

# Solar Home System

Product Catalog


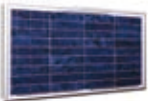




**SUNTECH**  
Solar powering a green future™

## The Power of Access



# DC


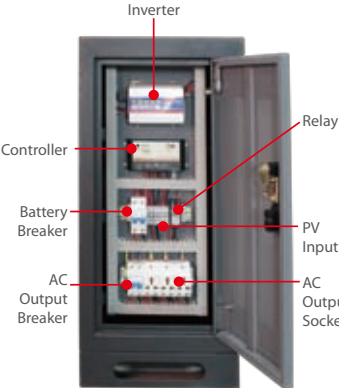
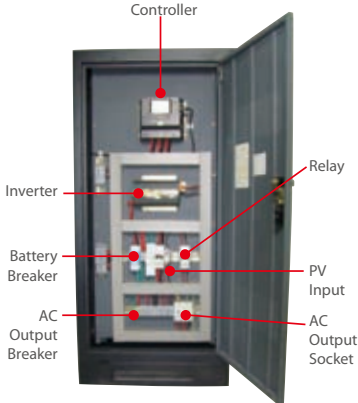
SNH	SNH-20/30	SNH-50/60	SNH-80/100
			
Product Dimensions (L x W x H)	407 x 223 x 362 mm	518 x 223 x 362 mm	607 x 223 x 362 mm
Net Generator Weight (w/o battery)	2.65 Kgs	3.0 Kgs	3.40 Kgs
System Voltage	12 V	12 V	12 V
Max.Input Capacity	10 A	10 A	15 A
Max.Output Capacity	10 A	10 A	15 A
Low Voltage Reconnect (LVR)	12.6 V	12.6 V	12.6 V
Low Voltage Disconnect (LVD)	11.6 V (at I=0A)	11.6 V (at I=0A)	11.6 V (at I=0A)
Power Consumption	6 mA (standby)	6 mA (standby)	6 mA (standby)
Battery Temperature Compensation	-20 mV/°C	-20 mV/°C	-20 mV/°C
PWM Float Charge Level	14.1 V (with Temperature compensation -20 mV/°C)	14.1 V (with Temperature compensation -20 mV/°C)	14.1 V (with Temperature compensation -20 mV/°C)
Power Consumption	80 mA (max)	80 mA (max)	80 mA (max)
Low Battery Condition (100%) Display	11.6 V	11.6 V	11.6 V
Full Battery Condition (100%) Display	12.6 V	12.6 V	12.6 V

Module Type	STP020D-12/CHA	STP030D-12/LFA	STP050-12/Md	STP060-12/Sb	STP080S-12/Bb	STP100D-12/TFA
						

Electrical Characteristics						
Open-circuit Voltage (Voc)	22.3 V	21.6 V	21.8 V	21.6 V	21.9 V	22.3 V
Optimum Operating Voltage (Vmp)	17.5 V	17.2 V	17.4 V	17.4 V	17.5 V	17.5 V
Short-circuit Current (Isc)	1.18 A	1.94 A	3.13 A	3.90 A	4.95 A	5.91 A
Optimum Operating Current (Imp)	1.15 A	1.74 A	2.93 A	3.45 A	4.58 A	5.72 A
Maximum Power at STC (Pmax)	20 W	30 W	50 W	60 W	80 W	100 W
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	715 V	715 V	715 V	715 V	715 V	1000 V
Maximum Series Fuse Rating	5 A	5 A	5 A	15 A	15 A	15 A
Power Tolerance	±10 %	±10 %	±5 %	±5 %	±5 %	±5 %

Specifications						
Cell	Monocrystalline 156 x 24 mm	Polycrystalline 156 x 39 mm	Polycrystalline 156 x 62.4 mm	Polycrystalline 156 x 78 mm	Monocrystalline 125 x 125 mm	Polycrystalline 156 x 117 mm
No. of Cells and Connections	36 (2 x 18)	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)
Dimension of Module	526 x 368 x 30 mm	426 x 680 x 30 mm	631 x 665 x 30 mm	771 x 665 x 30 mm	1195 x 541 x 30 mm	1131 x 676 x 35 mm
Weight	3.7 Kgs	5 Kgs	6.4 Kgs	6.2 Kgs	8 Kgs	8 Kgs

# AC

SNH	SNH-80/100	SNH-200/280	SNH-540/560
			

Product Dimensions (L x W x H)	607 x 223 x 362 mm	600 x 350 x 800 mm	600 x 600 x 1300 mm
Net Generator Weight (w/o battery)	3.40 Kgs	35.0 Kgs	70.0 Kgs
System Voltage	12 V	12 V / 24 V	12 V / 24 V
Max. Input Capacity (DC)	15 A	20 A	46 A
Max. Output Capacity (DC)	15 A	20 A	40 A
Low Voltage Reconnect (LVR)	12.6 V	12.6 V / 25.2 V	12.6 V / 25.2 V
Low Voltage Disconnect (LVD)	11.6 V	11.1 V / 22.2 V	11.1 V / 22.2 V
Power Consumption	6mA (standby)	controller ≤5 mA meter MT-1 ≤3 mA meter backlight ≤20 mA	Control circuit ≤15 mA LED & LCD display (max) ≤15 mA
Battery Temperature Compensation	-20m V/°C	-5m V/°C/2V	-5m V/°C/2V
AC Output Voltage	220 V	220 V	220 V
AC Output Frequency	50±2Hz (Modified sine wave)	50±2Hz (Modified sine wave)	50±2Hz (Modified sine wave)
Continuous Power (W)	240	240	400






Module Type	STP080S-12/Bb	STP100D-12/TFA	STP100D-12/TFA	STP140D-12/TEA	STP140D-12/TEA	STP270-24/Vd
						

Electrical Characteristics						
Open-circuit Voltage (Voc)	21.9 V	22.3 V	22.3 V	22.4 V	22.4 V	44.5 V
Optimum Operating Voltage (Vmp)	17.5 V	17.5 V	17.5 V	17.6 V	17.6 V	35.0 V
Short-circuit Current (Isc)	4.95 A	5.91 A	5.91 A	8.33 A	8.33 A	8.20 A
Optimum Operating Current (Imp)	4.58 A	5.72 A	5.72 A	7.95 A	7.95 A	7.71 A
Maximum Power at STC (Pmax)	80 W	100 W	100 W	140 W	140 W	270 W
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	715 V	1000 V	1000 V	1000 V	1000 V	1000 V
Maximum Series Fuse Rating	15 A	15 A	15 A	20 A	20 A	20 A
Power Tolerance	±5 %	±5 %	±5 %	±5 %	±5 %	0/+5 W

Specifications						
Cell	Monocrystalline 125 x 125 mm	Polycrystalline 156 x 117 mm	Polycrystalline 156 x 117 mm	Polycrystalline 156 x 156 mm	Polycrystalline 156 x 156 mm	Polycrystalline 156 x 156 mm
No. of Cells and Connections	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)	36 (4 x 9)	72 (6 x 9)
Dimension of Module	1195 x 541 x 30 mm	1131 x 676 x 35 mm	1131 x 676 x 35 mm	1482 x 676 x 35 mm	1482 x 676 x 35 mm	1956 x 992 x 50 mm
Weight	8 Kgs	8 Kgs	8 Kgs	12 Kgs	12 Kgs	27 Kgs



# Features

-  Long-term, sustainable power
-  Reliable, maintenance-free performance
-  Easy and quick installation
-  Simple control interface
-  Complete, all-inclusive power system

Suntech's Solar Home System (SNH) provides independent power for off-grid homes and communities by creating direct access to nature's most abundant energy resource. The small-scale power system, suitable for any climate or terrain, is easy to install and provides long-term, reliable power performance backed by a 25-year power output warranty. The all-inclusive installation kit features efficient and durable crystalline silicon solar modules, encapsulated, maintenance-free lead-acid batteries, hassle-free wiring, and an electrical control box that can be mounted easily, as well as a complete installation guide that empowers end users to take charge of their energy future.

## DC System Features

The Solar Home System (SNH) creates independent access to solar energy and generates DC 12V electricity for small home appliances, such as lighting. The complete package is easy-to-use with stable and reliable power performance, and most importantly can be conveniently transported and installed by a layperson with basic tools.

The system has under-voltage protection and recovery, over-voltage protection and recovery, reverse current protection, overload protection, short-circuit protection and an automatic temperature regulator.

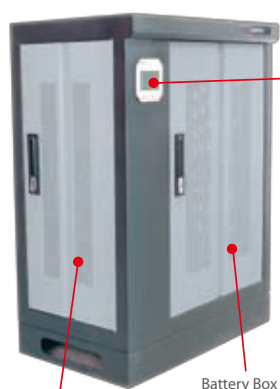
Single-button operating design is convenient and easy to use.

## AC System Features

The power controller and inverter system is designed to supply reliable alternating current electricity for a wide variety of household products, such as lights, TVs, VCRs, laptop computers, cell phone chargers, among other appliances.

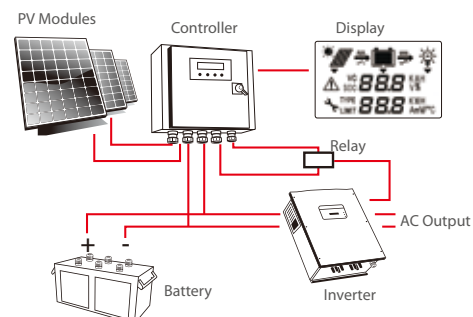
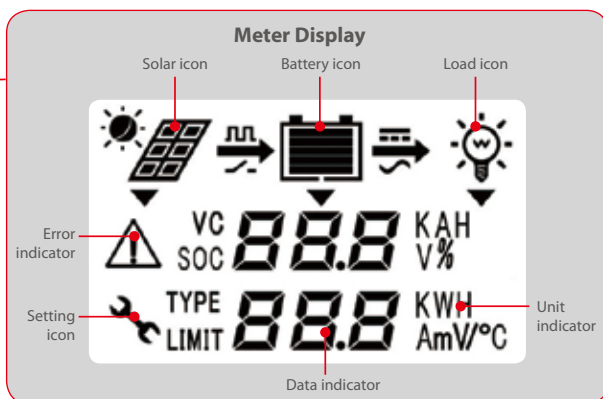
- A LCD display and four-button interface allows for accurate and timely system monitoring and straightforward control

- The Pulse Width Modulation(PWM) function provides higher power factor and improves inverter respond speeds to ensure reliable performance
- An advanced power regulation system with over-load, short circuit, and reverse-polarity protection
- Designed to accept diverse battery types and provide multiple (power) battery capacity management options



Electrical Box

Battery Box



## Distributor

Suntech Power Holdings Co., Ltd.

Tel: +86 510 8531 8888  
 Fax: +86 510 8534 3049  
 Email: sales@suntech-power.com

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