Datasheet
sonnen_system_3_60

sonnen_systeme
Projektgesellschaft mbH

Photovoltaic tracking systems with safety advance

In cooperation with leading german manufacturers from different branches, *sonnen_systeme* developed an biaxial tracking system for a maximum module surface of 60m², which combines proven remedies with new concepts and techniques.

An astronomical tracking system Increases the output by 35% or more compared with fixed systems. The high- precision astronomical control of the sonnen_system made by *sma* is integrated in communication of the *sma*- inverter. This causes important benefits with remote maintenance and control via internet.

We attach great importance to the safety of our systems, because in the past storms and lightnings caused numerous damages to photovoltaic tracking systems all over europe, which are avoidable. For this reason we adopt wind warn device from the renowned company *Thies*, for example.

Main dimensions

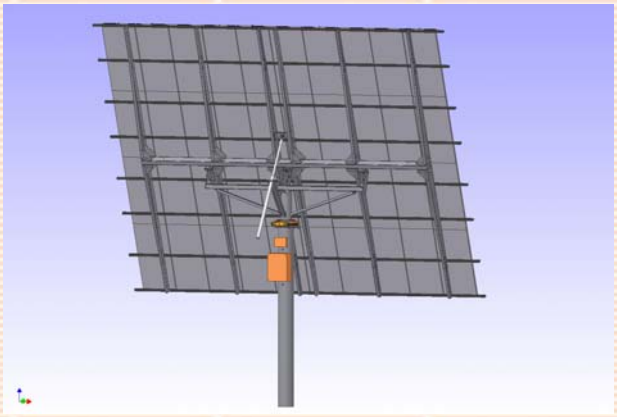
Possible size of the module surface	(depending on profiles and type of modules)	45 up to 60 m²
Capacity	(depending on type of modules)	6,5 up to 8,5 kW
Maximum height x width of the module surface	(depending on the profiles and module type)	7,2 m x 9,4 m
Supporting construction without profiles	(width x height)	7 m x 6,4 m
Maximum installation height	(upper edge of the surface above ground niveau)	25 m
Standard height of the mast		3 and 4 m
Diameter of the mast and thickness of coating		355,6 x 5,6 mm

Mechanics

Permitted wind load	
70°- position:	up to max. 13 m/s = 46,8 km/h = 6 Bft
„table"- Position (0°):	up to 32,7 m/s = 118 km/h = 12 Bft
Weight without modules, profiles and mast	appr. 670 kg
Adequate carrying capacity	1200 kg

Driving components

Azimuth	electrical driven slew drive
Elevation	electromechanival lifting spindle
Driving motors	
Nominal voltage	12 V DC
Power consumption	62,4 W
Gear	planetary gear
Mounting of the elevation axle	Triple ball beared in stainless steelhousing pillow units
Azimuth axle	270 °
Elevation axle	0 up to 70 °



Safety

Lightning protection class	one
Protection category	IP65
Wind warn device is activated at a wind speed of	13 m/s
Overdrive voltage of elevation drive	24 V DC
Duration moving overdrive	appr. 5 min
Non- stop power supply	
Nominal voltage	24 V DC
Battery capacity up to 3 days depending on the number of systems	

Electrics

Operating voltage	24V DC
Nominal voltage	ca. 110 W
Control unit	biaxial, astronomical

sonnen_systeme Projektgesellschaft mbH
Kirchner&Dippel
Auf der Welle 8
36211 Alheim-Heinebach

Telefon:+49 (0)5664 93911-40
Telefax:+49 (0)5664 93911-49
e-mail: info@sonnen-systeme.de
web: www.sonnen_systeme.de