

SCHLETTER TRACKING SYSTEM 1V/1P

PRODUCT SHEET

- + Accommodates large format & bifacial modules
- + Mounting flexibility maximizes module load bearing capacity
- + Light and robust design incorporating high strength steel
- + Stable as a fixed tilt tested in wind tunnel
- Suitable for Agri-PV applications
- Low LCOE due to durable design,
 efficient mounting and foundation



INDEPENDENT SELF-LOCKING ROWS WITH ± 60° ROTATIONAL RANGE (120° TRACKING RANGE)

Each row has a unique and patented method of self-locking at each post in every position, additional dampers are not required. The danger of "galloping" is completely avoided. This provides a higher level of investment security. In addition, a wide rotational range of $\pm\,60^\circ$ provides more energy during the day.



Girder assembly with drive and control unit



Tracking system in locking position



Tracking system in stepping position



TECHNICAL SPECIFICATIONS

Scope of application	Horizontal single axis tracker (SAT)
Material	Galvanized steel / zinc flake coated steel / stainless steel
Structural analysis	Structural analysis based on recognized engineering standards. Verification of structural safety of the mounting system is based on Eurocodes and general construction approvals. The load assumptions comply with DIN EN 1991-1, ASCE 7-05/10/16 and the regulations of the national annex. Any instructions on required certification and approval must be observed.
Module configuration	• 1 module row in portrait configuration
	• Up to 3 strings installable
	• Max. module size: 2500 x 1350 mm
Fastenings	Suitable for installation with a fast-clamping system
Installation effort	Easy installation due to pre-assembled components (optional)
Tracking range	120° (± 60°)
Power per tracker	Approx. 45 kWp (depending on module type), max. 90 modules ≈ 225 m²
Max. Dimensions	• Length per tracker: 90 m / 300 ft
	• Width per tracker: 2,5 m / 8 ft
	• Height per tracker: 3 m / 10 ft (with 0,5 m / 1,6 ft ground clearance)
Drive system	24 V DC motor, grid-powered system (optionally self-sufficient)
Noise emission	< 70 dB(A)
Flood protection	1.0 m / 3 ft clearance for electrical components
Ground maintenance	Free passage between tracker rows
Tracking system	Astronomical
Positions	• Stow position: 8° • Backtracking: ✓ • Snow position: ✓ (optionally)
	• Night position: 8° • Maintenance position: ✓
Monitoring system	Network Control Unit / SCADA interface
Communication & Control System	Grid-powered control unit for each row / ZigBee communication (RS485 option available)
Compliance	UL 3703 / CE 2006/42/EC / DIN EN 62817 / TIL No. A-41



Protection class	IP54 / IP65 / NEMA 4x
Corrosion class	Standard C3, optional C4 or more
Operating temperature	-25°C to + 60°C / -13°F to 140°F
	(-10°C to + 50°C / 14°F to 122°F with UL 3703 compliance or self-sufficient drive system)
Foundation	C-Profile
Max. slope	N-S 10°, E-W 10° (Project-specific structural verification required.)
Max. wind speed	• Tracking mode: up to 56 km/h / 35 mph (3-sec. gust)
	 Storm position (standard): up to 167 km/h / 105 mph (3-sec. gust)
	• Storm position (on request): up to 257 km/h / 160 mph (3-sec. gust)
	(The exact max. wind speeds are calculated on a project-specific basis.)
Warranty	10 years on structural components;
	5 years on drive, battery and control systems.
	Extended terms available.
Supplementary documents	Original operating manual Schletter Tracking System 1V/1P - Part 1 Assembly and installation
	• Original operating manual Schletter Tracking System 1V/1P - Part 2 Operation and maintenance