

FS-In

Lay-in system for our well-proven FS open area system

- Simple, quick and screwless module mounting
- Maximum level of pre-assembly
- Only few and perfectly harmonized system components
- Long durability due to ideal material combinations
- 10-year warranty (optionally 20 years)



The FS-In **system** is part of the Schletter open area system product range and has been designed to make module mounting even quicker and more convenient. The Schletter open area system has been used for several years for big projects all over Europe and is planned individually for each location. The solar installations are always adapted to the terrain shape.



Product information

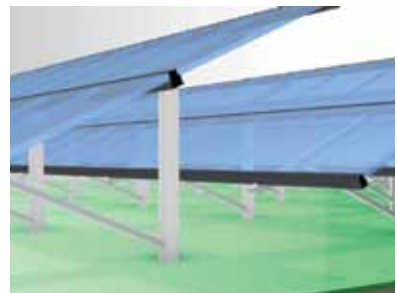
The **FS-In** system has been especially developed for modules that have an accordant certification for lay-in mounting in open area solar plants. Framed modules with thicknesses from 40 - 50 mm can be used. Projects with modules that have other frame thicknesses can also be realized, as far as the respective module producer approves this kind of mounting. Starting from project sizes of 5 MW, profiles for any frame thickness can be produced.



The module-bearing construction is made of aluminum by 100% and is fastened to pile driven steel profiles that are cut to size. GPS-aided surveys safeguard an absolutely precise positioning of the pile-driven foundations.

Special characteristics

With the **FS-In** system, the mounting time of the modules can be considerably shortened, as the modules are only laid in the profiles and do not have to be screwed.



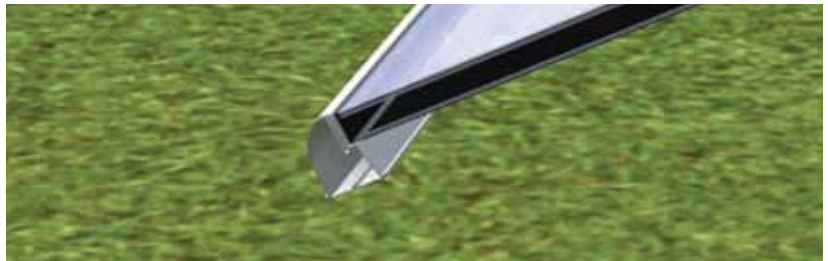
Mounting

The module-bearing construction is pre-assembled in our factory as far as possible. After delivery to the construction site, the rack is put on the foundations and screwed.

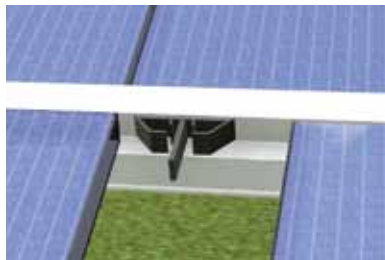
The installation of the modules is quick and inexpensive. After the mounting of the profiles, the modules are laid in.



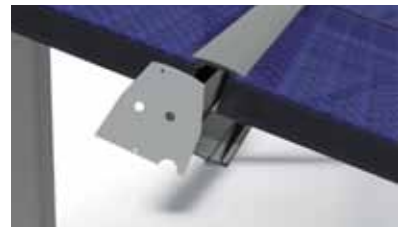
After that, the module is inserted into the lower profile.



In order to secure the laid-in module, special spring-suspended distance pieces are inserted. Thus, the modules cannot be removed in any inappropriate way (theft prevention).



As a last operation step, the profiles are sealed with suitable end plates.



Accessories


For simplified mounting, the following accessories are available:

- Cable duct
- Cable clip for purlin
- Cable clip for girder
- Pipe clamp for foundation

On request, the complete plant can be equipped with exterior lightning protection by means of just a few additional components. For this purpose, the Schletter GmbH offers a special planning program (also see the FS Protect product sheet).



Technical data

Material	Fastening elements, bolts: High-grade steel 1.4301 Profiles: Aluminum MgSi05 /EN AW 6063, EN AW 6005 Pile-driven foundations: Steel, hot-dip galvanized
Logistics	<ul style="list-style-type: none"> • Quick and simple mounting • Maximum level of pre-assembly • Optimized transport to the construction site
Construction	<ul style="list-style-type: none"> • Adjustment options to equalize ground unevennesses • Only for framed modules
Soil analyses	Soil survey on location and chemical analysis for the creation of a soil profile.
Structural analysis	<ul style="list-style-type: none"> • Individual terrain structural analysis on the basis of a soil survey • Individual system structural analysis based on regional load values • Load assumptions according to DIN 1055, part 4 (03/2006), part 5 (06/2005), part 100 (03/2001), Eurocode 1 (06/2002), DIN 4113, DIN 18800, Eurocode 9 and further or corresponding national norms • Optimized material dimensioning based on the latest research results from the area of wind dynamics. • Verification of all construction components based on FEM-calculation
Delivery and services	<ul style="list-style-type: none"> • Individual structural analysis of the rack based on regional data • Pile driving of the foundations and delivery of the complete mounting material • Optional: Rack mounting • Optional: Complete module mounting
Warranty and Certifications	

Conclusion

Schletter open area systems have been designed as an economic and practical mounting solution for large-scale solar plants in open areas and are suitable for all landscape conditions.

With our FS-In system you save both work time and working costs:

- *In many cases, no concrete foundations are required - the pile-driving of the metal foundations is quick and precise.*
- *The installation of the solar modules is considerably speeded up by using a screwless lay-in technique.*
- *Optionally, we offer the mounting of the foundations, the load-bearing construction and the modules, which of course means top efficient mounting.*
- *A 10-year durability guarantee and a long durability of all system components are the basis of an efficient solar.*

Our team will be glad to assist you if you have any individual inquiry!

Please find further information and our declaration of warranty on the internet at www.schletter.eu