplus solar energy back to grid

This On Grid – net metering system can save your electricity bills even more. AC loads are directly supplied by solar power instead of grid. When solar panels generate more electricity than demand of AC loads, those surplus solar energy will be sold back to grid.



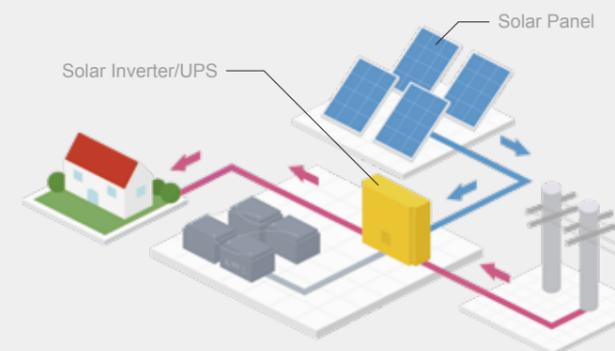
### On Grid net metering:

- Inverter output is physically connected to grid AC
- Inverter supplies loads from PV
- Extra PV power is feeding grid
- Loads are powered by inverter and/or grid AC

## On Grid – Self Using

save electricity bill by using solar power instead of grid power

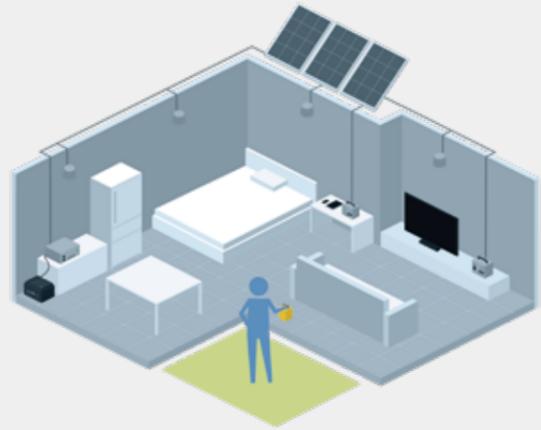
AC loads are directly supplied by solar power instead of grid. AC loads are supported by grid only when solar power is weak, such like cloudy day or raining day. However, if solar panels generate more electricity than demand of AC loads, those surplus solar power will not be sold back to grid.



### On Grid self using:

- Inverter output is physically connected to grid AC
- Inverter supplies loads from PV
- Extra PV power is not feeding grid
- Zero feeding to grid
- Loads are powered by inverter and/or grid AC

# Solar Home System



## Portable light

bring solar power on your hand

- Portable solar LED light with 3 stages adjustable brightness provides max 30 hours lighting anywhere.
- Built-in USB mobile phone charger keeps contacting people anytime.
- Enjoy LED lighting and smart phone charging anytime, anywhere.



### Specification

**LED light** : 3W max, 3 stage brightenss.  
**USB output** : 2A  
**Battery** : LWI NPS 6V 4AH battery built-in  
**Solar panel** : 3.7W



## Portable light

The solar Portable light provide LED lighting and USB output for wide variety of applications including, off grid house, camping sites, agriculture and industrial facilities.

**Application** : LED lighting / mobile phone charging

### Energy storage

The LWI PORTABLE LIGHT features a rechargeable, replaceable, sealed, lead-acid battery rated at 24Wh.

### LED lights

The LWI PORTABLE LIGHT can provide up to 30 hours of continuous lighting through high efficiency, long lasting LED lights.

### USB charging

The LWI PORTABLE LIGHT can be used to charge small electronic devices via a built-in USB port. The kit includes a universal dongle that connects to most mobile phones.

### Brightness control

The LWI PORTABLE LIGHT can control the brightness of the LED light. By adjusting brightness, users can extend the length of time the lights can be used.

### Battery charge indication

The LWI PORTABLE LIGHT features battery charge indication lights that allow users to tell at a glance battery charge status.

### Portable emergency power

The LWI PORTABLE LIGHT can provide vital light and stored power in the event of a blackout or other emergency.

### Clean, free charging

The NP4-6 battery is designed to charge the battery using the included solar panel providing a renewable supply of clean free power.



## Lighting kit

light up anyplace by solar power

- Plug-and-Go system, hand-carrying and easy use without installation.
- High efficient and performance LED lights with adjustable brightness tuner.
- Built-in USB mobile phone charger keeps contacting people anytime.
- Enjoy LED lighting and smart phone charging at home easily.



### Specification

**LED light** : 4W x 2 with dimmer, adjustable brightness.  
**USB output** : 2A  
**Battery** : LWI NPS 12V 7AH battery built-in  
**Solar panel** : 10W



## Lighting kit

The solar Lighting kit provide LED lighting and USB output for wide variety of applications including off grid house, camping sites, agriculture and industrial facilities.

**Application** : LED lighting / mobile phone charging

### Energy storage

The LWI LIGHTING KIT features a rechargeable, replaceable, sealed, lead-acid battery rated at 84Wh.

### LED lights

The LWI LIGHTING KIT can connect 4W LED x2pcs of continuous lighting through high efficiency, long lasting LED lights.

### USB charging

The LWI LIGHTING KIT can be used to charge small electronic devices via a built-in USB port. The kit includes a universal dongle that connects to most mobile phones.

### Brightness control

The LWI LIGHTING KIT can control the brightness of the LED light. By adjusting brightness, users can extend the length of time the lights can be used.

### Battery charge indication

The LWI LIGHTING KIT features battery charge indication lights that allow users to tell at a glance battery charge status.

### Portable emergency power

The LWI LIGHTING KIT can provide vital light and stored power in the event of a blackout or other emergency.

### Clean, free charging

The NP7-12 battery is designed to charge the battery using the included solar panel providing a renewable supply of clean free power.

# Solar Home System



## TV kit

enjoy TV anywhere by solar power

- Plug-and-Go system, hand-carrying and easy use without installation.
- High efficient and performance LED lights with adjustable brightness tuner.
- Built-in USB mobile phone charger keeps contacting people anytime.
- AC and DC output for watching TV.
- High performance LWI deep cycle solar battery provides long service life.
- Enjoy watching TV, LED lighting, and smart phone charging anyplace easily by solar power.



### Specification

**LED light** : 4W x 2 with dimmer, adjustable brightness.  
**USB output** : 2A x 2  
**AC output** : Pro -universal socket x 2(Max. load 400W) / Lite-universal socket x 1(Max. load 150W)  
**DC output** : cigar socket x 1  
**Battery** : Pro- LWI NPD 12V 50AH battery / Lite- LWI NPD 12V 22AH battery built-in  
**Solar panel** : 50W~100W



## TV kit

The solar TV kit provide LED lighting, USB output, Cigar and AC socket for wide variety of applications including off grid house, camping sites, agriculture and industrial facilities.

**Application** : LED lighting / mobile phone charging / AC&DC electrical appliances

### Energy storage

The TV KIT features a rechargeable, replaceable, sealed, lead-acid battery rated at 600Wh.

### LED lights

The TV KIT can connect 4W LED x2pcs of continuous lighting through high efficiency, long lasting LED lights.

### USB charging

The TV KIT can be used to charge small electronic devices via a built-in USB port. The kit includes a universal dongle that connects to most mobile phones.

### AC output

The TV KIT can be used to connct electronic devices (under AC220V, 400W).

### Brightness control

The TV KIT can control the brightness of the LED light. By adjusting brightness, users can extend the length of time the lights can be used.

### Battery charge indication

The TV KIT features battery charge indcation lights that allow users to tell at a glance battery charge status.

### Portable emergency power

The TV KIT can provide vital light and stored power in the event of a blackout or other emergency.

### Clean, free charging

The NP50-12 battery is designed to charge the battery using the included solar panel provideing a renewable supply of clean free power.



## Home kit

build your modern life by solar power

- High efficient and performance LED lights with adjustable brightness tuner.
- Built-in USB mobile phone charger keeps contacting people anytime.
- AC and DC output for watching TV.
- AC output for refrigerator, computers, and other home appliances.
- High performance LWI gel deep cycle solar battery provides extra-long service life.
- Enjoy refrigerator, watching TV, LED lighting, and smart phone charging easily by solar power.



### Specification

**LED light** : 4W x 8 max  
**USB output** : 2A x 2  
**AC output** : universal socket x 2(Max. load 800W / 1200W)  
**DC output** : cigar socket x 1  
**Battery** : external LWI NPG 12V 100AH~200AH battery  
**Solar panel** : 100W~150W

## Home kit

The solar Home kit provide LED lighting, USB output, Cigar and AC socket for wide variety of applications including off grid house, camping sites, agriculture and industrial facilities.

**Application** : LED lighting / mobile phone charging / AC&DC electrical appliances

### Energy storage

The Home KIT features a rechargeable, replaceable, sealed, gel deep cycle battery can be expanded.

### LED lights

The Home KIT can connect 4W LED x4pcs of continuous lighting through high efficiency, long lasting LED lights.

### USB charging

The Home KIT can be used to charge small electronic devices via a built-in USB port. The kit includes a universal dongle that connects to most mobile phones.

### AC output

The Home KIT can be used to connct electronic devices (under AC220V, 1200W).

### Brightness control

The TV KIT can control the brightness of the LED light. By adjusting brightness, users can extend the length of time the lights can be used.

### Battery charge indication

The Home KIT features battery charge indcation lights that allow users to tell at a glance battery charge status.

### Portable emergency power

The Home KIT can provide vital light and stored power in the event of a blackout or other emergency.

### Clean, free charging

The NP100-12 battery is designed to charge the battery using the included solar panel provideing a renewable supply.

