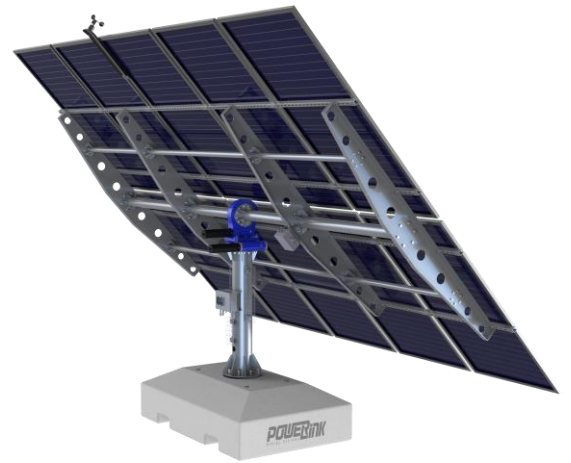


Solar Tracking System

Introduction

The single axis solar tracking system (STS) uses GPS to track astronomical monitoring and calculate the direction and position of the sun. Through a dual axis rotary actuator, the PV modules are driven to rotate and tilt, synchronously adjusting the azimuth and elevation angles of the PV panels, so that the sunlight always shines directly on the surface of the PV panels. Compared with traditional PV systems without trackers, the power generation efficiency is increased by 30%. It can be installed in single or multiple units and is matched with RHE series hybrid system units for environmental protection and energy saving.

Application areas: Communication base station power generation, island off-grid power generation, remote mountain area power generation, agricultural irrigation, farms, household energy saving, mining and other fields.



Product Feature



Monocrystalline silicon
PV panel
Generating power
650Wp/panel



C-shaped steel
support frame
Light weight, high strength



Waterproof
control cabinet
Adapted to a variety of
harsh environments



Wind speed sensor
Real-time wind speed
monitoring



Concrete foundation
counterweight
Plug and play, can be quickly
put into use



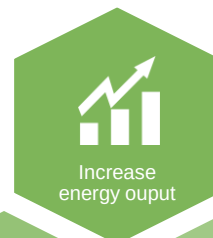
Real-time communication
with EMS
Realize remote monitoring
and management



Advantages



Improve
efficiency



Increase
energy output



Strong
adaptability



Reduce shadow
impact



Lower cost



Eco-friendly

Real time tracking of the sun's movement trajectory ensures that the PV panels always maintain the optimal angle with the sun, allowing the PV system to generate more electricity in the same amount of time

Automatically adjusting the orientation and angle of pv panels based on different geographical locations, seasons, and weather conditions can help reduce the impact of shadows and obstructions on the performance of photovoltaic systems

The automated control of tracking mode reduces the maintenance cost and manpower input of the system, while further improving the efficiency and output of PV power generation



Specifications

Basic parameters

Product model	STS6500
Drive type	Dual axis rotation
Motor voltage	24 VDC
Surface treatment	HDG
Horizontal tracking angle	±90°
Tilt tracking angle	0°–45°
Output power	6.5 kWp
Max. output voltage	520 VDC
Number of solar panels	10
Solar panel power efficiency	99 %
Power consumption	<0.3 kWh/day
Wind load (during operation)	16 m/s
Protection level	IP54
Service life	25 years

Transport parameters

Expand size (L×W)	5870×4606 mm
Excluding concrete counterweight	
Equipment weight	910 kg
Transport size (L×W×H)	1170×900×2300 mm
40' container packing quantity	26
Including concrete counterweight	
Equipment weight	4865 kg
Transport size (L×W×H)	2300×1400×2483 mm
40' container packing quantity	6



FAQ

Q: Is it possible to install locally poured concrete instead of purchasing weighted concrete.

A: STS systems without concrete foundations can be purchased.

Q: Can it be purchased with RHE units and connected to multiple STS systems? What are the suggestions for matching relationships?

A: It can be purchased together with RHE units and can be connected to multiple STS systems. One set of STS 6.5kWp can generate 900–1500 hours of electricity per year depending on the latitude and longitude of each region. According to the power parameters and battery capacity of the RHE hybrid system solar inverter, the appropriate number of STS systems can be selected.

Q: Is installation difficult? What equipment and tools are needed?

A: Installation is not difficult, all materials are supplied in sets, which can be assembled by 2 people within 4 hours, and then calibrated within 1 hour according to the calibration instructions document; The concrete counterweight requires a 5-ton forklift or lifting equipment weighing 5 tons or more for handling, while other components can be assembled using conventional wrenches.

Q: Do you need regular maintenance?

A: No regular maintenance is required. After the first calibration, only the dust on the solar panel needs to be cleaned every month.

Q: Can I use an app to remotely read and control?

A: The PowerLink app can be used to remotely read and control the STS system.

