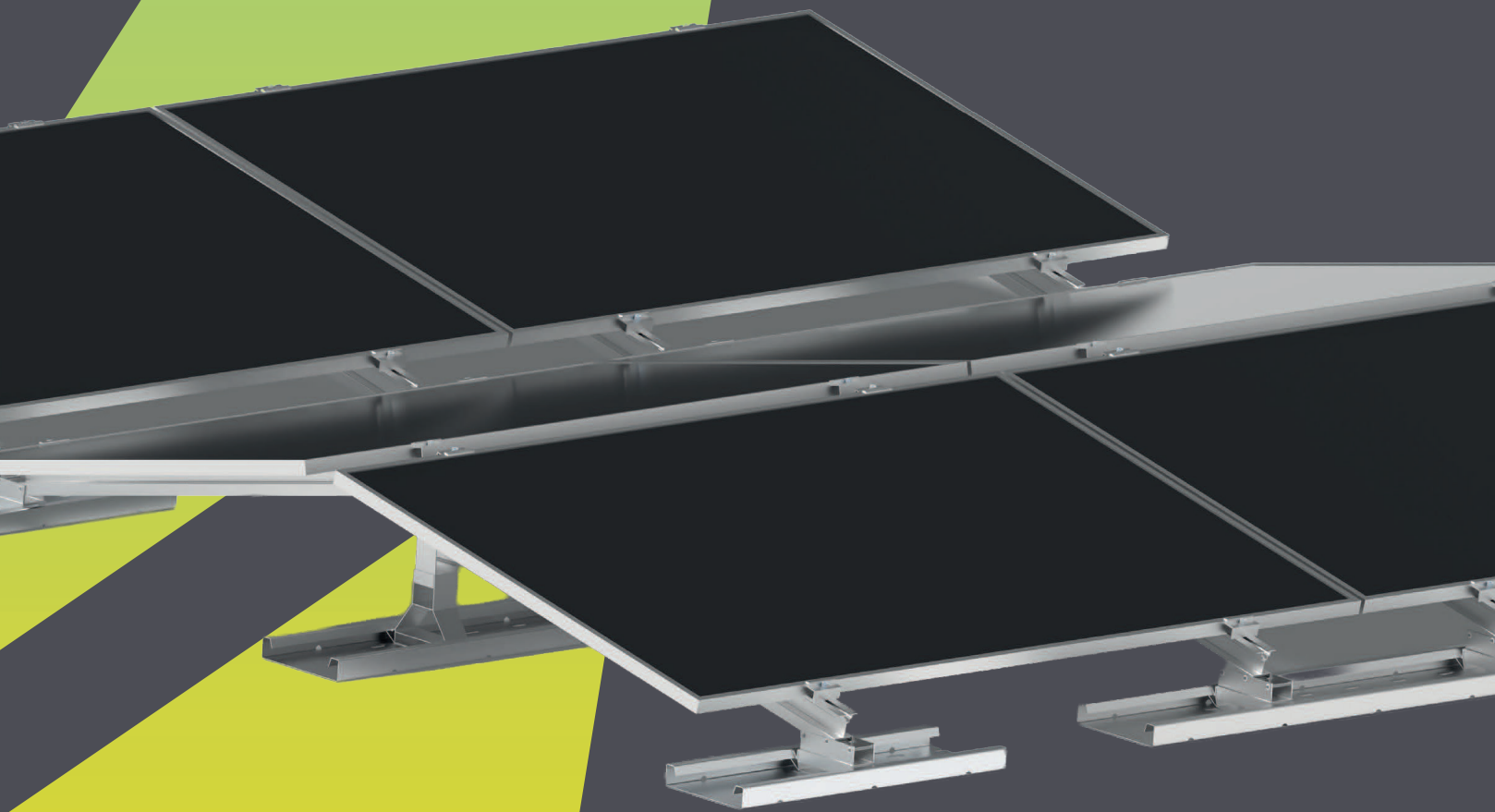




Planning documents

**Duraklick**

Flat Roof, Components, Accessories

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## Customer Service

For questions or problems, our customers can rely on our on-call service.

You can reach us 365 days a year, 24 hours a day, Monday to Sunday.



## In-roof Photovoltaic System



 **SwissSolarRoof**

## On-roof mounting system



**Duramont**

## Flat-roof mounting system



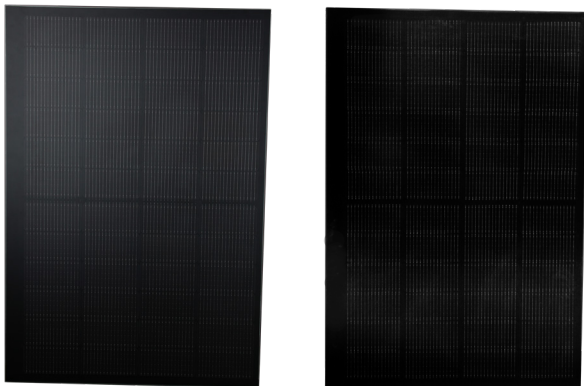
**Duraklick**

## Management system



 **SOLTOP**  
ENERGY MASTER

## PV modules Europe + Asia



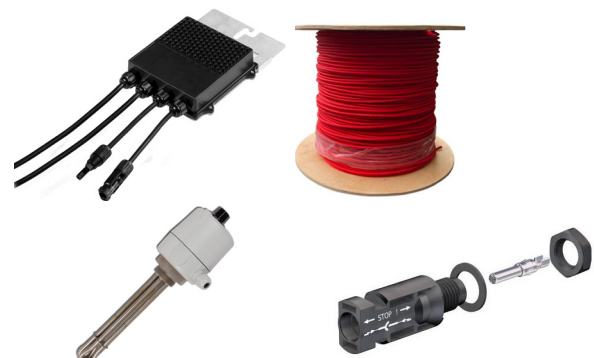
## Hybrid & grid-connected inverters



## AC/DC battery storage systems and charging stations



## Accessories

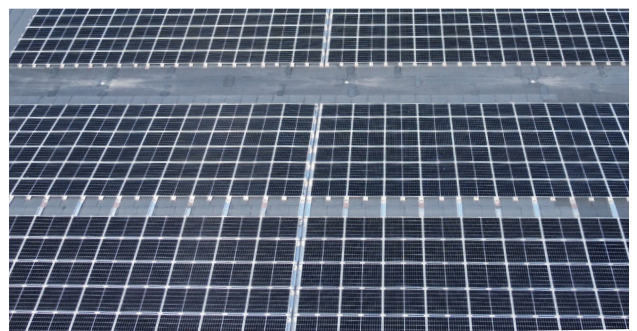


On flat roofs (bare roofs, substrate roofs or gravel roofs), PV systems can generally be installed easily and safely in any orientation. Our Duraklick mounting systems are aesthetic, cost-effective and quick to install. Thanks to their interconnected design and aerodynamics, they require little additional ballast. A certified fall protection system is also available for all Duraklick systems. Duraklick is available with various tilt angles in the South, East/West, Eco and green roof versions.



## Benefits

- Excellent load distribution thanks to the 230 mm wide base profile
- No roof penetration required
- Low system weight = minimal additional ballast
- Unbeatably quick and easy installation thanks to the patented click system
- Corrosion-resistant thanks to high-quality materials (aluminium and V2A stainless steel only)
- High flexibility (approved for bitumen, gravel and membrane roofs)
- On gravel roofs, the existing gravel can be used as ballast
- Numerous features, such as the integrated HSS fall protection system
- Short delivery times thanks to extensive stock and a small number of individual components
- Suitable and approved for almost all framed PV modules
- Free structural system calculations
- Excellent aerodynamics, approved up to wind zone 4 (ECO up to wind zone 3 only = 27.5 m/s)
- 360° wind tunnel tested / TÜV certified
- Building authority approval (not GR!)

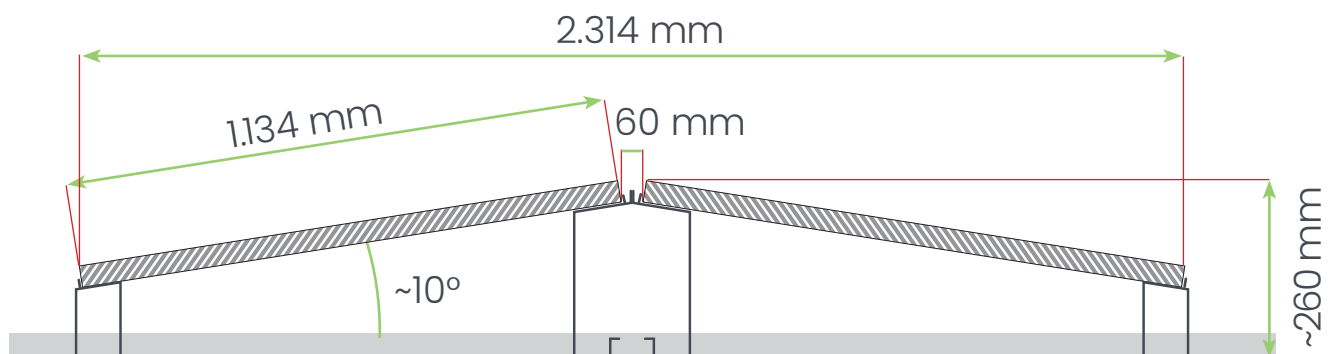


## Detailed views of Duraklick East/West (EW)

For maximum yields and optimal use of the available roof area, the Duraklick EW mounting system was developed. It ensures significantly more consistent energy yields on flat roofs and offers excellent value for money. The system also features the proven advantages of Duraklick, including easy installation, our click system and lightweight aluminium composite construction. With a module tilt of  $10^\circ$ , it is ideal for roofs with membrane or bitumen surfaces, as it can be installed without roof penetration and requires little or no additional ballast.



For PV modules with a width of 1,040–1,210 mm and a  $10^\circ$  tilt



Module width 1,134 / 30 mm

### Technical data

|                     |                                 |
|---------------------|---------------------------------|
| <b>Tilt</b>         | $10^\circ$                      |
| <b>Rail length</b>  | 0.3 – 6.0 m                     |
| <b>Module width</b> | 1,040 – 1,210 mm                |
| <b>Surface load</b> | approx. $13.1 \text{ kg/m}^2$ * |
| <b>Line load</b>    | approx. $21.6 \text{ kg/m}$ *   |
| <b>Material</b>     | Aluminium / stainless steel     |

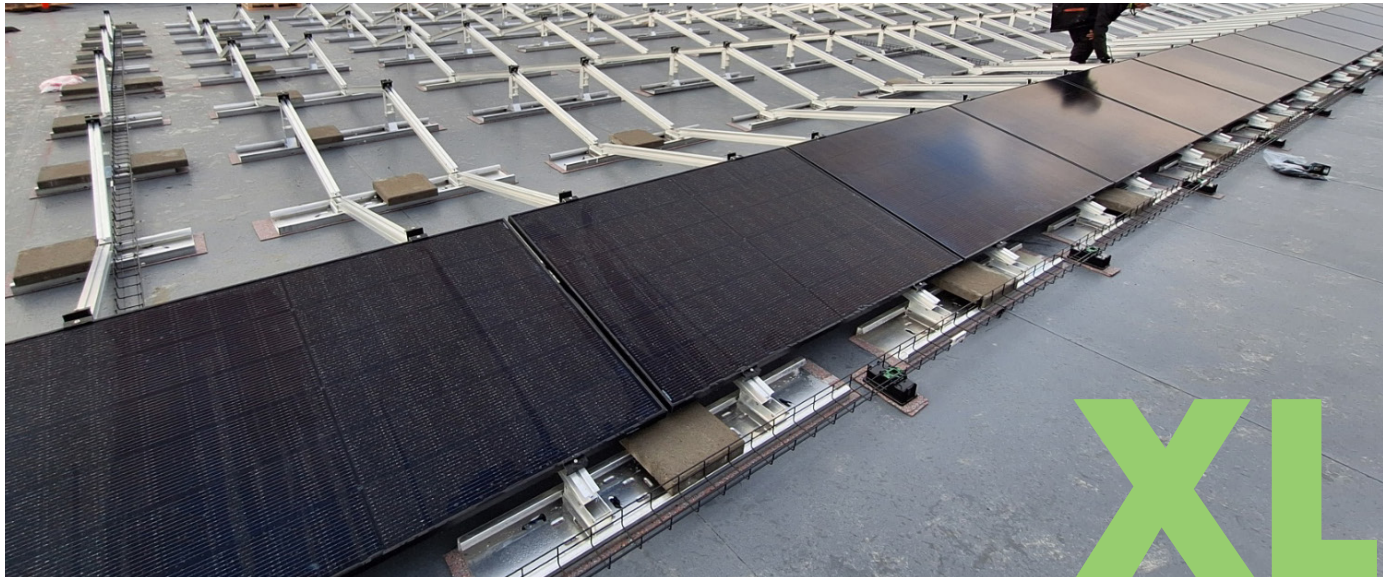
\* with a module weight of 19 kg and a module pitch of 2.35 m without additional ballast

→ Fall protection system – see page 11

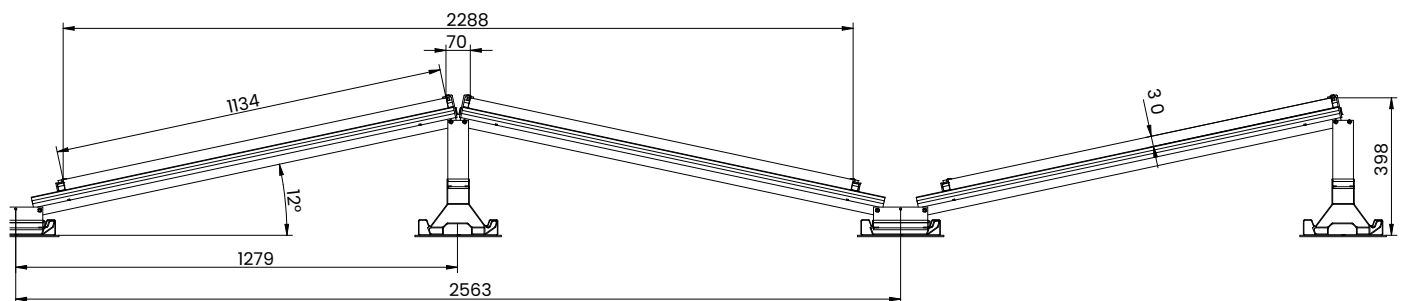
# Duraklick roof planning

## Detailed views of Duraklick flat roof (XL)

Duraklick XL is a modern mounting solution designed for the latest generation of PV modules. The system allows precise positioning of the module clamps, while the profiles underneath provide a stable structure. This enables high snow and wind loads to be safely absorbed and transferred to the substructure. Even large-format modules with narrow frames can be installed without difficulty. The patented click system, made from high-quality materials, enables quick and easy installation. The 230 mm wide base profiles ensure even load distribution, while the 12° tilt provides a good balance between energy yield and self-cleaning.



For PV modules with a width of up to 1,200 mm and a 12° tilt:



### Technical data

|              |                |
|--------------|----------------|
| Tilt         | ~12°           |
| Rail length  | 0,3 – 6,0 m    |
| Module width | up to 1,200 mm |

|                                       |                        |
|---------------------------------------|------------------------|
| Module length                         | Variable               |
| Surface load                          | 11 kg/m <sup>2</sup> * |
| Material: aluminium / stainless steel |                        |
| *with a module weight of 19 kg        |                        |

## Convincing features:

- Easy and quick to install
- Variable clamping along the long side of the module
- High load capacity thanks to the support profile beneath the modules
- Suitable for large modules
- Corrosion-resistant and structurally tested
- Compatible with the Duraklick HSS fall protection system
- All components made from high-quality aluminium
- Stainless steel screws
- Made in Europe
- **With interrupted or continuous base profiles**

## Duraklick green roof mounting system GR 10°L / GR 10°L 400 mm

Duraklick GR 10°L is a mounting system for photovoltaic installations that can be installed in both East-West and South orientations. Its elevated module position makes it particularly suitable for green roofs as well as ground-mounted installations. The lower ambient temperature on green roofs also helps increase the efficiency of the PV modules. Thanks to its special design, the system is resistant to high wind and snow loads. The simple click installation, the 230 mm wide base profile for optimal load distribution, and the lightweight aluminium composite construction ensure short installation times and a wide range of applications.



## Green roof mounting system GR 10°L / GR 10°L 400 mm

### Installation on substrate

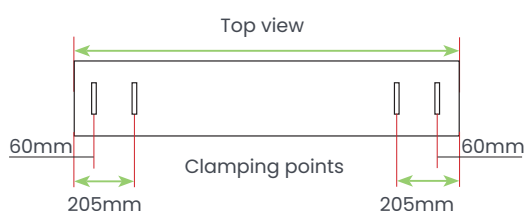
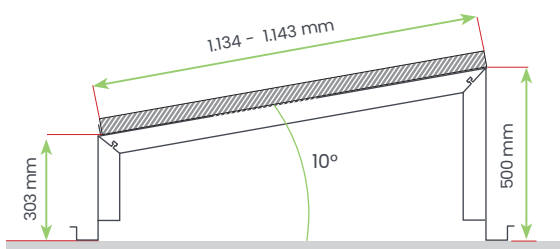
#### GR 10° L

##### Technical data

|              |                    |
|--------------|--------------------|
| Tilt         | 10°                |
| Rail length  | 0,3 – 6,0 m        |
| Module width | 1134 – 1143 mm     |
| Surface load | approx. 15 kg/m²*  |
| Line load    | approx. 26.5 kg/m* |

Material: aluminium / stainless steel

\*with a module weight of 25 kg



### Installation in substrate

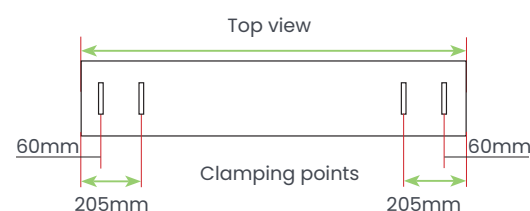
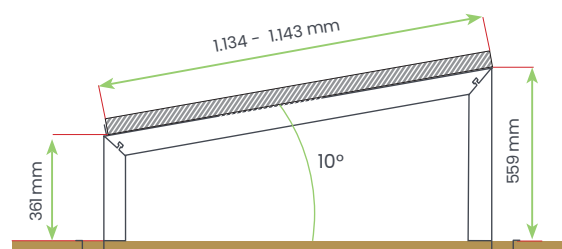
#### GR 10° L 400mm

##### Technical data

|              |                     |
|--------------|---------------------|
| Tilt         | 10°                 |
| Rail length  | 0,3 – 6,0 m         |
| Module width | 1134 – 1143 mm      |
| Surface load | approx. 15.2 kg/m²* |
| Line load    | approx. 26.7 kg/m*  |

Material: aluminium / stainless steel

\* with a module weight of 25 kg



# Duraklick roof planning

## Detailed views of Duraklick Eco

With the Duraklick Eco system, we offer a particularly economical and cost-effective alternative to our SR system. This flat-roof mounting system consists of the same high-quality components as our proven SR system, but without side spoilers or rear wind deflectors. It features a lightweight aluminium construction, is self-supporting and can be installed without roof penetration. For taller buildings and/or higher wind loads, we recommend using the optional wind deflectors in the northern section. The wide base rails and additional protective mats provide optimal protection for the roof surface.



## Duraklick Eco is available in three versions:

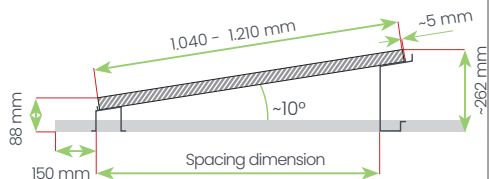
As this system has not yet undergone wind tunnel testing, the structural calculations must be carried out specifically for each installation (subject to a fee).

By “module pitch”, we mean the distance from the front edge of one module to the front edge of the module in the next row.\*

### ECO 10°

Module pitch 1.60 m – flexible

Module width 1,134 / 30 mm



#### Technical Data

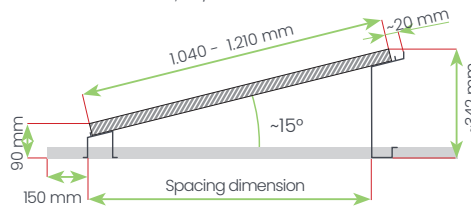
|              |                             |
|--------------|-----------------------------|
| Tilt         | ~10°                        |
| Rail length  | 0,7 – 6,0 m                 |
| Module width | 1.040 – 1.210 mm            |
| Surface load | approx. 10.7 kg/m²*         |
| Line load    | approx. 18.1 kg/m*          |
| Material:    | aluminium / stainless steel |

\* with a module weight of 19 kg and a module-pitch of 1.6m

### ECO 15°

Module pitch 1.80 m – flexible

Module width 1,134 / 30 mm



#### Technical data

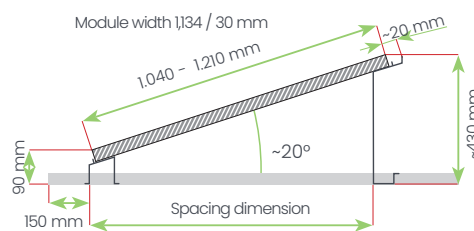
|              |                             |
|--------------|-----------------------------|
| Tilt         | ~15°                        |
| Rail length  | 0,7 – 6,0 m                 |
| Module width | 1.040 – 1.210 mm            |
| Surface load | approx. 9.3 kg/m²*          |
| Line load    | approx. 12.5 kg/m*          |
| Material:    | aluminium / stainless steel |

\* with a module weight of 19 kg and a module pitch of 1.8 m

### ECO 20°

Module pitch 2.00 m – flexible

Module width 1,134 / 30 mm



#### Technical data

|              |                             |
|--------------|-----------------------------|
| Tilt         | ~20°                        |
| Rail length  | 0,7 – 6,0 m                 |
| Module width | 1.040 – 1.210 mm            |
| Surface load | from approx. 7.0 kg/m²*     |
| Line load    | approx. 16.8 kg/m*          |
| Material:    | aluminium / stainless steel |

\* with a module weight of 19 kg and a module pitch of 2.0 m

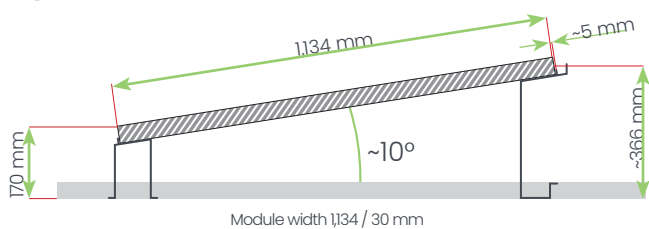
## Detailed views of Duraklick (GE)

The new Duraklick GE is an economical and cost-effective solution for installing PV modules on extensive green roofs. This flat-roof mounting system uses the same high-quality components as our proven SR and EW systems. The elevated position of the modules prevents shading caused by vegetation. Green roofs often have a lower ambient temperature than membrane roofs. This increases the efficiency of the PV modules and can also improve the overall cost-effectiveness of the system.



Duraklick GE mounting system is available in two versions:

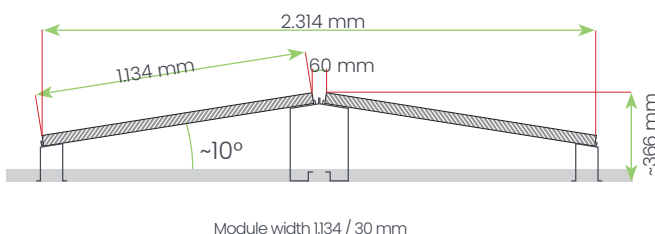
### GE 10°



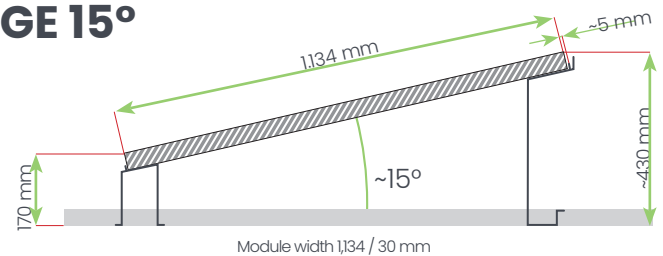
#### Technical data

|              |                                       |
|--------------|---------------------------------------|
| Tilt         | 10°                                   |
| Rail length  | 0,7 – 6,0 m                           |
| Module width | 1.040 – 1.210 mm                      |
| Surface load | plus approx. 10.7 kg/m <sup>2</sup> * |
| Line load    | approx. 18.1 kg/m*                    |
| Material     | Aluminium / stainless steel           |

\*with a module weight of 19 kg



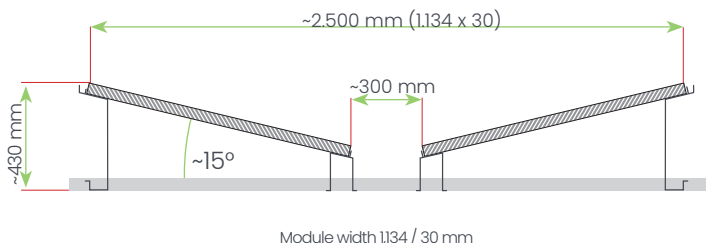
### GE 15°



#### Technische Daten

|              |                                       |
|--------------|---------------------------------------|
| Tilt         | 15°                                   |
| Rail length  | 0,7 – 6,0 m                           |
| Module width | 1.040 – 1.210 mm                      |
| Surface load | plus approx. 10,0 kg/m <sup>2</sup> * |
| Line load    | approx. 16,8 kg/m *                   |
| Material     | Aluminium / stainless steel           |

\*with a module weight of 19 kg



➔ Fall protection system – see page 11

The GE 10° mounting system, as well as the GE 15° version, can also be installed in an East-West configuration.

## Detailed views of Duraklick South (SR)

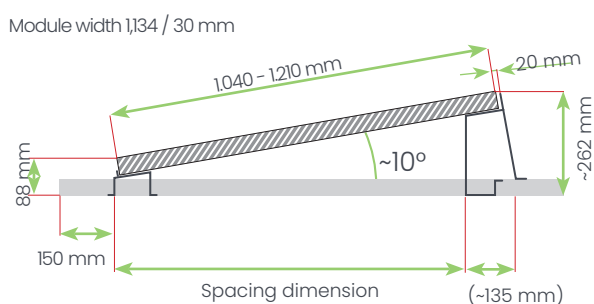
The SR series mounting systems were specially developed to meet the requirements of large-scale rooftop PV installations. Thanks to their excellent aerodynamics, these systems are also suitable for very tall buildings, roofs exposed to high wind loads, or roofs with limited load-bearing capacity. These lightweight, aerodynamic and self-supporting photovoltaic mounting systems feature an aluminum construction. They are installed without roof penetration and require little or no additional ballast. Bitumen-free protective mats beneath the mounting system provide additional protection for the roof surface.



Duraklick South (SR) mounting system is available in two versions:

### SR 100/10°

for photovoltaic modules with a width of 1,040–1,210 mm and a tilt of ~10°



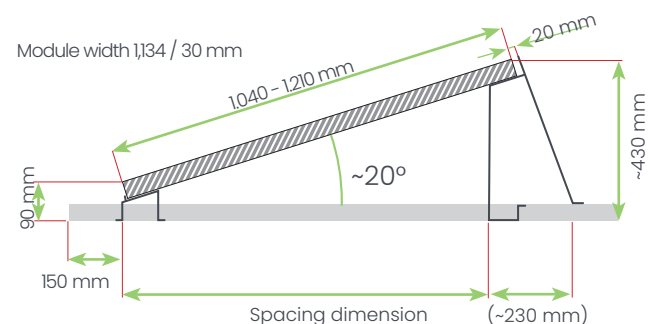
#### Technical data

|              |                            |
|--------------|----------------------------|
| Tilt         | ~10°                       |
| Rail length  | 0,7 – 6,0 m                |
| Module width | 1.040 – 1.210 mm           |
| Surface load | from approx. 8,0 kg/m² *   |
| Line load    | approx. 18,1 kg/m *        |
| Material:    | Aluminum / Stainless Steel |

\* Bei einem Modulgewicht von 19 kg

### SR 100/20°

for photovoltaic modules with a width of 1,040–1,210 mm and a tilt of ~20°



#### Technical data

|              |                            |
|--------------|----------------------------|
| Tilt         | ~20°                       |
| Rail length  | 0,7 – 6,0 m                |
| Module width | 1.040 – 1.210 mm           |
| Surface load | from approx. 7,0 kg/m² *   |
| Line load    | approx. 16,8 kg/m *        |
| Material:    | Aluminum / Stainless Steel |

\* Bei einem Modulgewicht von 19 kg

### Detailed views of the Duraklick fall protection system (HSS)

An efficient, flexible and cost-effective solution for fall protection on flat roofs. It is integrated directly into our PV mounting system, eliminating the need for separate anchor points or other roof safety systems. The fall protection system, certified in accordance with DIN EN 795, was specially developed for photovoltaic installations with Duraklick substructures. It is compatible with all Duraklick systems and can also be retrofitted to existing installations. Up to four people can be secured at the same time while maintaining a high degree of freedom of movement. For greater safety when working on roofs!

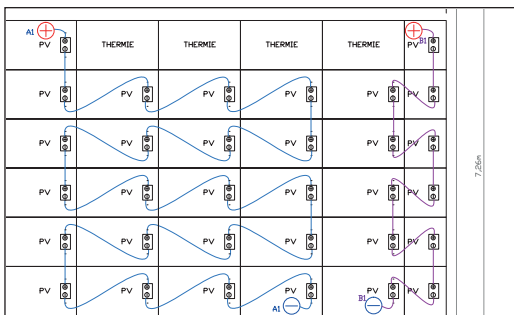
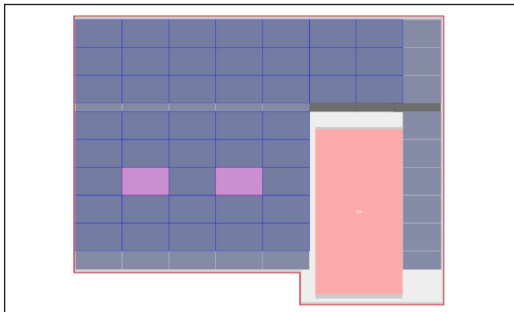


#### Convincing features:

- Can be retrofitted to all Duraklick & KNUBIX roof systems
- Can be installed without roof penetration
- Optimal use of the available roof area
- Maximum freedom of movement on the roof
- Travelling fall protection system, preventing pendulum falls
- No shading of the PV modules
- DEKRA certified in accordance with DIN EN 795:2012, Types D and E

### Services

We offer our customers a range of services in the field of solar power to help make the installation of PV systems more efficient.



### Installation instruction

For all SOLTOP solar power systems, we offer on-site installation instruction. Learn directly on your project how to install the systems as easily and efficiently as possible.

### my.Soltop roof detail planning

Project-specific assessments and drawings:

- Preparation of CAD plans for SwissSolarRoof
- Drawings of special connections to the SwissSolarRoof system

### HSS training and certification

Training and certification for the HSS system in accordance with DIN EN 795. HSS systems may only be installed by trained and certified installers.

### PV engineering

Technical processing of the supplied components: Sizing of PV modules for inverters, Preparation of schematic diagrams, roof layouts and string plans Export of CAD plans from my.Soltop

### PV registrations

Completion of the TAG form for the energy supply company.





Dura



Dura



klick



klick





[www.soltop-energie.ch](http://www.soltop-energie.ch)

v.08/26

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