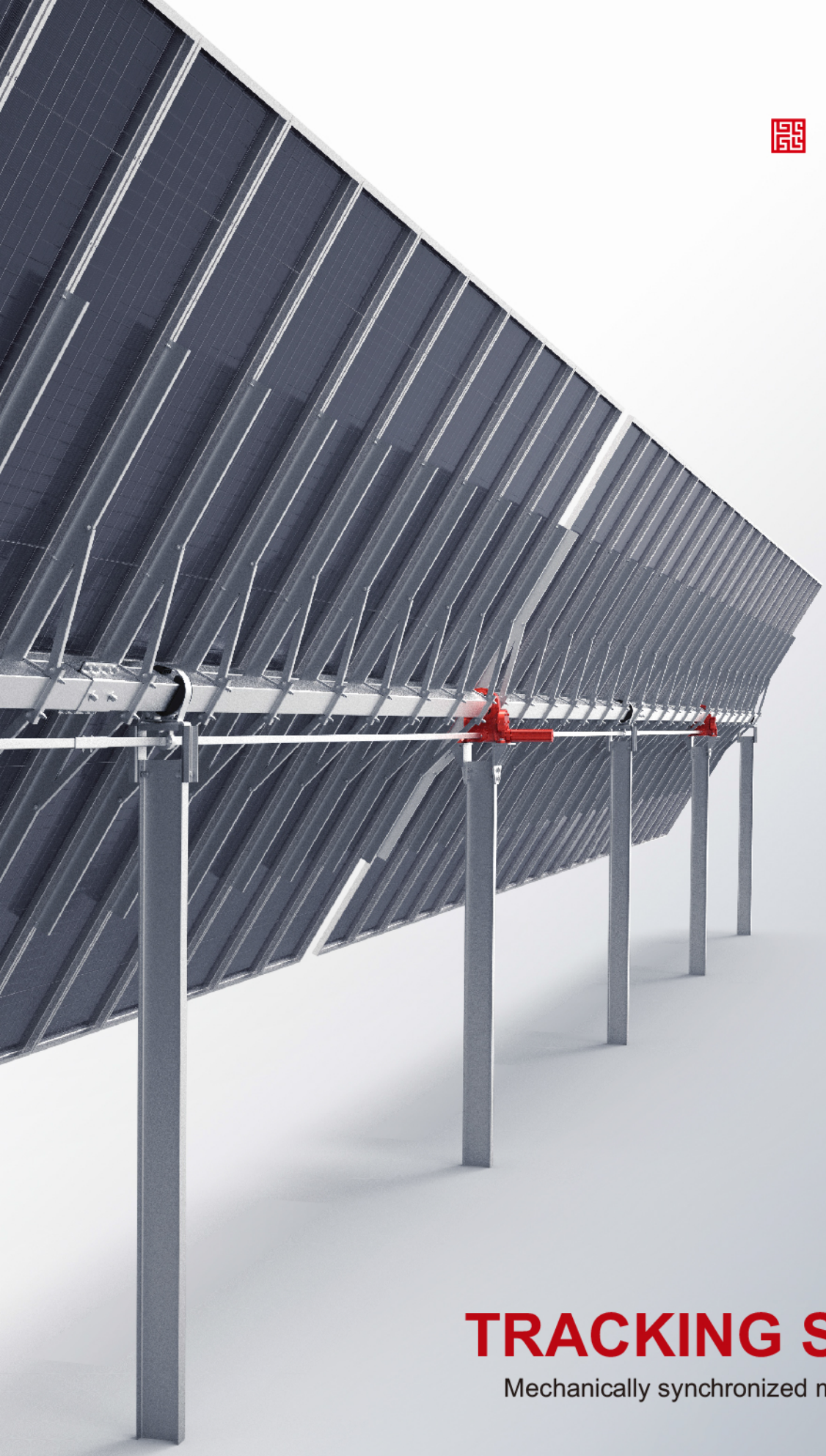
GRACE SOLAR



TRACKING SYSTEM

Mechanically synchronized multi-point drive - 2P

Xiamen Grace Solar New Energy Technology Co., Ltd

SYSTEM INTRODUCTION

Mechanically synchronized multi-point drive - 2P

Self-developed unique and highly reliable multi-point transmission tracking structure system, large torque tube, structure rigidity increased by 20%, can resist greater wind resistance, each row of trackers has 2 or more drivers, which is more improved accurate tracking accuracy and structural reliability, using the most advanced wind tunnel design, can adapt to multi-angle protection strategies, specifically designed for 182mm and 210mm large silicon high-power components.

Two artificial intelligence	AI control	Reliable and safe communication	Extreme Weather protection	Wind Tunnel Test Report
600W+	2.5m	LCOE	20%	25%
600W+ Module	Match module length up to 2.5m	Reducing LCOE cost	Slope can be adapted to 20%	Improving the efficiency by 15-25%

TECHNICAL SPECIFICATIONS

Mechanical Aspect	
Tracker's overall north-south length limit	≤ 138m
Number of Reducers per Tracker	2~4
Tracking range	± 60°
Material	Hot-dip galvanized steel + aluminum-magnesium-zinc plate
East-west land slope	Unlimited
North-south land slope	< 20%
Module arrangement	Single row Portrait
Ground clearance	> 500mm, (customizable)
Foundation form	Ramming post, PHC pile, Concrete
Standard wind speed	≤ 60m/s, (ASCE7-10)
Protection wind speed	18m/s
Mechanical tracking accuracy	± 2°
Land occupation rate	32%
Grounding method	Self-grounding
Electrical Aspect	
Drive way	Slewing drive / Linear actuator drive
Motor power	150W
Flat time	< 10 minutes
Controller	MCU
Control tracking accuracy	< 2°
Control mode	Astronomical Algorithm + Position Sensor Closed-Loop Control + AI Algorithm
Limit protection	Mechanical limit + motor hard limit + soft limit
Motor protection	Overheat protection, overcurrent protection, self-locking protection
Operating temperature	-30-+60℃
Protection level	IP65
Power consumption	< 0.04kWh/day
Power supply	String power supply/external power supply
Communication method	LoRa/Zigbee wireless communication or RS485
Signal transmission method	Wired / wireless optional

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