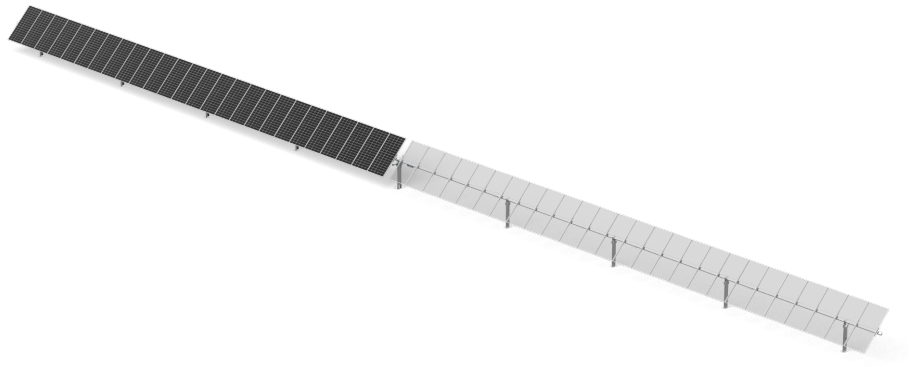


# TAI-Simple

Slew-Drive Single-Axis  
Independent Tracking System - 1P



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## DESIGN SPECIFICATION

|                                    |  |
|------------------------------------|--|
| <b>Tracking Type</b>               | Horizontal Single-Axis 1 Module-in-Portrait Tracker              |
| <b>Drive Type</b>                  | Single Point Slew drive  |
| <b>Motor Type</b>                  | 24V DC Motor   |
| <b>String Voltage</b>              | 1000 V or 1500 V (DC)  |
| <b>Tracker Length</b>              | Up to 97m  |
| <b>Tracker Configuration</b>       | Up to 3 strings (1500V DC)                                       |
| <b>Module Number</b>               | Up to 90 modules (depending on module size)                      |
| <b>Ground Coverage Ratio (GCR)</b> | >25%   |
| <b>Modules Support</b>             | All Commercial Modules (210/182/166)                             |
| <b>Stow Position</b>               | 30° (configurable, depending on the project requirement)         |
| <b>Tracker Rotation Range</b>      | Up to $\pm 60^\circ$   |
| <b>Operating Temperature Range</b> | -30°C to 60°C  |
| <b>Foundation Type</b>             | Ramming/Pre-drilling/Concrete Pile/PHC                           |
| <b>Anti-Corrosion Coating</b>      | Pre-Galvanized/Hot-dipped Galvanized/Magnesium Zinc Coated Steel |
| <b>Allowable Wind Speed</b>        | Up to 55 m/s per ASCE 7-10                                       |
| <b>Slope Tolerances</b>            | N-S: Up to 20% (11°)   |

## ELETRONICS & CONTROLS

|                                      |   |
|--------------------------------------|---|
| <b>Control System</b>                | 1 controller per tracker  |
| <b>Power Supply</b>                  | 300-1500VDC String Powered, 90-264VAC Powered, Backup lithium battery |
| <b>Solar Tracking Algorithm</b>      | Astronomical Algorithms+Intelligent Algorithms                        |
| <b>Controller Energy Consumption</b> | About 0.05 kWh/Day  |
| <b>Tracking Accuracy</b>             | $\pm 2^\circ$   |
| <b>Communications</b>                | Zigbee Wireless Mesh Network/ Ethernet or RS485 Cable                 |
| <b>Nighttime Stow</b>                | Yes   |
| <b>Backtracking</b>                  | Yes (3D optional)   |

## INSTALLATION & SERVICE

|                                 |   |
|---------------------------------|---|
| <b>Onsite Training</b>          | Yes   |
| <b>Installation requirement</b> | No special tools required   |
| <b>Warranty</b>                 | Up to 10 Year Drive and Control, 15 Year Structure, 5 years Batteries |
| <b>Certifications</b>           | UL3703/CE/UL2703/IEC62817   |