## SOLAR MOUNTING SYSTEMS GROUND-MOUNTED





# WE SUPPORT SOLAR.

## AT SCHLETTER, WE BELIEVE THAT ANY ENTERPRISE, BIG OR SMALL, CAN ONLY BENEFIT FROM PASSIONATE SUPPORT.

And if ever there were an industry worth supporting, it's solar. Which is why we care about the success of every solar company, including yours.

We're here to urge you forward and support your initiative with products engineered to ensure the success of your projects – which will change our lives, and the planet, for the better.

If you don't deserve our support, who does?



BRAND FILM



WATCH OUR NEW BRAND FILM





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## UNCOMPROMISING **QUALITY**

## SCHLETTER'S PRODUCTS ARE DESIGNED TO WITHSTAND ALL WEATHER CONDITIONS.

For the past few decades, we've dedicated ourselves to improving durability, safety, sustainability, and especially the quality of our solar mounting systems. Our quality control process is painstaking, meticulous, and uncompromising, and we use only the highest-quality steel and aluminum.

Specifically designed to combat inclement weather on any terrain, our mounting structures can withstand the harshest conditions - stormstrength winds, torrential rain, excessive snow-loads, sandstorms, or even earthquakes - for 25 years or more.





## **PRODUCT PHILOSOPHY**

Our holistic approach to product development encompasses material selection, structural integrity, and environmental impact. Our solutions reflect this belief, balancing affordability, safety, and sustainability.



- 1. Superior material utilization
- 2. Efficient manufacturing process
- 3. Optimized logistics
- 4. Time-saving assembly



## THE RIGHT SOLUTION

Schletter offers a comprehensive risk management solution that takes various factors into account, such as environmental conditions. We support you with our engineering expertise to ensure the safety and optimal performance of your modules.

## TRACKING SYSTEM 1P AND 2P

## AS STABLE AS A FIXED TILT.

Schletter Tracking Systems are designed to get the most out of your solar power system. Our solar trackers combine lightweight and robust, highstrength steel construction with the advantages of our self-locking Geneva Drive, enabling them to withstand wind speeds of up to 257 km/h. The high degree of mounting flexibility maximizes the module capacity and accommodates large format and bifacial modules.



## **ADVANTAGES**

- Low load on modules +
- Leightweight: No heavy equipment or special tools + needed for installation
- No galloping effect due to structural concept +
- As stable as a fixed tilt with the Geneva Drive +
- Low installation and maintenance costs ÷
- Free passage between tracker tables +
- Pre-assembled components make installation easier +
- Corrosion resistance of 20+ years +
- No ground sealing ÷
- Self-powered system / wireless communication, + grid-powered optiona
- High-tensile steel allows wider spans ÷

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+ Pivots through 120 ° to capture more sunlight

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#### 257 km/h



WITHSTANDS WIND SPEEDS OF UP TO 257 km/h.

#### **UP TO 10°**



MOUNTING ON TERRAIN WITH A SLOPE ANGLE OF UP TO 10°.

## **1**P

**DESIGNED FOR USE WITH XXL MODULES IN PORTRAIT FORMAT.** 







#### 1P = 110 m 2P = 130 m

1P UP TO 3 STRINGS, 2P UP TO 8 STRINGS.



#### MOUNTING ON TERRAIN WITH AN ANGLE OF INCLINATION OF UP TO 10°.



**2 PORTRAIT OR 4 LANDSCAPE** MODULES, BIFACIAL OR MONOFACIAL.



## **WORLD-CLASS TRACKING SYSTEMS**

Whether in temperate latitudes, tropical hurricane zones, or the Australian Outback; our tracking systems are proving themselves every day, with over 1 GWp of installed capacity, all over the world - on almost every continent and in all climates.



**INSTALLATION** 



### **PATENTED TRACKING SYSTEM**

INDEPENDENT SELF-LOCKING ROWS WITH ± 60° ROTATIONAL RANGE (120° TRACKING RANGE).

Each table has a unique and patented method of self-locking at each post, in every position, to eliminate the galloping effect. This provides a higher level of investment security. In addition, a wide rotational range of 120 ° provides more energy during the day.



TRACKING SYSTEM IN LOCKING POSITION





TRACKING SYSTEM IN STEPPING POSITION

## AGRIVOLTAICS

## CULTIVATING A BRIGHTER FUTURE.

Agrivoltaics or Agri-PV is the synergy of photovoltaic technology and agriculture. It combines the harnessing of solar energy with animal husbandry or crop cultivation on the same piece of land. Farmland with solar PV remains 80 percent arable while the power plant produces energy with 80 percent efficiency.

Harvest the power of the sun - 160 percent of it.



## SCHLETTER OFFERS TWO SYSTEM SOLUTIONS FOR AGRIGVOLTAICS:

- + 2P Tracking System
- + Vertical System SolFarm



## **SCHLETTER SOLFARM**

SOLFARM IS A VERTICAL AGRI-PV SYSTEM THAT COMBINES AGRICULTURE AND SOLAR ENERGY PRODUCTION TO MAXIMIZE LAND UTILIZATION.

The vertical arrangement benefits agricultural practices by utilizing space efficiently and maximizing the amount of farmable land while enabling clean energy production. And at the same time, it protects crops and animals from harsh weather.

- + Simple connections for easy and quick installation
- + Can be installed in flat and hilly terrain, compensating for height differences with its modular design
- + Flexible module clamping position on the long frame side
- + Supports monofacial, bifacial and XXL modules
- Distance between rows can be adjusted freely, + taking the type of crops and the size of the mower unit into consideration







150 m



**HEIGHT: UP TO 2 MODULES IN LAND-**SCAPE, WIDTH: UP TO 3 MODULES IN LANDSCAPE BETWEEN POSTS.

**COHERENT TABLE INSTALLATION OF** UP TO 150 m. UP TO 4 STRINGS.

up to two modules

rec. ground clearance at rec. embedment depth





## BENEFITS

## **ECONOMIC BENEFITS**

#### **ADDITIONAL INCOME**

#### **ENERGY COST REDUCTION**

Leasing land for Agri-PV installations or selling excess energy generates a regular source of revenue. Agri-PV systems are also eligible for subsidies and tax benefits in the EU and several other countries.

The price per kWh is lowered in the long run by using the solar energy generated by the Agri-PV system to power irrigation and other operations.

#### **OPTIMIZED LAND UTILIZATION**

Utilizing the same piece of land for crop production and energy production optimizes land use and maximizes the benefits gained from every acre.

### **ENVIRONMENTAL BENEFITS**

#### **RESILIENCE TO CLIMATE** CHANGE

Agri-PV systems can improve agricultural resilience in the face of climate change, as they can help regulate temperatures, protect the soil from erosion, and provide shelter from severe weather

#### **CARBON REDUCTION**

Agri-PV systems generate clean energy, reducing reliance on fossil fuels which leads to reduced greenhouse gas emissions.

#### WATER CONSERVATION

The shade provided by Agri-PV panels helps to reduce water loss through evaporation, which conserves water and supports sustainable agriculture.



### **BIODIVERSITY IN AGRIVOLTAICS**

Innovative solutions are crucial to meet the increasing demand for sustainable food and energy. Agri-PV is a solution that promotes sustainable farming by reducing the need for chemical fertilizers and pesticides. It supports pollinators and other beneficial insects by providing habitats and food sources through wildflower strips sown beneath PV plants. This increases biodiversity and creates a healthier ecosystem, which is especially important in monoculture.

We are dedicated to supporting you in successfully implementing Agri-PV and achieving your sustainability goals.

## SOCIETAL BENEFITS

#### **ENERGY ACCESS**

Agri-PV systems can provide access to electricity for rural communities, improving living standards and economic development.

#### **FOOD SECURITY**

Agri-PV systems can help ensure food security by increasing agricultural resilience and providing a sustainable energy source.

#### **EDUCATION AND INNOVATION**

Installing and maintaining Agri-PV systems can provide education and training opportunities, further increasing the potential for technological innovation.



# WITH A BUZZ

## **GROUND-MOUNTED SOLAR SYSTEMS**

## SOLAR PARKS ARE A VITAL INVESTMENT IN THE FUTURE OF SUSTAINABLE ENERGY.

The success of this investment hinges on the quality of ground-mounted solar mounting solutions, as the reliability of mounting systems directly affects the overall performance of the solar plant. We specialize in durable, high-quality steel solar mounting systems with robust designs and easy installation to guarantee the performance and longevity of your solar park investment. Our ground-mounted systems have a high load capacity, require minimal maintenance, and are built to last – even in the harshest conditions.

With a team of top geologists and system planners, we develop robust solutions for challenging terrains and weather conditions. Through our high degree of prefabrication and optimized components, we ensure rapid and effective installation.



## **FS UNO**

#### FOR MANY YEARS, THE FS UNO SYSTEM HAS BEEN THE SYSTEM OF CHOICE FOR MORE THAN 15 GWp OF PROJECTS AROUND THE WORLD.

Its flexibility makes it an ideal solution for challenging terrain, where fewer foundations have to be used. It is the counterpart to the FS Duo double post system.

- + Easy installation and low weight for reduced shipping costs and LCOE
- Durable pre-galvanized material +.
- Coating according to corrosion class of + environment
- Cost-efficient system with few posts ÷
- Available in individual parts or pre-assembled +
- Cost savings with rammed steel foundations + 1





UP TO 2 MODULES IN PORTRAIT OR **4 MODULES IN LANDSCAPE.** 



MOUNTING ON TERRAIN WITH AN ANGLE OF INCLINATION OF UP TO 10° (30° WITH FS TILT HEAD).





**COHERENT TABLE INSTALLATION OF** UP TO 35 METERS.





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## **FS DUO**

## THE DURABLE FS DUO GUARANTEES A LONG SERVICE LIFE FOR GROUND-MOUNTED SOLAR INSTALLATIONS.

With its high efficiency and stability, FS Duo is the ideal solution for level terrain, as it is designed for sizeable multi-row module arrangements in open spaces and agricultural areas.

- + System with pile driving foundation
- + Up to 25° inclination
- + Optimized project-related planning
- + Excellent material efficiency, system connections optimized down to the last detail
- + High strength and durability
- + Durable pre-galvanized material
- + Maximum degree of prefabrication
- + No ground sealing
- + Quick and easy assembly
- + Perfectly matched system components
- + High economic efficiency
- + Additional version with concrete foundations available for soils unsuitable for pile driving

#### 3P/6L









MOUNTING ON TERRAIN WITH AN ANGLE OF INCLINATION OF UP TO 10° (30° WITH FS TILT HEAD).

#### 35 m



COHERENT TABLE INSTALLATION OF UP TO 35 METERS.

rec. embedment depth up to 130 cm



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## **SCHLETTER SUNRIDE**

#### SOLAR CARPORTS ARE AN EXCELLENT ADDITION OR ALTERNATIVE TO LARGE-SCALE PHOTOVOLTAIC SYSTEMS.

SunRide, Schletter's modular solar carport system, offers reliable protection against solar radiation, snow, rain, and hail, while generating clean electricity for self-consumption and electric vehicle charging - a win-win solution. With rising electricity costs, the SunRide carport provides free and sustainable electricity for years after the initial investment, ensuring planning security.

- + More than 15 years of experience with carport systems worldwide
- Optimal use of parking space +
- Suitable for all module types and sizes ÷
- High-quality galvanized steel +
- Efficient modular system +
- Straight or angled parking, thanks to the single + column principle
- Expert support in project planning ÷
- Complete structural calculation for each project +
- Full documentation in the form of system + drawings

### **DUAL WING**

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## **SERVICE OFFER**

SUPPORT FOR GROUND-MOUNTED SOLAR INSTALLATIONS AT EVERY STAGE OF YOUR PROJECT.

- Assessment & Training
- Supervision & Reporting +
- Advice & Support



### **ASSESSMENT & TRAINING**

KNOWLEDGE OF THE GEOLOGICAL CONDITIONS AND A WELL-TRAINED TEAM OF EXPERTS ARE ESSENTIAL FOR THE SMOOTH OPERATION OF ANY PROJECT.





CONTRACT **CLOSURE** 

#### TRAINING

Remote training.

and checklist.

installation company.

#### **GEOLOGICAL SURVEYS**

Prerequisite: Organized pull-out tests and test reports prepared.

External service in cooperation with proven partner companies.

Schletter takes care of the necessary arrangements and the synchronization of the pull-out tests. The technical equipment, and machinery is provided by the partner company.

Pull-out test reports can either be created in-house by Schletter or by the partner company.

Practical tips to facilitate installation and compliance with assembly tolerances.

Explanation of potential sources of errors.

#### **INSTALLATION TRAINING**

Preparatory online training sessions for site managers and team leaders of the

Remote training: Ramming, rack mounting

Preliminary discussion: Commissioning.

Explanation of the installation instructions using pictures and videos, including discussion of the checklists.

#### SYSTEM TRAINING

Prerequisite: Knowledge of the installation instructions, as well as an online meeting for discussion.

One week of installation training for site managers and team leaders of the installation company.

Set-up of a reference unit for checking the correctness of the installation.

Explanation of potential error sources during installation and prevention of problems to comply with the assembly tolerances.

Inspection of the installation during assembly by certified trainers to prevent systematic assembly errors.

### **SUPERVISION & REPORTING**

DURING THE INSTALLATION PHASE, CONSISTENT MONITORING AND INSPECTIONS CAN ULTIMATELY ENSURE THE ERROR-FREE SET-UP OF THE SYSTEMS.

## **ADVICE & SUPPORT DURING OPERATION**

THE FINAL STEPS FOR COMMISSIONING A TRACKING SYSTEM REOUIRE A PROFOUND KNOWLEDGE OF THE CONTROLS. WE ARE ALSO THERE FOR YOU DURING OPERATION.





**TECHNICAL ASSISTANCE** 

with a detailed report.

Verification of installation quality, such as compliance with assembly tolerances,

Identification of and instructions for correcting any installation errors that may have occurred.

Random inspection of the correct finishing of the components (e.g. damage to the galvanization during assembly, correct regalvanisation).

#### SUPERVISION AND SUPPORT FOR THE MECHANICAL CHECKLIST

Prerequisite: An online meeting to explain the "mechanical checklist".

3-5 days of on-site support to explain the individual points in the checklist.

Instructions for determining and entering the measured values using suitable measuring tools.

Instructions for completing the "mechanical checklist" step by step according to the current stage of construction.

Creation of a status report by the supervisor.

#### **PRE-COMMISSIONING** SUPPORT

Prerequisite: A meeting to explain the commissioning process and the significance of the "Prerequisites for Commissioning"-document.

Supporting the customer with preparations for commissioning.

Determination of the commissioning capability of the system, as well as supporting the customer with the necessary preparatory work, e.g. TCU scanning, calibration of the 0-point, etc.

Creation of a report by the supervisor.





**SUPPORT** 

#### **COMMISSIONING SUPPORT**

Prerequisite: successfully completed precommissioning.

Supporting the customer during system commissioning.

Customer support during commissioning of the system is provided by Schletter and the respective control system manufacturer, including switching on the TCUs, moving the tracker to the maximum positions, checking the angles, verifying the sequence scenarios: wind/snow alarm, cleaning position, night position etc., operation control in automatic mode.

Detailed commissioning report.

#### SUPPORT FOR OPERATION **AND MAINTENANCE**

Evaluation of the portal data.

Detailed O&M reporting.

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#### **REMOTE SUPPORT**

Remote customer support during maintenance.

Cause analysis via portal evaluation and remote access to the controls in the unlikely event of tracker malfunctions.

Replacement work with remote guidance, monitoring the restart of tracker units, etc.

## WE SUPPORT SUSTAINABILITY

SCHLETTER'S COMMITMENT TO CORPORATE SOCIAL SUSTAINABILITY IS DRIVEN BY ENVIRONMENTAL STEWARDSHIP AND ETHICAL BUSINESS PRACTICES.

At Schletter, we are deeply committed to corporate social responsibility (CSR) and sustainability, striving to incorporate social, environmental, and ethical considerations into our business practices. Our aim is to contribute positively to society and the environment while minimizing our impact on the planet.

We intend to enhance our CSR strategy to advance our environmental sustainability efforts, including reducing carbon emissions by exploring options for renewable energy sourcing, optimizing supply chain transportation, and adopting more sustainable production processes. We are also implementing measures to minimize waste, expanding recycling programs and reducing water usage per MW produced.

Our dedication to treating our employees, suppliers, and customers fairly while promoting diversity, equity, and inclusion remains unwavering. We prioritize ethical sourcing practices, ensuring our suppliers adhere to ethical labor standards and environmental regulations. Additionally, we are committed to expanding our social initiatives while supporting local communities.

As part of our commitment to transparency and accountability, we aim to publish a sustainability report for the financial year 2023, demonstrating our efforts to create a sustainable future and have a positive impact on society and the environment.



## >28.3 MILLION TONS

CO<sub>2</sub> SAVED BY PV INSTALLATIONS ON OUR MOUNTING SYSTEMS PER YEAR

Read more about our sustainability at: https://www.schletter-group.com/company/ sustainability/

Source for conversion formula: German Federal Environmental Agency and Solarcluster BW

SCHLETTER NA INC.

## **BEHIND YOU ALL** THE WAY.

Mounting a photovoltaic system requires more than a mere metal clamp. It needs a plan thoroughly thought through and adapted to suit actual circumstances. It starts with initial soil or structural analyses and ends with tightening the very last screw. We accompany our customers through the entire process. With our uncompromising quality standards at every project stage, we ensure that our top quality products and solutions reach their full potential. This care and our holistic approach are an integral part of our company's DNA.

No matter how broad or long-term your vision or ambitious or imaginative your goals; when it comes to solar, one company is behind you all the way.

HEADOUARTERS SCHLETTER SOLAR GMBH

SCHLETTER ENERJI VE METAL

SCHLETTER ESPANA S.L

SCHLETTER UK LTD.

SCHLETTER ANORTHERN

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SCHLETTER SOLAR SOUTH AFRICA (PTY) LTD.

1968 FOUNDED IN BAVARIA,

GERMANY

>45 GW SYSTEMS INSTALLED WORLDWIDE

>580 PRODUCTS FOR ALL SOLAR MOUNTING NEEDS

>110 COUNTRIES WITH SCHLETTER SYSTEMS INSTALLED

>105 **GLOBAL PATENTS** SECURED

>700 **EMPLOYEES WORLDWIDE** 



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#### **SCHLETTER GROUP**

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