



# 1. Solar Tracker Advantage

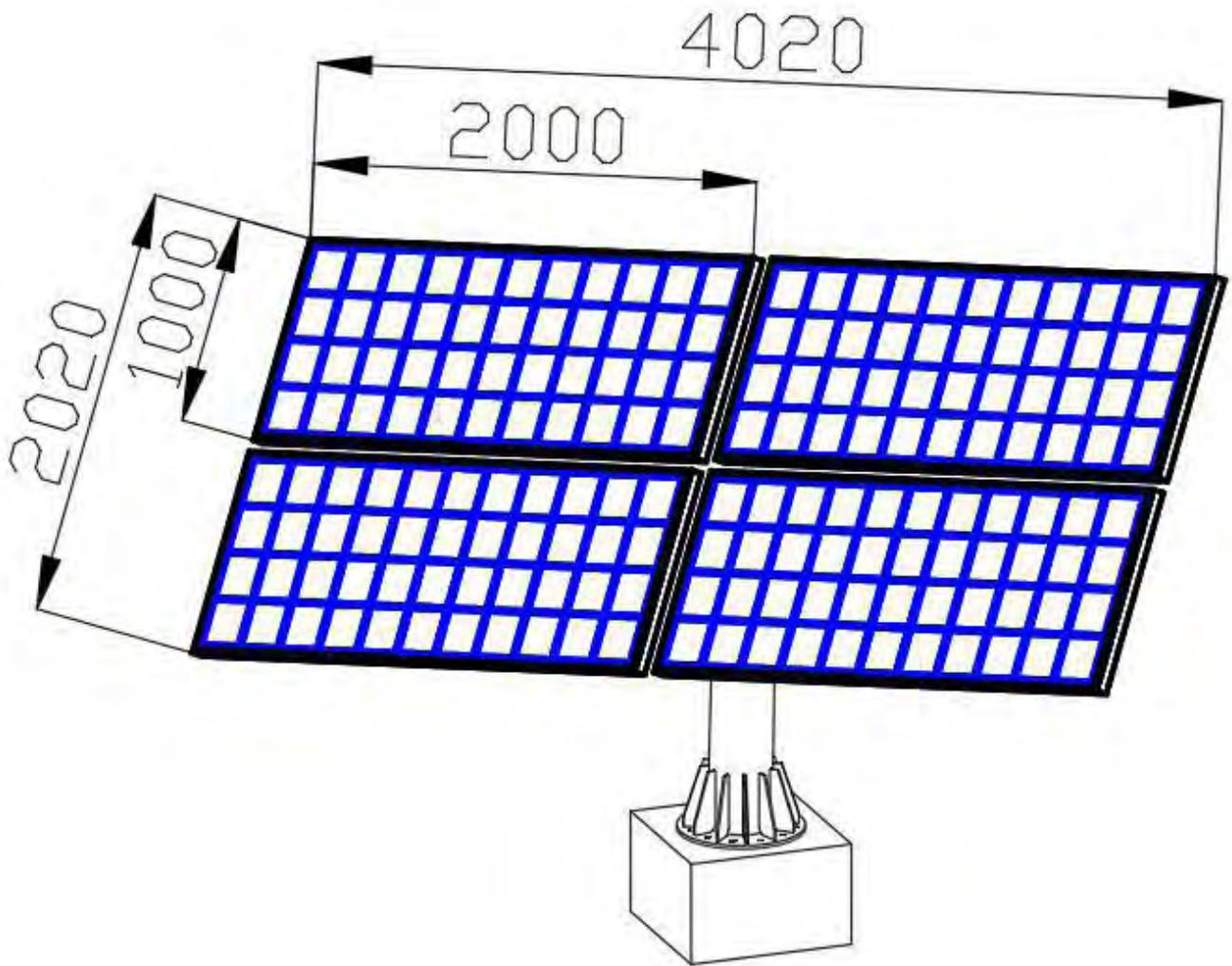
- ❖ 1. The solar tracker uses high-precision astronomical algorithm to calculate the sun's angle, combined with a high-performance microcontroller (DSP core), to make the system calculate the position accurately and reliably and to adapt to a wide range of operating environments without the interference of rainy days.
- ❖ 2. Selection of international first-line brand inclination sensor, real-time closed-loop feedback tracking angle, automatic tracking, without human intervention.
- ❖ 3. Self-developed back tracking algorithm to further improve the efficiency of power generation to ensure that the solar panels are always working on/in the shadowless state, increasing the solar power generation and prolong its service life.
- ❖ 4. Tracker has aviation plug connections, easy installation and commissioning, with manual control mode, you can manually adjust the tracking angle, the controller has a power station Running, Stop, Night return status indicator.
- ❖ 5. Strong anti-interference ability of the system, severe electromagnetic interference in the photovoltaic area with ease, its excellent electromagnetic compatibility design, is to ensure the system's high operational reliability.



- ❖ 6. Wind-resistant design, automatically flat to the initial position at night, the system has a wind speed protection interface, support for external wind speed sensor, at any time to control the system into the mechanical maximum wind conditions.
- ❖ 7. The system has a spare battery, to ensure that no data loss of the system power failure, automatically enter the running state after powering on.
- ❖ 8. System in  $-40 \sim +70$  degrees stable operation, no cumulative error
- ❖ 9. RS485-MODBUS standard communication interface, the computer software can read the device at any time providing the following information;
  - ❖ (1) Sun angle, inclination angle, operating status.
  - ❖ (2) Actuator, inclination, limit, communications fault alarm.
  - ❖ (3) Remote start, stop, reset, manual, wind, snow, rain.

Dual Axis Solar Tracker Main List( 4 pieces panel-1956x991mm)

Serial No.	Component Name	Size (mm×mm× mm)	Sketch map or Picture	Qty (Pcs/Set)
1	Solar Tracker Bracket	4020×2020×2500		1
2	Solar Tracker slewing drive	310×450×82		1
3	Linear Actuator	1380×150×100		1
4	Control Box	320×200×110		1
5	Inclination Sensor	250×250×40		1



### Solar tracker technical parameters

Module Number	4 units	Module Size	1956 x 991mm
Tracking Precision	$\leq 1^\circ$	Communicating Protocol	RS485-MODBUS
Power Supply	90~264VAC,47~63HZ	Electricity Consumption	$\leq 0.25$ (KW.h)
X tracking Angle	$-120^\circ \sim +120^\circ$	Y tracking Angle	$0^\circ \sim +60^\circ$
Bracket Area	$\approx 8$ m2	Operating Temperature	$-40 \sim +70$ °C
Bracket Material	Hot Galvanizing	Device Weight	$\approx 280$ KG
Standard	GBT 29320-2012	Design Life	$> 25$ years
Certification	CE,CQC, ISO9001, ISO14001, OHSAS18001		

