

TrinaTracker Smart Controller TCU

Track and Boost Your Energy



SuperTrack

Smart Tracking Algorithm & Smart Backtracking Algorithm
Increase energy generation by as much as 8%



Active closed-loop tracking control

32-bit high-performance MCU



Multi-function modes improve reliability

Strong wind protection mode
Manual snow removal mode



Multiple power supply

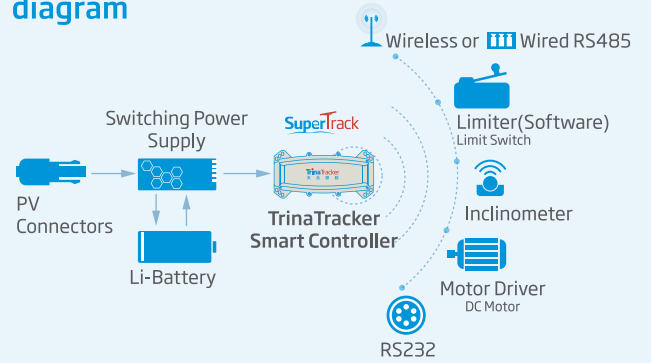
String-powered
Self-powered
AC-powered



Diversified & Stable communication modes

Wireless communication: LoRa/ZigBee
Wired communication: RS485 (optional)

Electrical schematic diagram



Warranty period of 5 years for TrinaTracker electrical components.



Characteristic Parameters

Input

String-powered Supply	300-1000V DC
Self-powered Supply	32-55V DC
AC-powered Supply	110V AC/220V AC

Output

Working Voltage	DC 24V
Rated Output Current	6.0A
Max. Output Current	10.0A

Battery

Battery Type	Lithium-ion Battery
Battery Capacity	3.0Ah (AC-powered, String-powered Supply) 6.0Ah (Self-powered Supply)

Power Consumption

Daily Energy Consumption	0.04kWh/day
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Smart Control

Tracking Algorithm	SuperTrack
Snow Mode	Yes
Hail Pattern	Yes (optional)
Wind Protection	Multi-Level Wind Protection
Reset Protection at Night Parking	Yes
Rotation Limit Protection	Yes
Motor Overcurrent Protection	Yes
Manual/Automatic Tracking Mode	Yes
Emergency Button	Yes

General Data

Certification	IEC62109/IEC62817/UL3703
Tracking Angle	up to $\pm 60^\circ$
Tracking Accuracy	$< \pm 1^\circ$
Wireless Communication	LoRa/ZigBee
Wired Communication	RS485 + Ethernet
Protection Level	IP66
Weight	$< 5\text{kg}$
Dimensions	426* 202* 118mm (L*W*H)
Environment Temperature	-30°C~60°C (String-powered/Self-powered) -40°C~60°C (AC-powered optional) ⁽¹⁾
Class II	Yes
Max Altitude	4500m

*1 Standard configuration. Different conditions under request, please consult TrinaTracker.

