

# AP90 2.5 - 1500V SINGLE-AXIS TRACKER

The 2.5 is the latest evolution of the extensively deployed AP90 Single Axis Tracker. AP90 has proven superior performance for over 10 years of tracking in extreme conditions across 12 countries on 4 continents. The AP90 2.5 offers greater power density, a smarter controller and lightning fast installation through innovative new features and lower part count.

Designed specifically for worldwide manufacturability and quick installation, the AP90 tracker leads the industry in total cost of ownership.



## ROBUST DESIGN

- High design margins
- Fewest motors per MW
- Patented DC wire management



## PROVEN RELIABILITY

- Wind tunnel & lifecycle tested
- UL & PE certified
- Proven performance in extreme climates & terrain



## HIGH QUALITY COMPONENTS

- Rigorous quality control process
- Defect-free fabrication methodology
- Pre-shipment functionality tested



## OPTIMIZED FOR INSTALLATION

- No specialized tools/equipment
- Designed for offsite subassembly
- Lowest man-hours per MW



## LOWEST MAINTENANCE COST

- Maintenance free bearings & connections
- Zero structural failures in more than 10 years of operation



## BANKABLE

- > 1GW fleet installed in 12 countries
- Globally endorsed by IE's
- Up to 25% higher yield over fixed tilt

# AP90 2.5 SINGLE-AXIS TRACKER - 1500V

## TECHNICAL SPECIFICATIONS

Tracker Type	Horizontal single-axis tracker with backtracking
Tracker Capacity	Up to 1240 modules per tracker block
Wing Layout	Up to 31 modules in portrait orientation (62 modules per row)
Number of Rows	Up to 20
Control Modes	Auto (tracking), manual (maintenance), emergency (stow)
Tracking Range	$\pm 50^\circ$
Communications Bus	Modbus RTU/RS485
Maximum Wind Speed	168 kmph (105mph) in stow position
Tracking Drive Unit	Centrally located screw jack with NEMA 4X rated VFD motor
Power Supply	380 V ~ 480 V, 3-phase, and/or 1500V DC string power
Ground Coverage Ratio	Variable: From 33% to 50%
Codes & Standards	UL-certified components, PE-certified structures
Operation Temperature	$-40^\circ\text{C}$ to $55^\circ\text{C}$
Maximum Snow Load	40 psf
Foundation Types	Driven pile and/or concrete caisson
Integrated Grounding	Yes
Integrated Wire Management	Yes



## SITE LAYOUT (20-ROW BLOCK)

Footprint (33% GCR)	62 modules per row: [4573" (116.2m) x 2598" (66m)]
Minimum Ground Clearance	18" (0.45m)
Land Grading Tolerances	E-W $\pm 5.0^\circ$ (Terrain following, bed frame section must be horizontal) N-S up to $\pm 3.5^\circ$ deg (post heights vary to maintain level torque tubes)
Foundation Installation Tolerances	North/South: $\pm 1"$ ( $\pm 25\text{mm}$ ) East/West: $\pm 1"$ ( $\pm 25\text{mm}$ ) Height: $\pm 1"$ ( $\pm 25\text{mm}$ ) Twist: $\pm 1^\circ$ and/or Plumb $\pm 1^\circ$
Specialized Equipment	None. No in-field welding required.



For more information, visit [www.ftcsolar.com](http://www.ftcsolar.com)  
For Tracker support, contact us at [trackers@ftcsolar.com](mailto:trackers@ftcsolar.com)