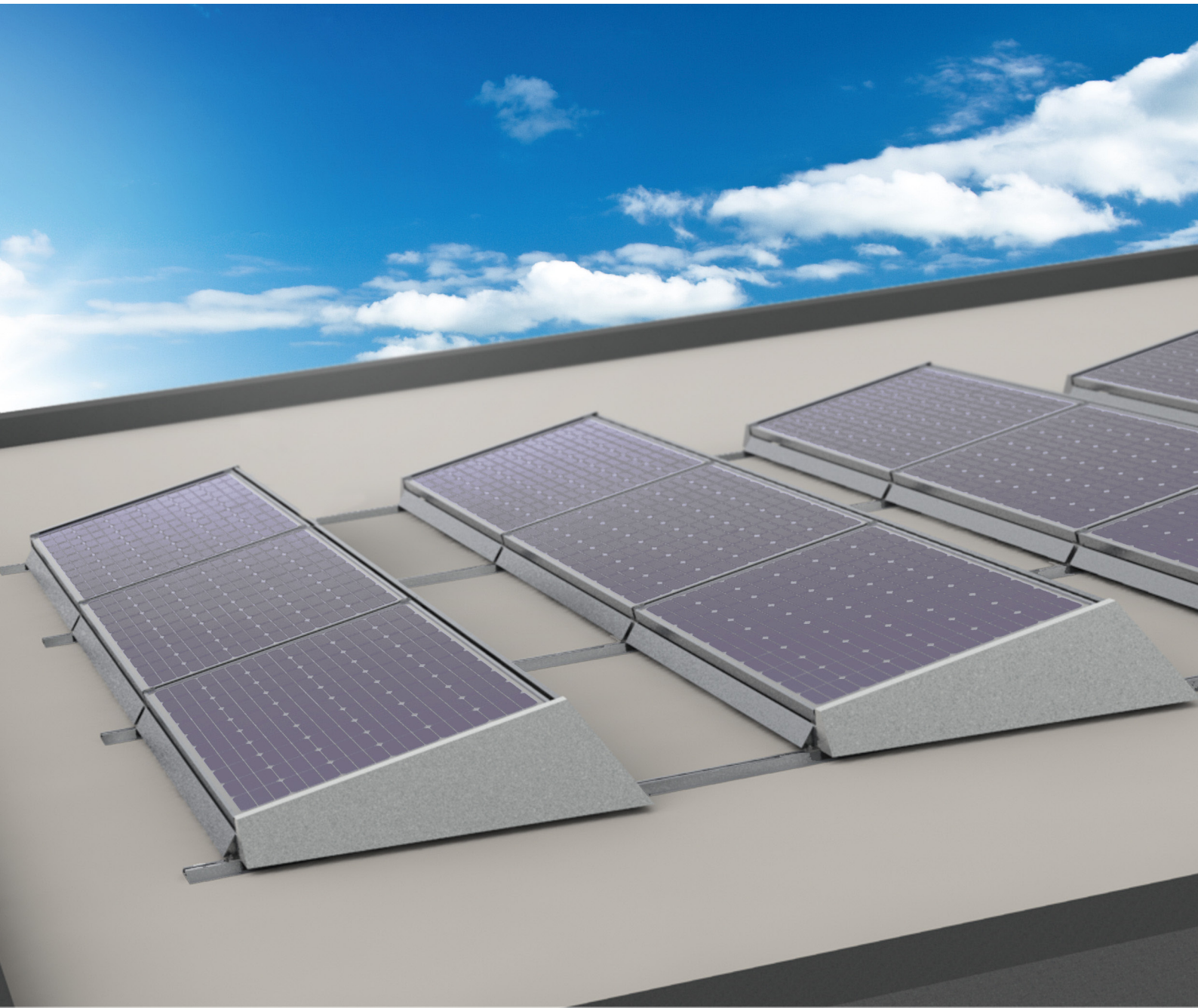


Innovative and modular PV mounting system from Øæ { æ



**Windstream**

PV Mounting System

# Windstream V5

## Flat Roof

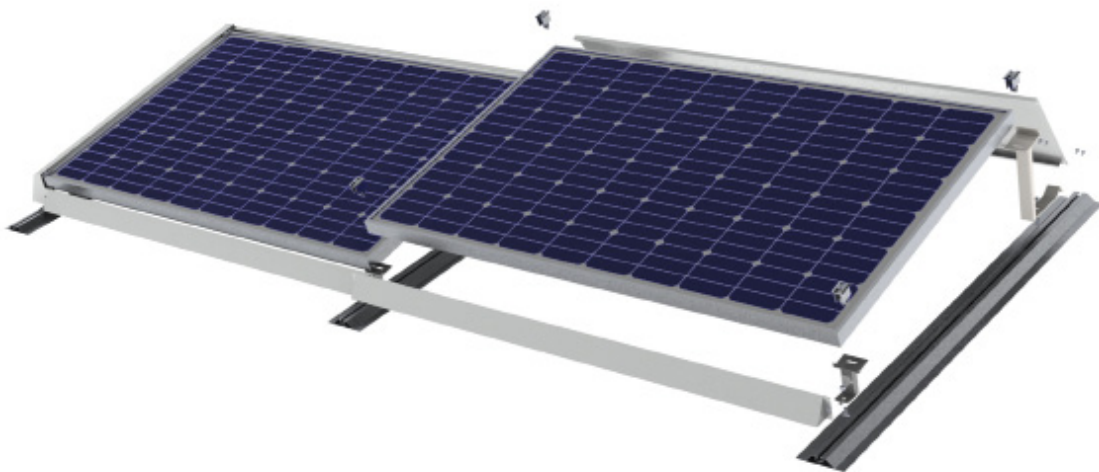
The perfect solution for flat roofs which allow little extra load.



The PV mounting system with air deflector is specially designed by Caymax for flat roof with limited load capacity. Pouring weight is not necessary for the PV mounting system, for it has a shell attached to produce aerodynamic effect making the system stable under big wind load.

The system is easy to install and causes no roof damage.

Caymax PV mounting system is characterized by a combination of innovative design, high versatility and outstanding performance. Caymax has a team of seasoned designers and experienced consultants dedicated to providing high-quality products and all-round services.



### HIGHLIGHTS

- Suitable for flat roofs, especially for bituminous and membrane roofs with limited load bearing capacity.
- No unnecessary load such as pouring weight on the roof.
- Good performance demonstrated by the wind tunnel test at Technical University of Munich.
- No damage to the roof.
- Aluminium and stainless-steel parts to be highly corrosion-resistant.

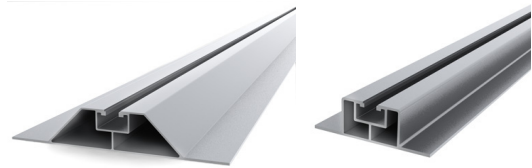
### Easy installation with straightforward steps

- Just lay Al rails on roof according to the configuration, no extra fixation parts is needed between rails and roof.
- Fix supporting legs to the rails and lay modules on the legs.
- Fix modules to supporting legs with aluminium alloy clamps.
- At last, attach mental sheets to form the air deflectors to the frames.

## Components of Windstream

### Aluminium Profile

- The anchor point of the supporting legs can be adjusted along the slot of the rail.
- The bottom of the base rail is sized to be 80mm or 140mm wide to ease the pressure on the roof. This design is critical for the security of roof especially membrane roof.



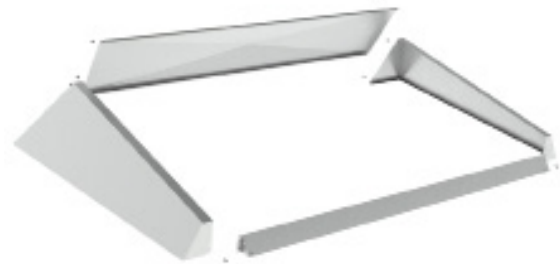
### Supporting Leg

- Supporting leg is made of high quality stainless steel and it is corrosion-resistant.
- High mounting efficiency with the use of aluminium alloy clamps to fix PV modules.
- Arrangement of module array can be customized according to requirements.



### Air deflector

- Using stainless or zinc plated steel sheets to be corrosion-proof.
- Having aerodynamic effect to prevent the frame from overturning by high wind.



### Joiner pieces for base rails

The maximum length is 6m for normal aluminium rails, splice bar is used to prolong the rail.

- 1 T-shaped splice bar with four M8 holes on it.
- 4 flange screw M8.

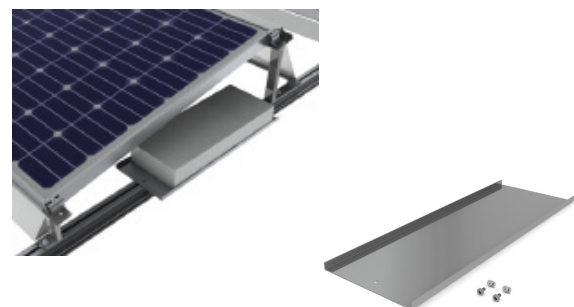


### Ballast supporting components

- 1 ballast supporting plate, stainless steel, 600x200x2mm.
- 2 flat head bolt M6x12.
- 2 flat head nut M6x12.

#### Notice:

Ballast supporting plate is optional, it is used in the installation field where the wind could be too strong.



## Mechanical Calculation and Wind Tunnel Test

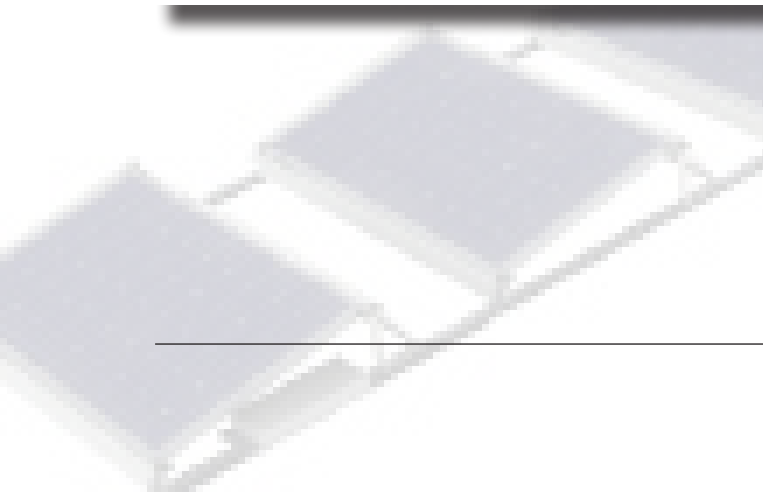
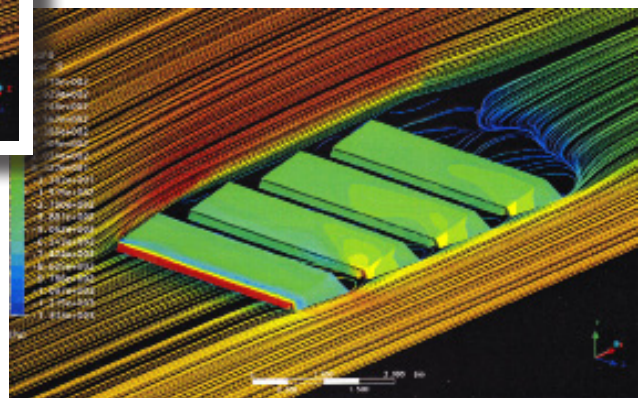
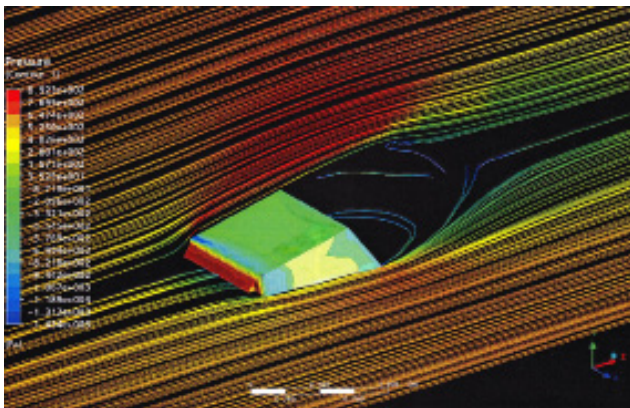


Stability and reliability of the mounting system under strong wind has been proved through the wind tunnel test at Technical University of Munich, the wind speed reached 160km/h high in the test.

- The total weight of mounting system plus the modules is 11.65kg/m<sup>2</sup>.
- The wind speed is 160 km/h.
- The angle between the module and the ground is 10° – 15°.

### TECHNICAL DATA

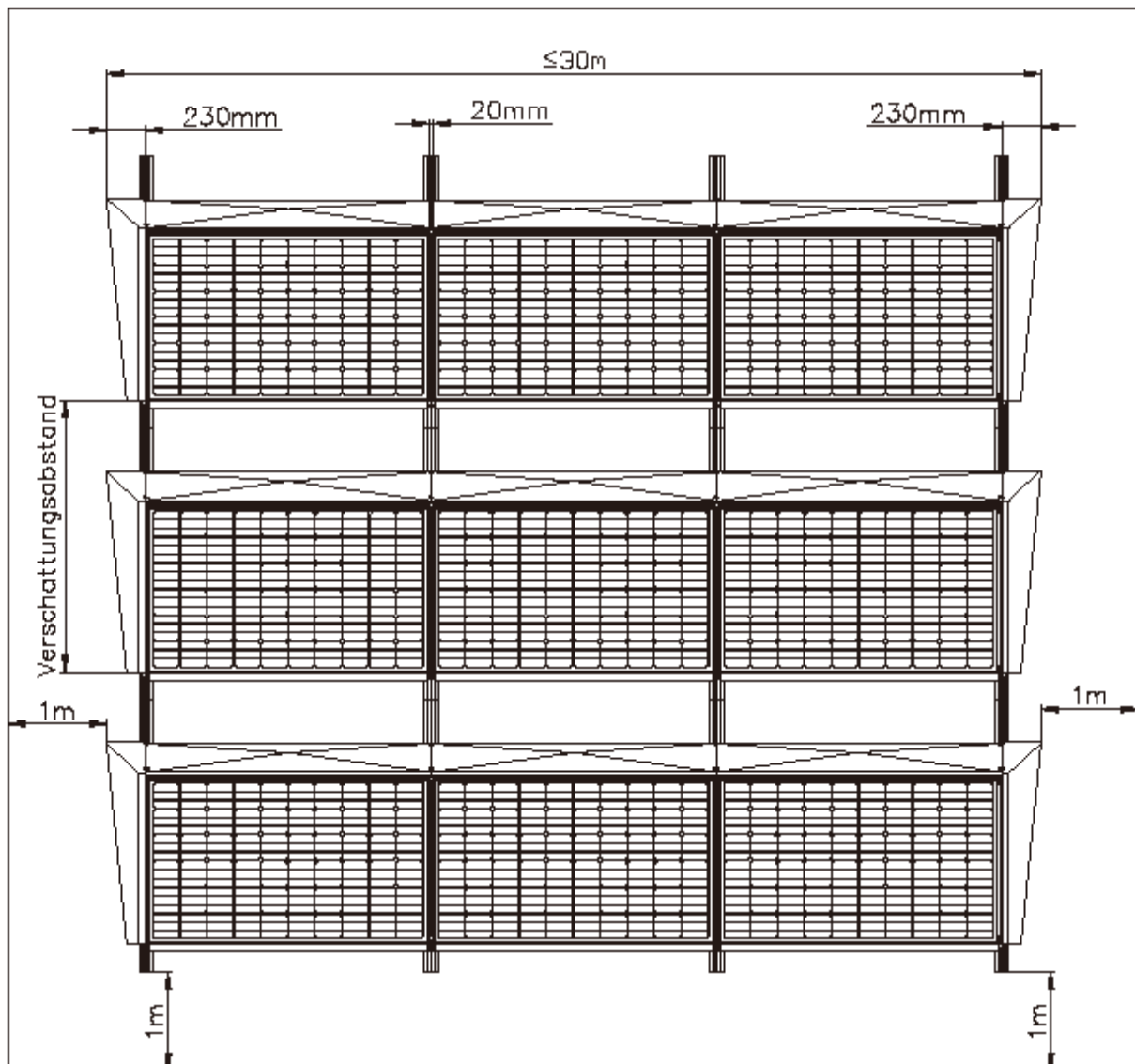
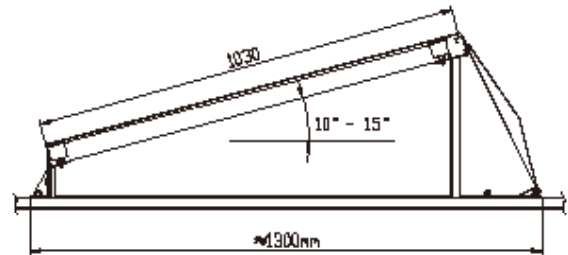
|   |                        |
|---|------------------------|
| Module tilt angle                       | 10°- 15° to the ground |
| The max. roof tilt angle                | 5° to the ground       |
| Module type                             | Virtually any          |
| Module orientation                      | Horizontally           |
| Minimum quantity of PV module per array | 3 rows and 3 columns   |
| Weight(frame plus modules)              | 11.65kg/m <sup>2</sup> |
| Max. wind speed to withstand            | 160 km/h               |
| Material                                | Al/stainless steel     |
| Warranty                                | 10 years               |





## Layout for Windstream

- The calculation for the width of module layout is:  
 $n \times (\text{length of a module}) + (n-1) \times 20\text{mm} + 2 \times 230\text{mm}$   
 (n=Number of modules per row)  
 Notice the width of module should be <30m.
- The installed PV modules must be at least 1m away from the sides of the roof.
- A minimum of 3 rows and 3 columns is required for an array.



# Windstream

Safety. Reliability. Stability

Our goal is to offer economical, practical and reliable mounting system with high cost-efficiency.



Gigabiz Ltd

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