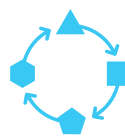


TECHNICAL DATASHEET TRACKER



HIGH FLEXIBILITY

Designed to meet diverse project requirements, the tracker system offers flexible configurations to suit various site conditions and module layouts.



GREAT ADAPTABILITY

Engineered to perform reliably under different climate, terrain, and load conditions, ensuring consistent performance across all project environments.



EASY ASSEMBLY

Pre-engineered components enable fast and simple installation, reducing on-site labor time and overall project costs.

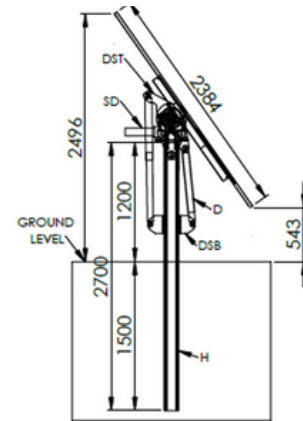
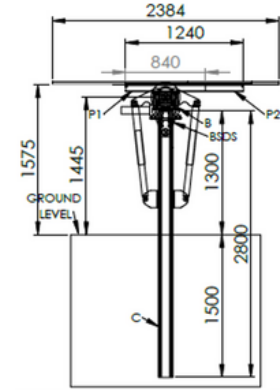


MINIMUM MAINTENANCE

Robust design and high-quality materials minimize maintenance needs while ensuring long-term, trouble-free operation.

GENERAL AND MECHANICAL CHARACTERISTICS

String Configuration	1500V / 1000V
Configuration	1x module in portrait
Tracking range of motion	±55°
Row Size	1P × 14 / 28 / 42 / 56
Motor	Brushless DC
Materials	Hot-dip Galvanized Steel or Magnelis
Ground Mounting Methods	Pile Driving, Pre-drilled, Ground Screw and Concrete Anchor
Operating Temperature Range	Self Powered: -20°C to 60°C (-4°F to 140°F) AC Powered: -40°C to 60°C (-40°F to 140°F)
Wind Speed	Up to 45 m/s (IEC 62817 compliant)
Wind Protection	Automatic stow based on real-time wind speed and direction data
Stow Position	Flat Stow
Slope Tolerances	North-South: up to 15%, East-West: up to 10% (terrain-adapted with 3D backtracking)



ELECTRONIC AND CONTROL CHARACTERISTICS

Solar tracking method	3D Backtracking algorithm (terrain-adapted, minimizing shading, with stow positioning support under wind and snow conditions).
Communications	RS485 (Modbus RTU) wired or ZigBee (2.4 GHz, AES-128 encryption) wireless communication; all TCUs are remotely managed and monitored via the NCU.
Night Protection	Battery and UPS-supported operation ensures safe stow position during the night and continuity of morning/evening movements.
Power supply	Available in AC (100–277 V), string-powered, or self-powered with internal battery options. UPS and backup battery support ensure power continuity.
Operator interface	Suntrack Field Service mobile app featuring an advanced HMI with SCADA integration.
Sensors	Wind speed and direction sensors, optional snow sensor support.

SERVICE, WARRANTY AND REGULATORY COMPLIANCE

Operation Monitoring	Continuous monitoring and optimization through the 3D Backtracking algorithm, iStow (wind/snow stow) Winter Mode, and dynamic limits for safe and efficient operation.
Warranty	10-year structural, 2-year drive and controls standard; extended warranty available. (may extend)
Codes and Standards	Compliance with IEC 62817 (Solar Tracker Design Qualification), IEC/EN 61000 series (EMC), IEC 61010 (Electrical Safety), UL/ETL certifications, and CE marking in accordance with international standards.