Technical Datasheet

1P - Horizontal Single Axis Tracker

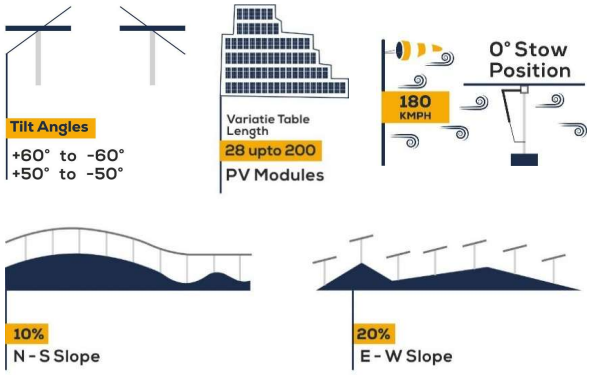


SUPPLYING STRUCTURES
Deploying Trust

Sunchaser horizontal single-axis tracker is engineered for maximum stability through a material-optimized architecture and rigorous quality assurance protocols.

By utilizing a multi-drive design principle validated by advanced wind tunnel testing from industry-leading experts, the system provides a robust, risk-minimized solution for utility-scale & AgriPV applications. This structural sophistication ensures high mechanical reliability and long-term durability even in challenging environmental conditions.

The control system provides standard tracking algorithm along with adaptive backtracking for different tracker orientations to optimize the incident sunlight on the PV modules. With a complete in-house production capability and a global delivery of over 2 GW in structures, Sunchaser is a unique partner for structural solutions for ground mounted PV systems.

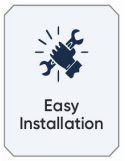


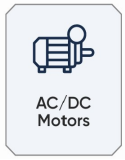


DESIGN SPECIFICATION	Tracker Type	1P - Horizontal Single Axis Tracker 1P-HSAT
	Drive Strategy	Distributed Multi Drive
	Drive Motor (Electric Motor)	24V Geared DC-Motor
	Power Input	230V, 50Hz Optional: PV Module/ DC-String
	Foundations	C-Pile Earth screw Concrete
	Operating Temperature	-20° to +55°
	Tracker-Length	Variatie tracker length from 26 up to 200 Modules
	Operating Angle	± 60°
	Module Types	all framed Modules
	Stow-/ Night Time Position	0° to 5°
	Wind-Protection	Up to 60 km/h with tracking Up to 180 km/h in storm position
	Cleaning-Position	45° (configurable)
	Ground Slope	North to South up to 10%, East to West – 20 %
	Design-Principles	Eurocode 0 - basics Eurocode 1 - actions on structure Eurocode 3 - steel construction EU- Machine directive 2006/42/EC
	Corrosion Resistance	min. C3
	Materials Specification	Hot-dip galvanized (HDG) Avg. 80µm / Magnelis ZM310
CONTROL SYSTEM	Controller Strategy	Independent on Each Tracker
	Table Control Unit	Time, GPS, Bi-Directional
	Tracking-Algorithm	Astronomical Algorithm (AA)
	TCU Communication	Wireless - LoRA Optional - Modbus RS485
	Monitoring-System	ChaseX Web/Cloud Based - on Subscription
	Sensoric	1 tilt sensor per Tracker Wind sensor Snow or Flood sensor
	Tracking Accuracy	≤ 2°
WARRANTY	Structure Warranty	15 Years
	Electronics & Controller Warranty	5 Years
	Drive Part Warranty	15 Years
	Corrosion Warranty	15 Years
	Spare Supply Guarantee	25 Years





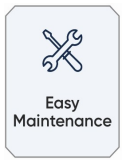












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