

Sigma TR2

Single Axis PV Tracking System



Reliable technology – standard industry components

Mounting Systems presents its stable and innovative single-axis, single-post PV tracker system. Based on standard industry components, with self-locking linear actuators on each single post as part of a fully encapsulated drive system, Sigma TR2 is the standard of reliability, durability, and simpleness.

Designed with two main goals in mind: Firstly, to achieve static stability and minimize vibrations during operation, and secondly, to create a smooth and low friction system that will ensure a low level of energy demand. The Sigma TR2 can withstand wind speeds of up to a remarkable 260 km/h.

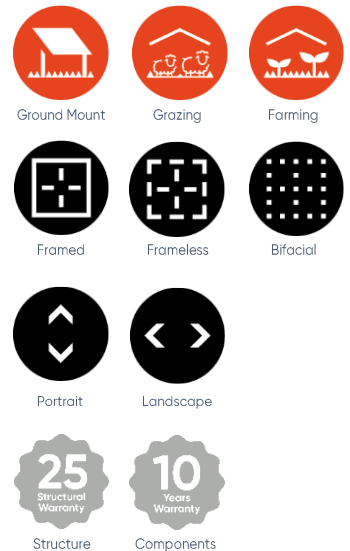
Open interfaces, variety of functionality

Not only standard sun-tracking, adaptive back-tracking (with or without offset), snow management, various farming modes as well as low light management are readily available.

Based on standard PLC software and operated through a Web-based user interface, Sigma Control® allows to design and seamlessly integrate customized functionality.

Agri PV

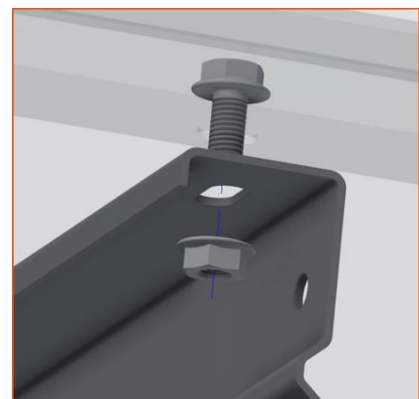
With a fully encapsulated and overhead mounted drive system and various special operating modes (farming modes), Sigma TR2 is designed for use in agricultural environment. The drive system is protected against effects from fertilization and irrigation.



| | |
|-----------------------|--|
| Application | Horizontal single-axis solar tracking Back-tracking with & without offset. Wind management & zoning Snow management Low light management Cleaning mode Farming mode & crop rotation management |
| Module types | Framed modules, Dual-Glass-Modules Laminates |
| Module fastening | Always according to module installation manual Bolts incl. grounding |
| Module layout | 2V / 2P (vertical, portrait) 4H / 4L (horizontal, landscape) |
| Bifaciality | Optimized Bifaciality with < 1% rear side shading |
| Operating angle | +/- 60° with optional seasonal adjustments |
| Tracker length | Up to 125 m – Flexible string-based configuration with up to 234 panels per drive / tracker row |
| Wind protection | Up to 90 km/h with tracking Up to 260 km/h in storm position |
| Ground slope | Up to 10° along tracker row Up to 25° across tracker row |
| Operating temperature | -25 to +50°C ambient temperature |
| Design principles | Eurocode 0 – basics Eurocode 1 – actions on structures Eurocode 3 – steel construction |
| Foundations | Drive C-pile (HDG) Earth screw (HDG) Concrete |
| Power Input | 400V, 50Hz, 0.55 kW per tracker row Optional: 230V, 50 Hz/60 Hz |
| Control unit | Sigma Control ® SPS MODBUS RS485 communication Park wide fiber optics network SCADA interface over Modbus/TCP |
| Plant monitoring | Sigma View® Web based GUI |
| Sensors | 2x tilt sensor per tracker row Wind sensor Snow sensor |
| Warranty | 25 years structural warranty 10 years structural parts warranty 5 years drive component warranty |



Linear Drive System



Module fastening including grounding

For further information please contact projects@mounting-systems.com.