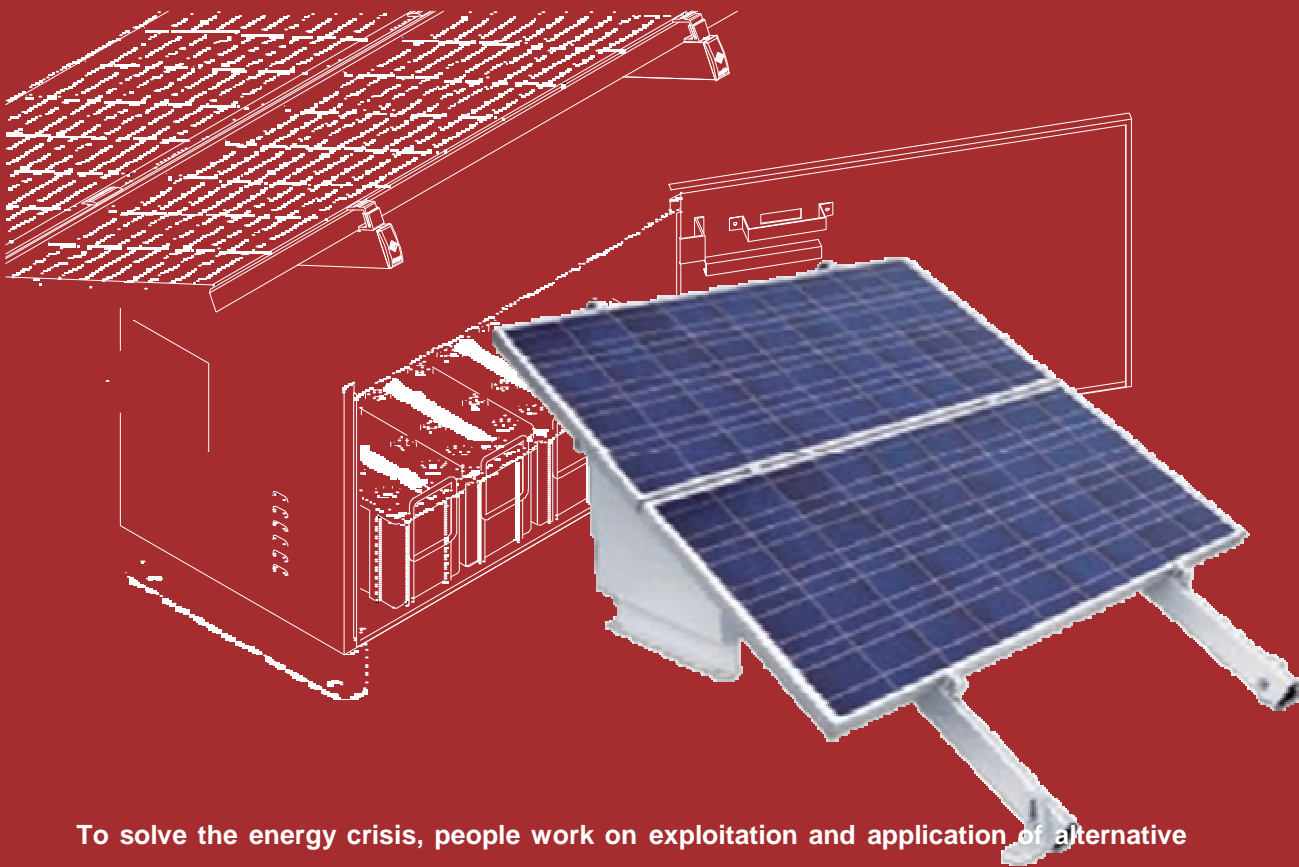


ST

- . Main power systems for home and office use.
- . Standby power for important facilities.
- . Power for utility unreachable areas.
- . Power for utility rationing area.
- . Emergency power for factory, power station, remote area and etc.

OFF-GRID SOLAR POWER SYSTEM





To solve the energy crisis, people work on exploitation and application of alternative energy sources. Among the various renewable energies, solar energy has features of low pollution, accessibility, and inexhaustibility. Thus, it becomes one of the important and attractive resources for people to research. Due to the rapid development of solar power system, Hengs designs six models off-grid power systems from 130W-4140W (ST series) to fit different applications. ST series is suitable for the areas with electricity hard to access, unstable power supply and high excavation costs, such as mountain, isolated island, power station, remote area, power rationing area and etc. The system consists of PV module, solar mounting rack, solar charge controller, inverter, distributor box, battery box, battery, cable set, and related facilities.

We will suggest the most suitable model according to your local weather condition and power consumption. The product development not only provides customers more stable power supply, but also achieves the design concept for environmentally friendly, energy saving and sustainable usage.

If where you live are lack of electricity, you may consider installing off-grid system. Some of the factors you need to deliberate before installation:

1. Is there sufficient sunshine?
2. Is there any shading on the installation site? (little or partial)
3. Do you have enough area to be installation site?
4. Do you have any electrical engineering technicians to support?

Once you confirm the area meets the condition of setting solar power system, you could select the suitable system capacity. Please consider the following things to avoid system failure

PECIFICATION

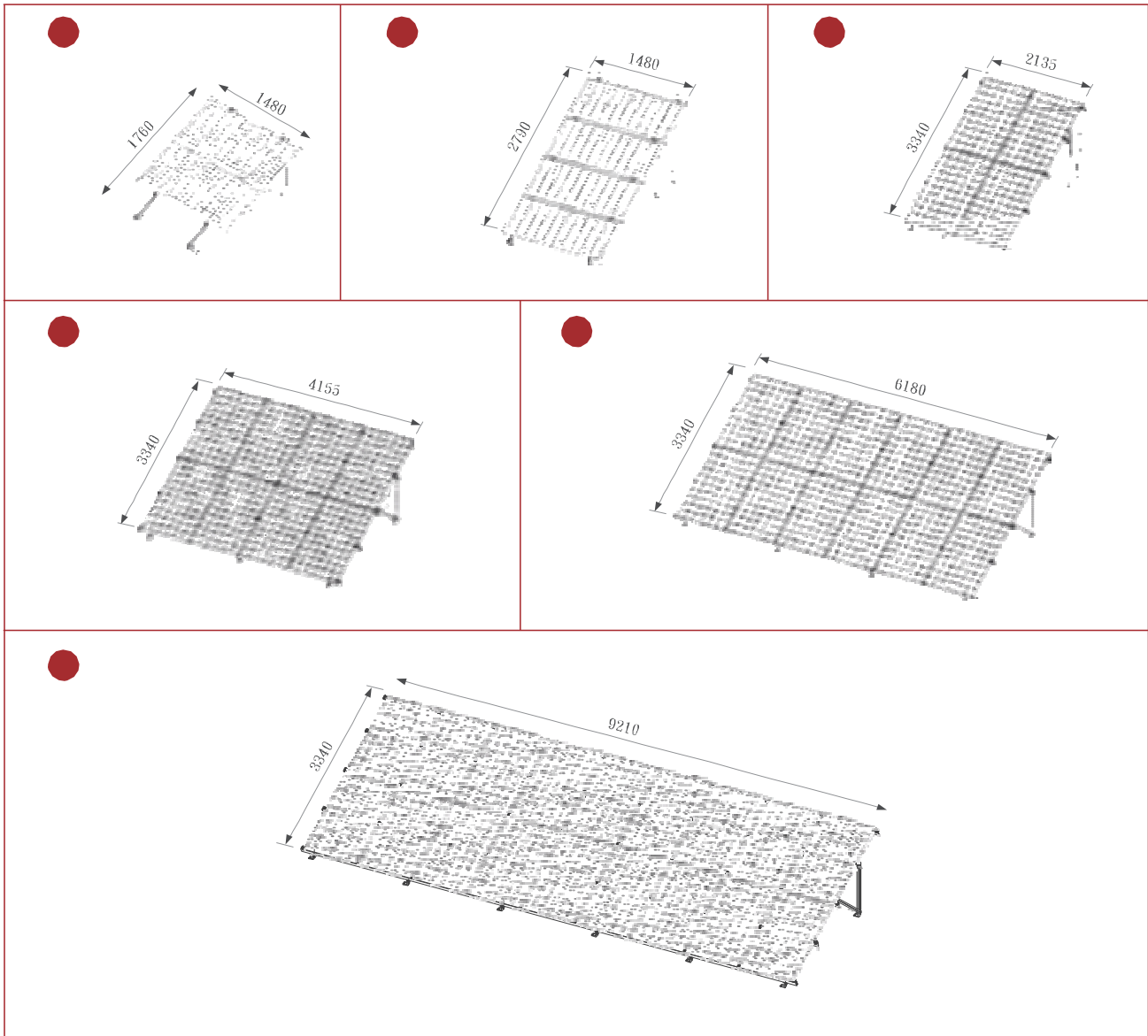
Features

- . Renewable-energy system with low maintenance.
- . Off-grid system with batteries, switch to utility is also available.
- . Complete components for easy installation, can be installed within hours by a novice user
- . High performance solar charge controller and inverter
- . Sine wave output, suitable for all kinds of electric instruments.
- . Affordable price with high quality
- . Two-year warranty

Application

- . Main power systems for home and office use.
- . Standby power for important facilities.
- . Power for utility unreachable areas.
- . Power for utility rationing area.
- . Emergency power for factory, power station, remote area and etc

A: ST-260 B: ST-500 C: ST-1000 D: ST-2000 E: ST-3000 F: ST-4000

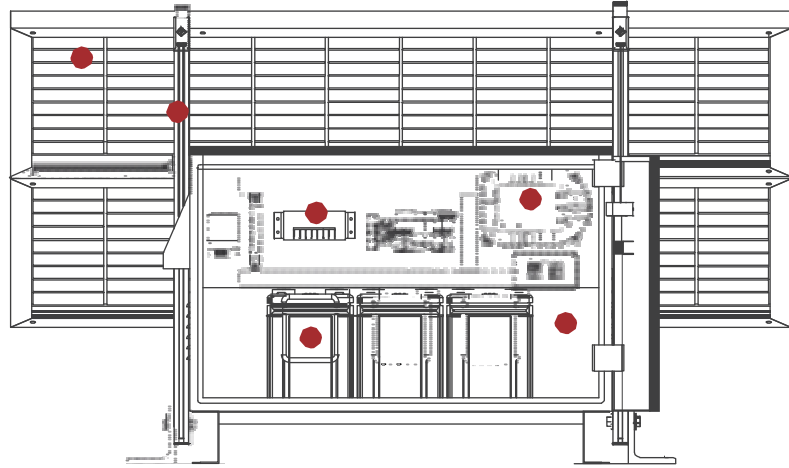


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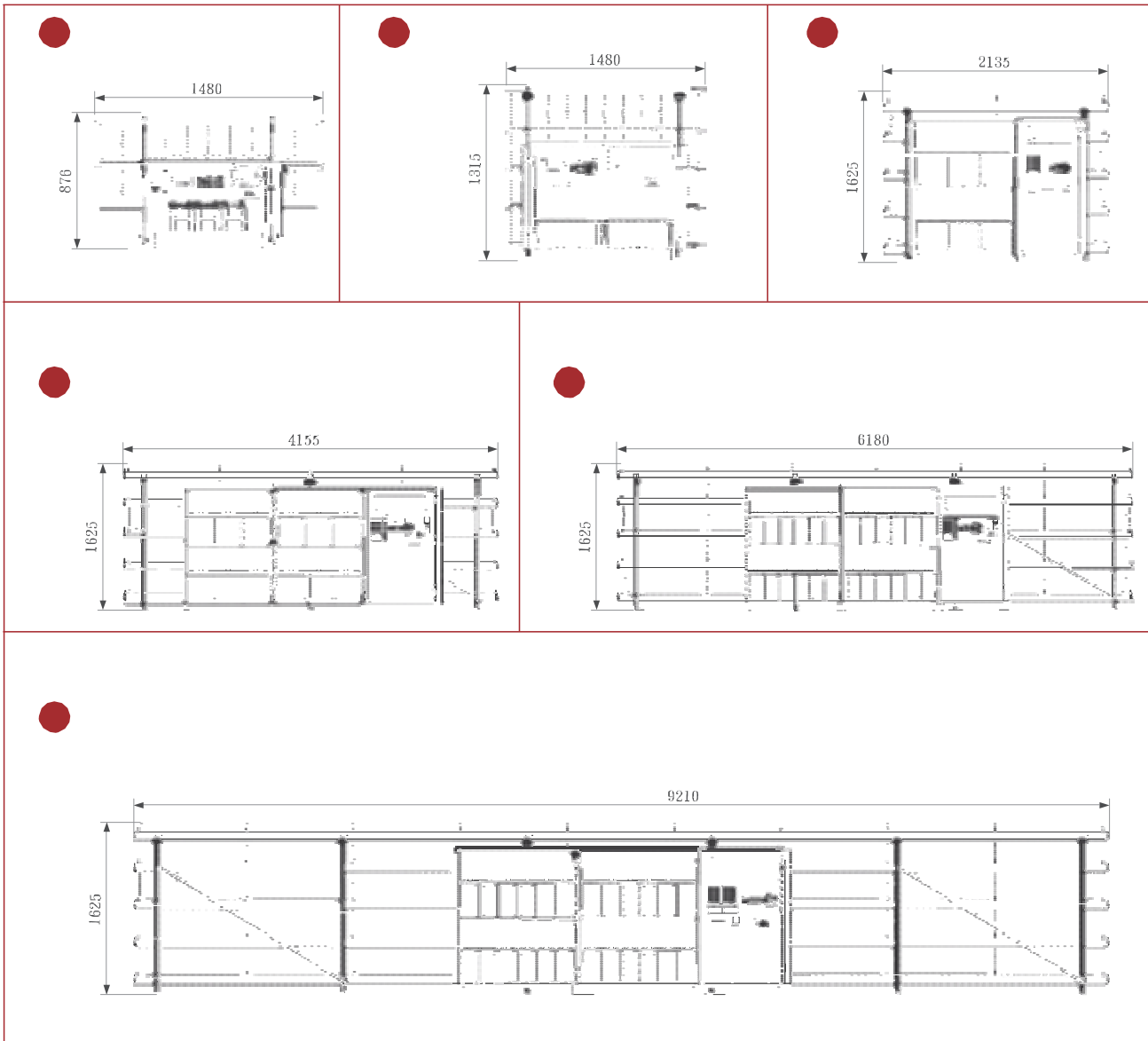
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1. PV Modules
2. Solar Mounting Rack
3. Solar Charge Controller
4. Inverter
5. Battery
6. Distribution Box



A: ST-260 B: ST-500 C: ST-1000 D: ST-2000 E: ST-3000 F: ST-4000

Unit:mm



Specification

Model	ST-260	ST-500	ST-1000	ST-2000	ST-3000	ST-4000
PV Modules						
Rated Power (*)	260W (130W*2)	520W (130W*4)	920W (230W*4)	1840W (230W*8)	2760W (230W*12)	4140W (230W*18)
Solar cells	Poly-Crystalline Silicon					
Certificate	IEC 61215 / IEC 61730 / UL 1703					
Solar Charge Controller						
Solar Charge Rated	20A		45A		60A	45Ax2
Charging Characteristic	PWM		MPPT			
Temperature Compensation	Yes					
Battery Bank						
Capacity	300AH/12V	300AH/24V	600AH/24V	600AH/48V	800AH/48V	1000AH/48V
Type	Deep Cycle, Gel Battery					
Battery Life Expectancy	4-5 years					
Inverter						
Rated Power	300W	1000W		4000W		
DC Voltage	10.0-15.5Vdc	20~30Vdc		40~60Vdc		
AC Voltage /Frequency	220V or 115Vac±10% 50 or 60 Hz ±0.1%	120 or 220 or 230Vac 50 or 60 Hz ±1%		120/230/240Vac±10% 50 or 60Hz ±1%		
Peak Efficiency (peak)	90%	87%		93%		
LVD Protection	Yes					
Safety Protection						
Delta Lightning Arrestor			●	●	●	●
Ground Terminal	●	●	●	●	●	●
DC Breaker		●	●	●	●	●
DC Fuse	●	●	●	●	●	●
AC Breaker		●	●	●	●	●
AC Fuse	●	●	●	●	●	●
Mechanical						
Weight (kgs)	259	474	820	1499	2001	2459
Structure (Material)	Aluminum Alloy + Stainless Steel Screw					
Wind Speed Resistance	max. 55 m/s (106.9 knot)					
Distribution Box	Galvanized with Powder Coating					
IEC Enclosure Rating	IP54					
System Capability						
Warranty	2 years					

(*) STC— Radiation strength=1000W/m², spectral distribution=AM 1.5, temperature=25±2°C

The following is the example of ST power generation under the condition of ESH 4 hours. (ESH = Equivalent Sunshine Hours)

Daily Power Generation

Model	ST-260	ST-500	ST-1000	ST-2000	ST-3000	ST-4000
Daily Power Generation	830WH	1660WH	3310WH	6620WH	9930WH	14900WH

* The sunshine hours vary from 2-5 hours depending on the different locations. Please refer to the local weather data.

Introduction

Due to the rapid development of human civilization, natural energy consumption is immensely increasing. However, world's natural energy resources such as oil, natural gas and coal are limited, and will be running out shortly under the large extraction from human beings. To solve the energy crisis, people devote to developing sustainable power, therefore, solar energy with the features of low pollution, accessibility, and inexhaustibility is an ideally alternative energy. Solar power is the biggest and unlimited energy resources without any pollution in earth. The energy of the Sun reaches to the Earth's ground every day is around one-fourth times of the oil reserves in the world. Moreover, the technology of semiconductor materials is advanced in recent years, and that makes sunlight absorption of solar cells enhance continually. As a result, the technology contributes to the development and popularity of solar power system.

Established in 1998, Hengs Technology Co., Ltd. was a professional company specializing in monitoring system integration. In 2002, we founded natural energy department and focused on

renewable-energy system integration and related products marketing. Today, Hengs has become the leading company in solar energy application in Taiwan.

the techniques of solar power system integration and application. Our solar project constructions all over the world have made great impression on our customers. No matter where you are, you are able to benefit from our comprehensive services.



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