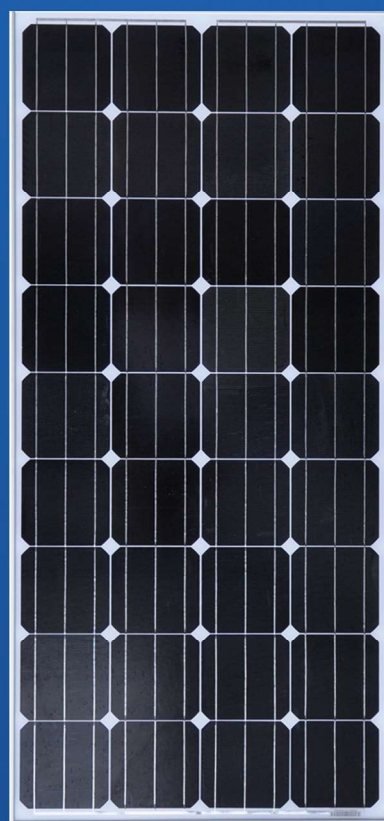




领鞅科技
LINGYANG TECHNOLOGY



Solar Tracker Control Box TCU

FD 40P-24D01



RECYCLABLE
PACKING



EU-28 WEEE
COMPLIANT

RECYCLABLE
PACKING



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Product Description

The tracking controller is self-powered the PV string without external power. it is a high intelligent PV tracking controller that automatically calculate the sun's trajectory and azimuth and the altitude angle of the location at any moment according to the local longitude, latitude, time. In the automatic mode, the system can automatically send tracking commands in accordance with the current position of the sun and control the operation of the motor actuator, eventually tracking the sun in real time and improving the power generation of the station.

Product Advantages

Water-proof Structure

—— Aviation plug facedown

Human-Machine Interaction

—— Easy clicking and debugging for less time and labour

IoT Cloud Platform

—— Long-distance operation and monitor

Load AI Module

—— The intelligent algorithm is further optimized by neural network

Product Features

Wireless one-key upgrade, wireless self-grouping, anti-shadowing tracking, wind, rain and snow protection, over-current and over-temperature protection and other intelligent functions. While equipped with NCU, SCADA, they can manage to make the system in different complex meteorological conditions to automatically switch between different working modes, for the protection of PV bracket in the case of high wind, heavy rain, heavy snow, the whole system without human intervention, fully automatic operation, furthermore, it's professional to provide users with PV tracking one-stop solution.



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Solar Tracker Control Box TCU FD 40P-24D01



System Datasets

Models	TCU-FD 40P-24D01 (Self-powered by independent components)
Types of tracking panel	horizontal single-axis / tilted single-axis panel
Drive systems	slewing reducer + DC motor / linear actuator + DC motor
Motor power	≤150W
Daily power consumption	≤0.1 kWh
Types of control	active tracking closed-loop control (astronomical algorithm + location feedback)

Mechanical Datasets

Sizes	262mm*182mm*120mm
Box material	polymer material Makrolon®6487
Water-proof level	IP65
Display interface	YES
Keyboard interface	YES

Electrical Datasets

Photovoltaic modules	60-120W
Types of power supply	PV series power supply (DC input) 32-48VDC
Output voltage	24VDC
Types of lithium battery	6AH (customized)
BMS battery management system	YES
Wind protection	YES
Nighttime reset protection	YES (confirmed)
Disturbing protection	YES (soft pounding protection, over current protection, over load protection)
Anti-shadow tracking	YES
Wind speed protection	10m/s-30m/s (3S) (customized)
Types of communication	ZigBee/LoRa (wireless) / RS485 (wired)
Angle range of tracking	±30°-±60° (customized)
Models of AI control	customized
Network background	customized
Work temperatures	-20°C-55°C

Note: Standard setting above. For customized