



## **Schletter Solar Mounting Systems**

### *Open area systems and car port systems*

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## 1 General

### Economic open area plants

The Schletter Open area system has been designed in order to provide an economic and convenient mounting solution that allows open area plants in almost any landscape situation. Schletter has reduced the total cost for extensive PV plants by utilizing hydraulically pile-driven metal supports. These metal supports that are pile-driven into the ground render the utilization of concrete foundations unnecessary and thereby save both work and material cost.

The measurements and the design of the system depend on the exact and detailed analysis of the respective area, including a soil analysis and pressure tests and also on the wind and snow loads that impact the specific area.

Alternatively, the PvMax3 system allows open area mounting onto concrete foundations in cases in which the FS system is not economic due to the size of the plant or is not feasible because of the soil structure.

**State-of-the-art manufacturing options grant a rational manufacturing of standard components, as well as a swift and flexible realization of special constructions on customer request.**

The quality supervision is carried out according to DIN ISO 9001:2000. Being a founding member of the RAL-Solar, we also promote a company-independent, overall further development of quality standards and a professional definition of interfaces between the areas of competence.

**We grant a voluntary 10-year warranty on our system components.**  
Further certifications of our systems are TÜV-Proof and VDE-GS, for example.



Further information on the different systems is summed up in product sheets and application hints:

➔ This sign always hints to further documents

## 2 FS system

- No soil sealing
- Extremely short mounting time
- Maximum level of prefabrication
- Application for patent filed at the German patent office
- Perfectly synchronized system components
- High durability due to ideal material combinations
- Optimum accessibility for terrain maintenance (central support)
- 10-year warranty – like on all Schletter systems (optionally 20 years)



The FS open area mounting system has been applied for many years in numerous projects in Germany and all over Europe.

Individual system statics and an optimum material utilization take into account the cost pressure that is constantly increasing especially in the sector of open area systems. All verifications of structural safety are carried out consistently and without compromise according to the current state of standardization.

Experiences gained in many projects on a two-digit MW scale and a consistent further development of the whole construction on the basis of simulation calculations have been integrated in the 6th generation of FS systems. In this process, all possibilities of in-house pre-fabrication have been utilized in order to optimize the mounting time on the construction site.

Due to the perfectly harmonized connection of the module elevation to the especially optimized pile-driven foundations, an optimal price-performance ratio is obtained.

Based on the soil analysis of the site and according to the wishes of the customer concerning the arrangement of the modules, a mounting rack is usually completely optimized for each individual case. The foundations are dimensioned considering the occurring loads and are produced individually. A minimal mounting time is reached by the usage of just a few components and by convenient adjustment possibilities of the rack.



- ➔ FS product sheet
- ➔ FSGeo product sheet
- ➔ FSProtect product sheet

### 3 System FSVario

The inexpensive tracking system  
 on the basis of the well-proven FS open area systems!

- Perfectly synchronized system components
- Optimum accessibility for terrain maintenance (central support)
- No soil sealing
- High durability due to ideal material combinations
- Extremely short mounting time
- 10-year warranty – like on all Schletter systems



The FSVario system is a consequent further development of the FS open area system series.  
 The reduction of the number of mechanical interfaces and the purposeful abdication of automatic control systems result in a very cost-efficient construction of the FSVario System and the utilization of high-value materials and a favourable mounting time at the same time.

A decentral manual adjustment device is integrated in the column base. The complete module row (length about 12m) can be tilted around its axis of gravity without problems by one person simply by unfixing the clamping at each support. Thereby, a very inexpensive seasonal adjustment of the elevation angle is possible with this system.

➔ FSVario product sheet



## 4 System PvMax3

- Stability and high durability
- All components made of aluminium
- Perfectly synchronized components
- Dimensioning according to the currently valid national norms
- 10-year warranty – like on all Schletter systems



**PvMax3** is a universal unit assembly system made of 100% aluminium. Due to a consequent further and new development on the basis of its predecessor PvMax2 and the profiles from the IsoTop program that already have been well proven thousands of times, the load bearing characteristics could be significantly improved, and at the same time both the mounting effort and the rack price could be significantly reduced. With smaller plants, an optimum cost-performance ratio is reached in most cases due to the extensive standardization, in case of bigger plants or special plannings we can plan a material-optimized mounting rack on short notice using a special program - usually, only low extra planning costs occur in such cases, and these low extra costs are compensated by the perfect optimization of the material utilization. The soil surface area remains accessible in an optimum manner and can be used for sheep grazing, for example.



➔ PvMax3 product sheet

## 5 System PvCombi

The well-proven modular system for open areas with optimized super-imposed loads!

- Designed especially for the application on landfill sites on the basis of the PvMax3 system
- Reduced soil pressures due to minimized foundation weights
- 10-year warranty – like on all Schletter systems

Especially on landfill sites it is mostly not possible to use grounding piles because of a membrane sealing. Also the necessary weights of the concrete foundations are very often a big problem on landfill sites. The systems with the PvCombi design are especially optimized for these application cases by interconnecting the rows. Due to the extended base contact area and the thereby reduced moment of tilt, the structural safety can be reached with less weight loads.



➔ PvCombi product sheet

## 6 System Park@Sol Carports

Parking areas with solar car ports provide a welcome completion for the extensive use of photovoltaic electricity generation, especially as the roof areas on car ports are granted the maximum compensation according to the electricity feed-in law!

The combination with **P.Charge**, the fuel dispenser for electric vehicles, is a reasonable extension.

➔ **Park@Sol** product sheet



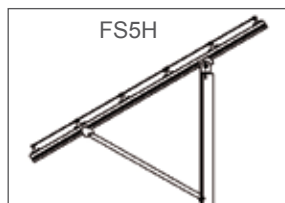
## 7 Different kinds of mounting

Here is a selection of possible mounting options.

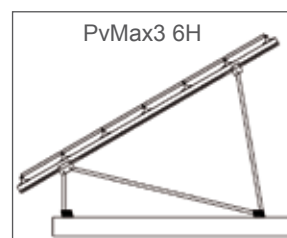
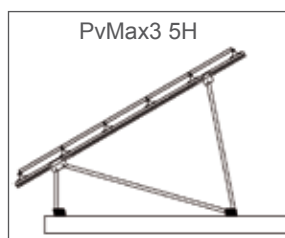
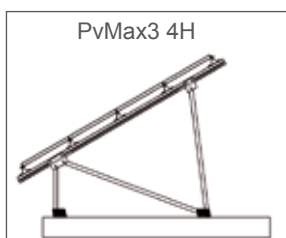
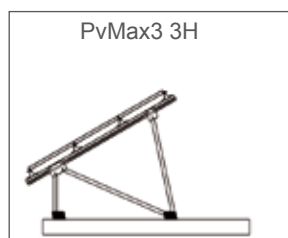
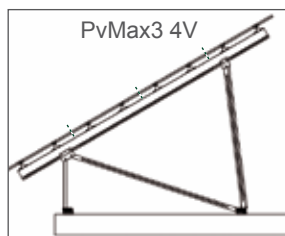
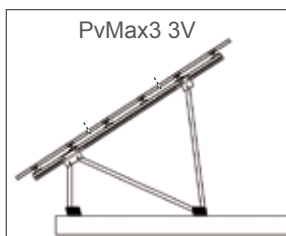
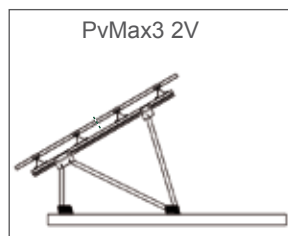
### Park@Sol



### FS-System



### PvMax3

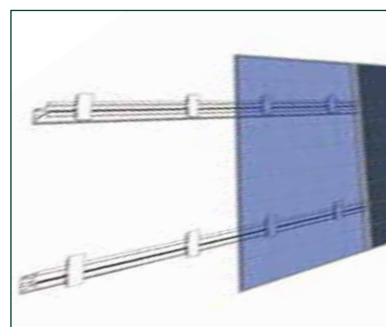


## 8 Optibond gluing technology

- For big module sizes
- Minimum mounting times

In cooperation with numerous module manufactures, the Schletter GmbH develops appropriate glueing procedures to connect modules to the respective substructure in a mechanically optimum manner.

The mounting system OptiBond offers the components and the technology to mount frameless modules in big PV plants in a technically optimum manner, and thereby also in an economically optimum manner.



➔ [OptiBond product sheet](#)



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For a comprehensive and competent consulting during the planning of your plant and for questions concerning logistics and order processing, our members of staff are available from Monday to Friday from 7:30 am to 5 pm.