# Data sheet sonnen\_system

3\_30 / 3\_40 / 3\_60

# sonnen systeme

Projektgesellschaft mbH

### Performance Overview



- Biaxial tracking system for photovoltaic installations
- Local astronomical control
- Additional yield up to 40% compared to stationary plants
- Comprehensive safety concept
- Central monitoring via Internet
- Track back process in order to prevent the tracking system from shadowing each other
- Permits installation to buildings
- Guarantee 2 years
- Suitable for every type of framed modules

|  | sonnen_system 3_30                    | sonnen_system 3_40  | sonnen_system 3_60                    |  |
|--|---------------------------------------|---|---------------------------------------|--|
| Dimensions   |                                       |   |                                       |  |
| Size of module surface   | approx. 19 <b>—</b> 35 m <sup>2</sup> | approx. 36 <b>–</b> 45 m <sup>2</sup>                       | approx. 46 <b>–</b> 60 m <sup>2</sup> |  |
| Size of supporting structure without profile rails (width x height)            | 5 m x 3,8 / 5 m                       | 7 m x 5 m   | 7 m x 6,4 m                           |  |
| Maximum installation height (upper edge of module surface above ground niveau) | 25 m                                  | 25 m  | 25 m                                  |  |
| Weight without mast, profile rails and modules                                 | approx. 525 kg                        | approx. 620 kg  | approx. 670 kg                        |  |
| Components   |                                       |   |                                       |  |
| Steel construction   |                                       | hot-dip galvanised acc. to DIN EN 1461                      |                                       |  |
| Azimuth  |                                       | electromechanical slew d <mark>rive</mark>                  |                                       |  |
| Elevation  | electromechanical lifting spindle     |   |                                       |  |
| Planetary gear   | azimuth: 400 : 1   elevation: 225 : 1 |   |                                       |  |
| Safety   |                                       |   |                                       |  |
| Monitoring   | monitori                              | monitoring system for the entire plant via SMA Sunny WebBox |                                       |  |
| Wind alert system actuates at wind speed                                       | ≥ 13m/s                               | ≥ <mark>1</mark> 3m/s                                       | ≥ 13m/s                               |  |
| Lightning protection class (exterior lightning protection)                     | one                                   | one   | one                                   |  |
| Type of protection   | IP 65                                 | IP <mark>65  </mark>  | IP 65                                 |  |
| Voltage monitor actuates at  | ≤ 24V / DC                            | ≤ 24V / DC  | ≤ 24V / DC                            |  |
| Uninterruptible power supply   | 44                                    | 44 / 55 Ah depending on the quantity of sonnen_systeme      |                                       |  |
| Performance  |                                       |   |                                       |  |
| Capacity of PV-generator (depending on module type)                            | 2,7 — 4,9 kWp                         | 5,0 <b>–</b> 6,5 kWp  | 6,6 — 10 kWp                          |  |
| Angular range  |                                       | azimuth 270°   elevation 70°                                |                                       |  |
| Angular accuracy   |                                       |   | by 0,5°                               |  |
| Operating voltage  | 24 V / DC                             | 24 V / DC   | 24 V / DC                             |  |
| Nominal power  | max. 110 W                            | max. 110 W  | max. 110 W                            |  |

# Professional control, Data management and Monitoring



#### **SOLTRK**



- Local control developed in cooperation with SMA for the sonnen\_system
- Astronomical control permanently calculating the current position of the sun
- Area of operation: between 25° and 65° N/S, as well as between the longitudes 180° E and 180° W
- Administration and remote operation via Sunny WebBox
- Interface for communication with Sunny WebBox and inverter via RS485

## SMA SUNNY WEBBOX



- Collection of the energy yield
- Parameterisation and remote control of SOLTRK
- Permits data management by 25 sonnen\_systeme
- Uninterrupted monitoring of the system data
- Integrated web server for online access to the current data by PC or Sunny Portal
- Diagnostics and configuration of the system by any type of PC
- Data logging on SD card

#### **SMA SUNNY PORTAL**



- Free of charge data filing
- Visualisation of the measured values from SOLTRK
- Status- and fault reports per e-mail to PC, mobile phone and PDA
- Visualisation of the measured values of the system
- Remote monitoring

#### sonnen systeme

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