

ETATRACK active 2000-A Single-axis Tracking System for PV Modules

Characteristics

- total module surface up to c. 20.5 m²
- no failure-prone light sensor
- no unnecessary tracking movements
- low power consumption (c. 1.5 kWh/year)
- statics according to German and European standards
- high reliability and life-expectancy
- maintenance-free
- cost-efficient tracking system



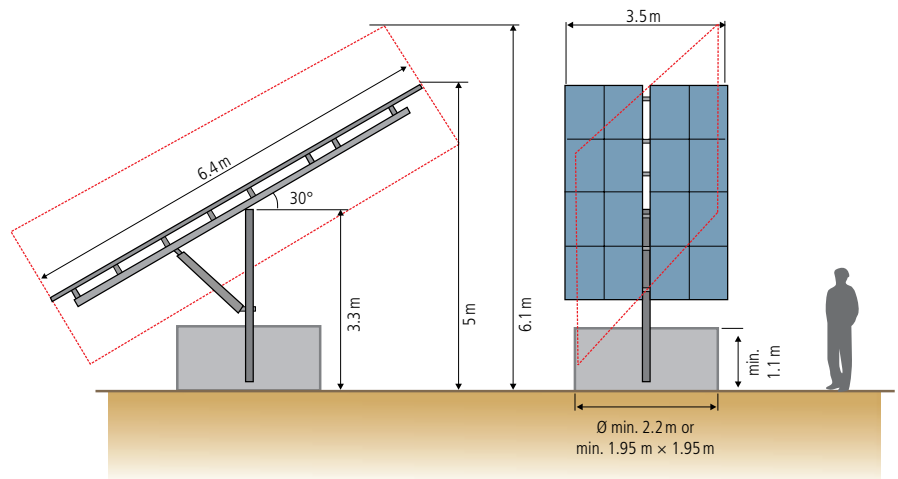
Application

- single-axis tracking system for PV modules*
- additional energy yield of up to 40 % compared to fixed installations

Design

Tracking Unit

- single-axis tracking system
- angle of second axis adjustable 0–45° in steps of 5°
- elevation East-West: 90°
- module surface up to c. 20.5 m²
max. dimensions of mounted frames (supportive area, installation area PV modules): width: 3.5 m, height: 5.9 m, up to four rows of PV modules in upright position
- frame and pole: steel, hot-dip Zn-coated
- screw set: steel, Zn-coated
- module clamps made of stainless steel for mounting the PV modules using the holes in the module frame, incl. M6 stainless steel screw kits
- suitable for high wind speeds: statics according to German and European standards
- low energy consumption c. 1.5 kWh/year
- maintenance-free



Example: system dimensions with 16 PV modules, c. 1.6 m × 0.8 m

Control

- electronics incl. battery in plastic housing
- supply voltage: 12V DC (nominal voltage) up to 50Voc (open-circuit voltage), by one of the tracked modules**
- stepwise tracking, depending on the daily sunshine duration (length of day)
- South position in darkness
- synchronisation of multiple units possible

Drive

- DC linear drive
- maintenance-free

Foundation

- concrete foundation with steel reinforcement (min. 4 m³)

Included in Delivery

- kit tracking unit
- control
- drive
- module clamps (cf. design): 64 sets per tracking unit for 16 PV modules
- installation manual
- optional: mounting clamps (J-clips), 48 sets per tracking unit, for mounting the PV modules with middle and end clamps

* for framed PV modules according to IEC 61215, UL 1703

** For safe operation in specific system designs, an additional small module might be necessary. Cf. installation manual.