



## MOUNTING SYSTEMS FOR FIELD PV INSTALLATIONS

Metaloumin S.A. presents the fixed support structure of photovoltaic panels made of aluminum alloy AlSiMg 6005, which ensures extremely high strength and corrosion resistance. Given that the structure is consisted of expandable units, it is ready to cover all kinds of projects.

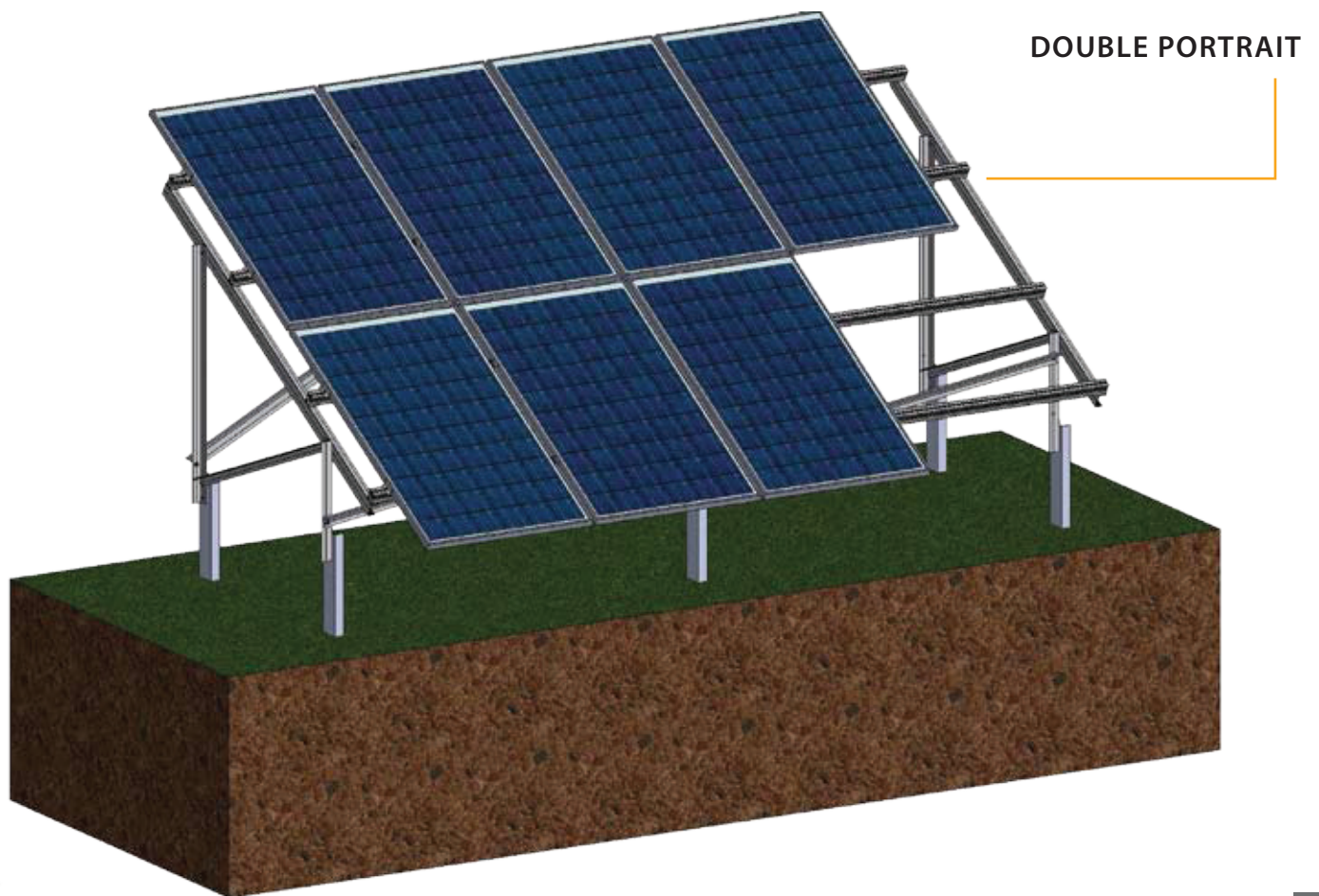
## **A) DOUBLE POLE ARRAY MOUNTING SYSTEM FOR FIELD AND FLAT ROOF**

### Synoptic Information:

- There is a complete certificated static study (TUV HELLAS) with finite elements, which takes under consideration the combination of various loads such as wind, snow, earthquake and temperature changes.
- The mounting system is designed in accordance with Eurocodes 1 and 9 (maximum wind velocity at 180 Km/h).
- Easy and fast assembly of mounting system (only screws are used for the connection of the parts) due to the absence of unneeded components (thorough design).
- Adjustable to each project's needs
- Value for money
- No maintenance required



For framed modules of any dimension  
and type & non framed HELIOPHERA modules



## TECHNICAL DATA

- Unlimited capacity of extension with maximum distance between the legs of the structure 2,4 m.
- Capability of supporting further PV equipment (such as inverters) on the body of the structure.
- The mounting system has a fixed angle of gradient (20o - 40o).
- All joints are using bolts and nuts (friction joints class 3 according to Euro code).
- Ability to overcome the thermal expansions through special patents.
- Insulation material between aluminum in order to avoid galvanic corrosion.
- Diagonal cross bars to protect the assembly from side (E-W) wind load vibration.



## FOUNDATION

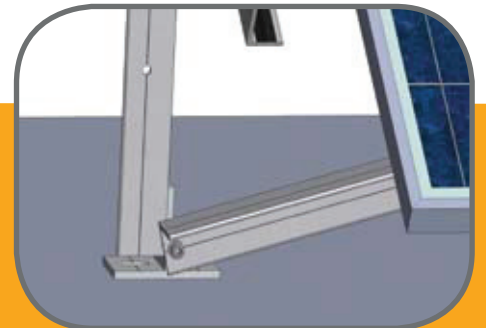
Ready for installation on pole, cement and screw with low axial loads



POLE

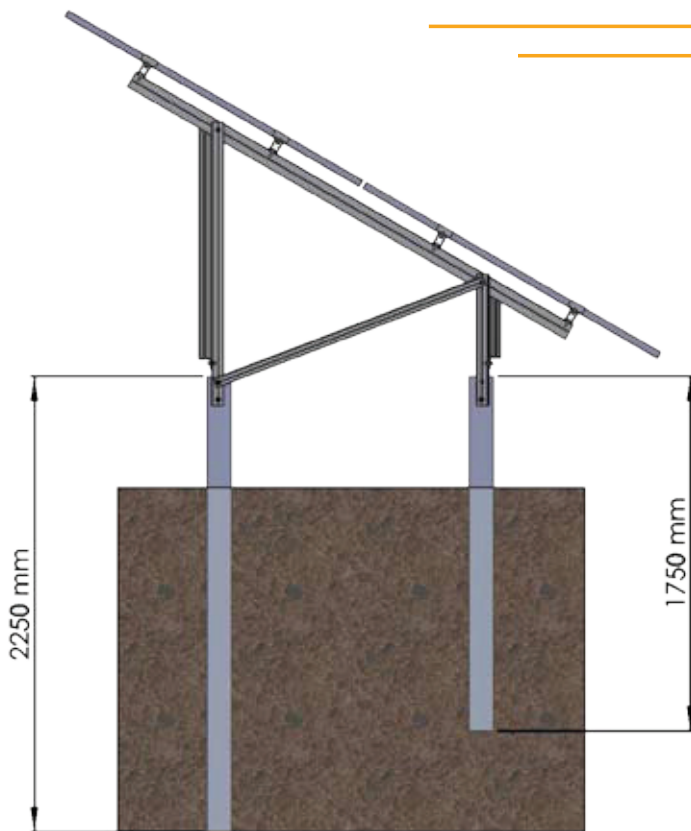


SCREW

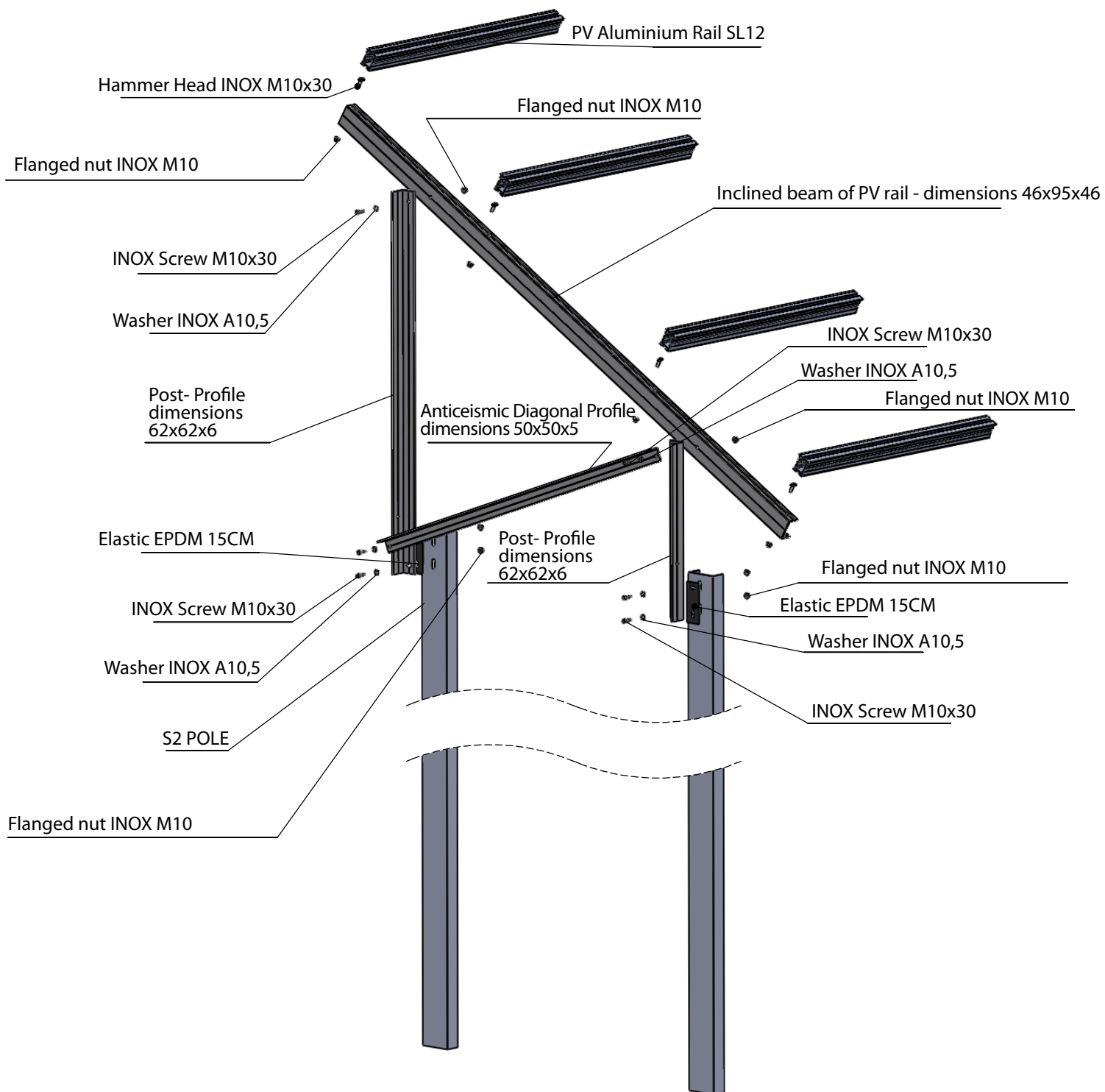


CEMENT










## LENGTH OF POLES



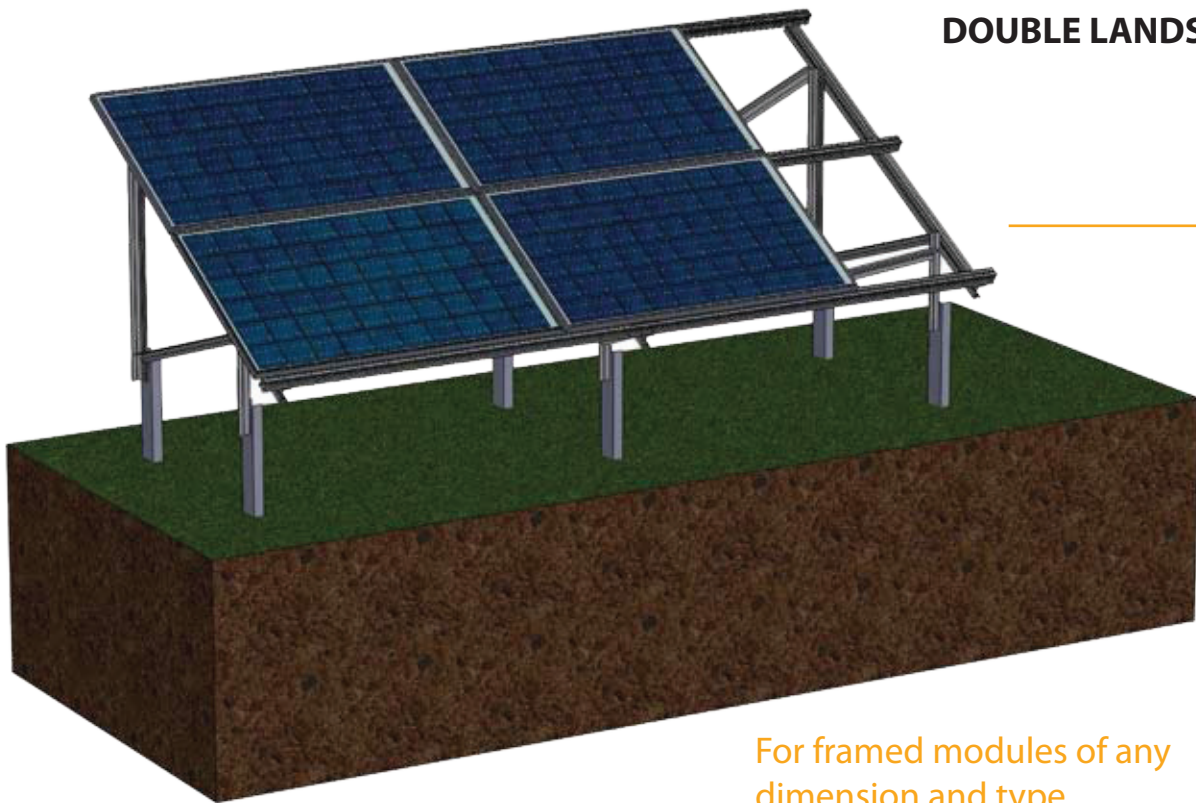
The length of the pole depends on the ground resistance (typical height of the front pole 1,75 m & typical length of the rear pole 2,25 m).



## MATERIAL – TRIANGLE ACCESSORIES

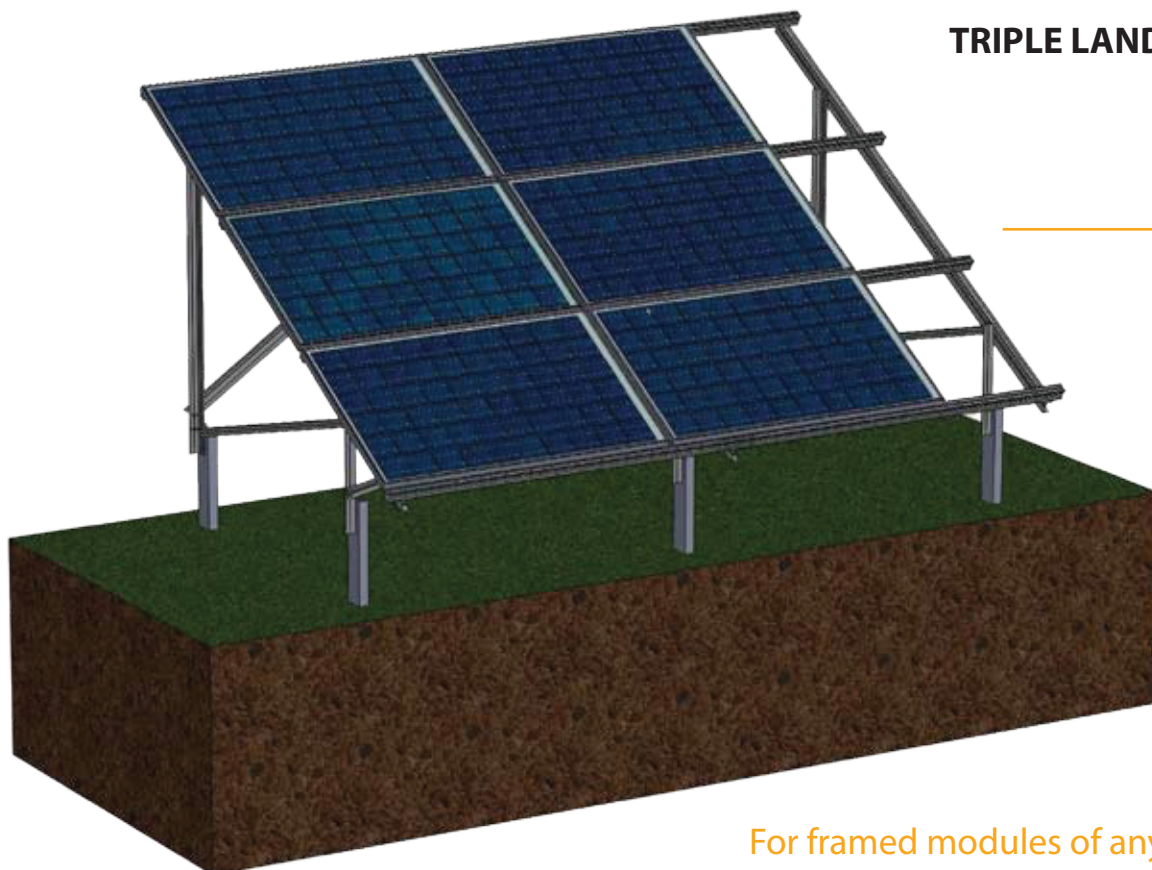
Num.	MATERIA	ILLUSTRATION	DESCRIPTION
1	SL12		PV Aluminium Rail SL12
2	SL23		Inclined beam of PV rail - dimensions 46x95x46
3	SL04		Post- Profile dimensions 62x62x6 (front and rear triangle leg)
4	SL05		Antiseismic Diagonal Profile - dimensions 50x50x5
5	M10X30		INOX Screw M10x30
6	M10 DIN 6923		Flanged nut INOX M10
7	A10,5/20		Washer INOX A10,5
8	TAU M10x30		Hammer Head INOX M10x30
9	Elastico EPDM		ELASTIC EPDM 15CM

# landscape



**DOUBLE LANDSCAPE**

For framed modules of any dimension and type

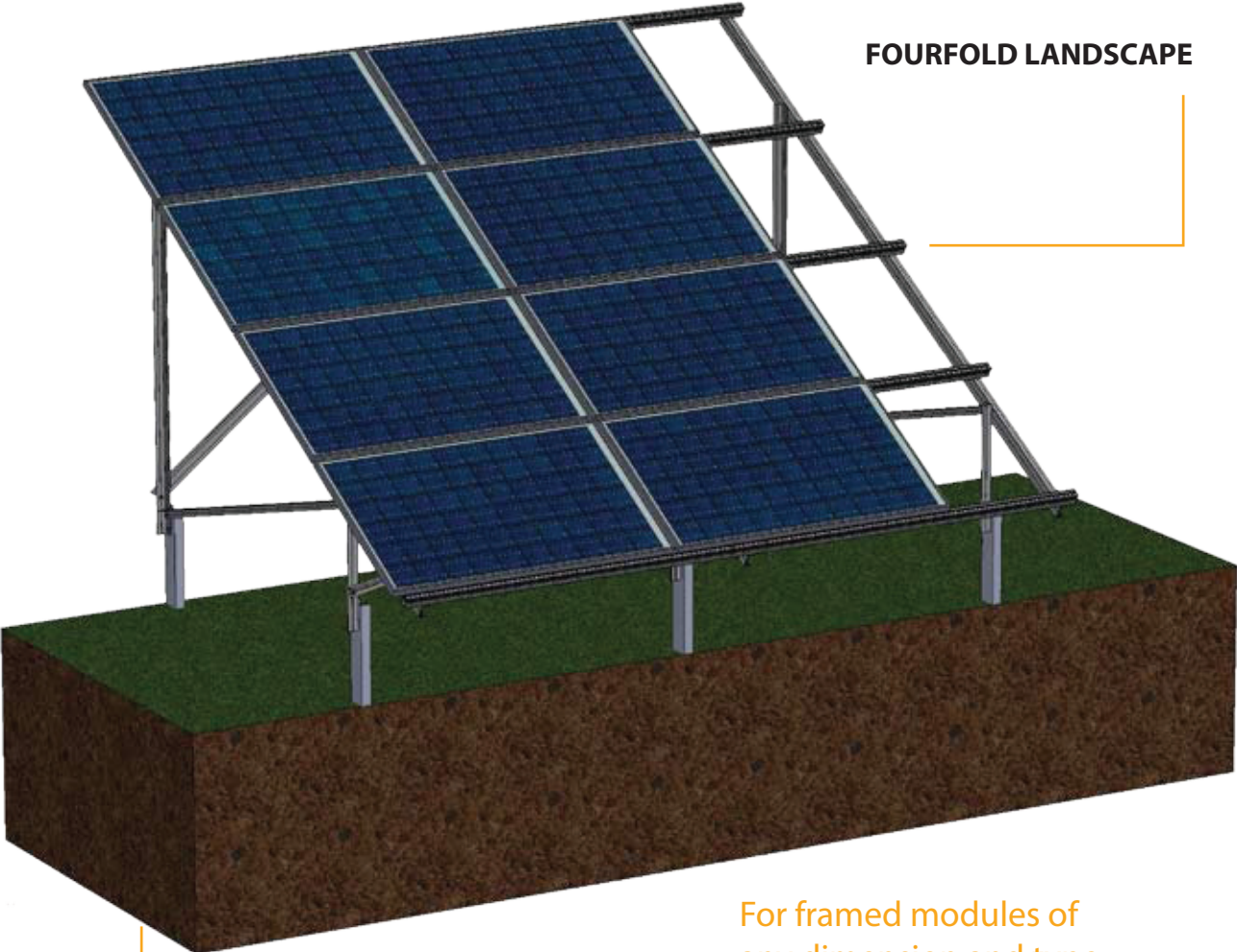


**TRIPLE LANDSCAPE**

For framed modules of any dimension and type

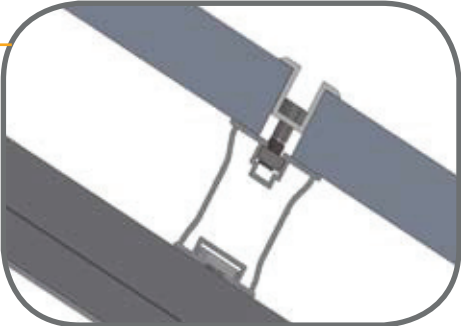


# landscape



FOURFOLD LANDSCAPE

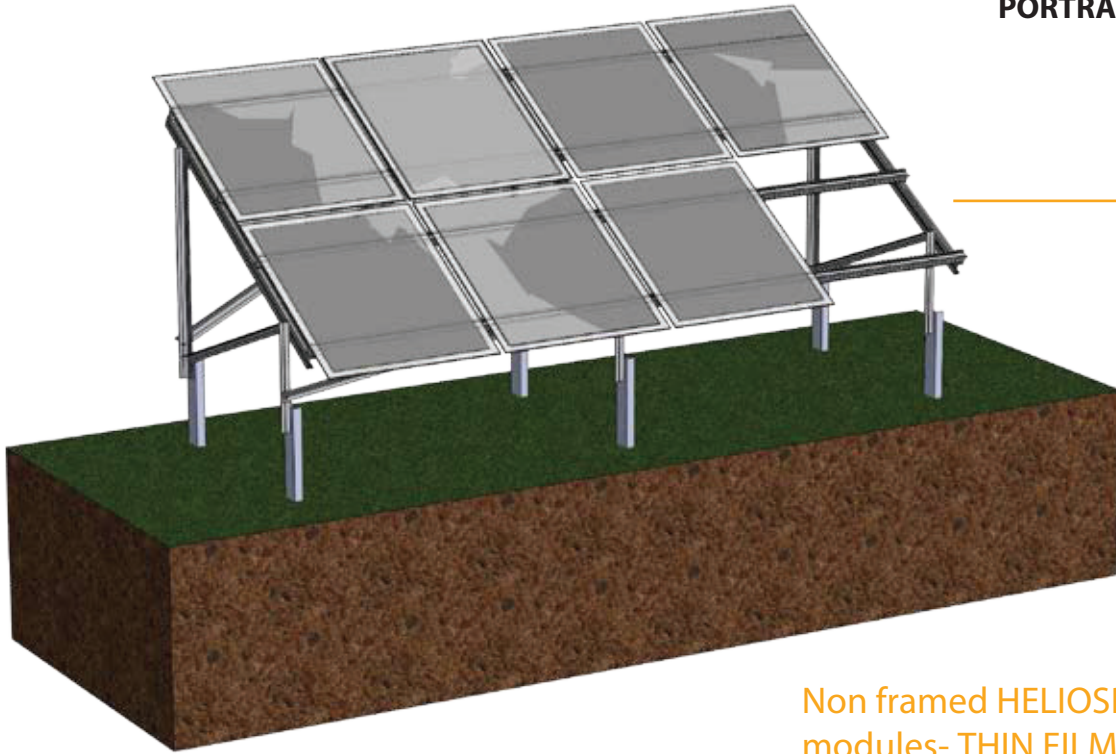
For framed modules of any dimension and type





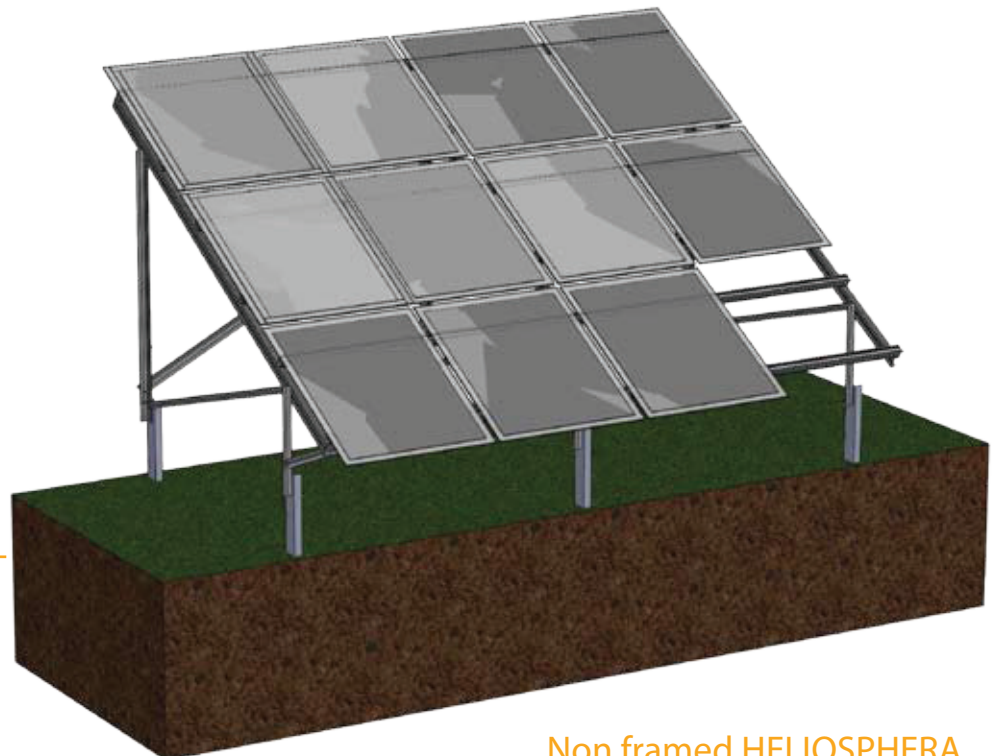
# portrait

**DOUBLE HELIOSPHERA  
PORTRAIT**



Non framed HELIOSPHERA  
modules- THIN FILM

**TRIPLE HELIOSPHERA  
PORTRAIT**



Non framed HELIOSPHERA  
modules- THIN FILM

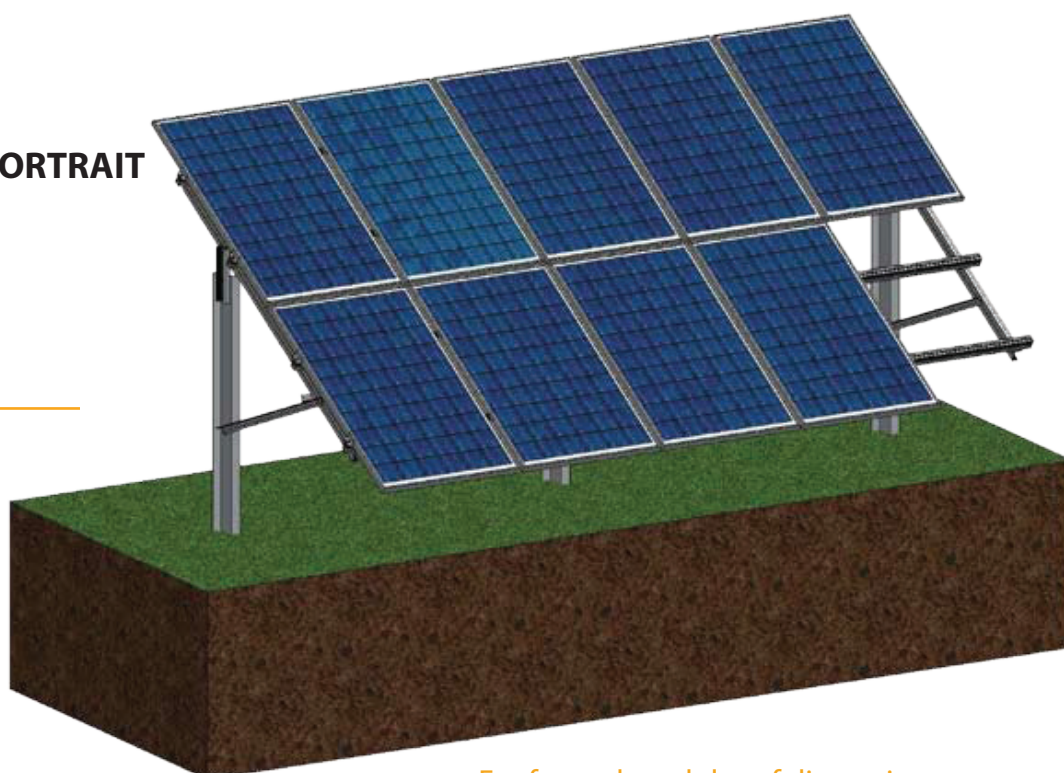
## B) SINGLE POLE ARRAY MOUNTING SYSTEM FOR FIELD PV PROJECTS

Synoptic Information:

- The mounting system is designed in accordance with Eurocodes 1 and 9 (maximum wind velocity at 180 Km/h).
- There is a complete certified static study with finite elements (TUV HELLAS), which takes under consideration the combination of various loads such as wind, snow, earthquake and temperature changes.
- The necessary hardware (screws, nuts and bolts) used are of stainless steel.
- Easy and fast assembly of mounting system (only screws are used for the connection of the parts) due to the absence of unneeded components (thorough design).
- All joints are using bolts and nuts (friction joints class 3 according Euro code).
- Ability to overcome the thermal expansions through special patents.
- Insulation material between aluminum in order to avoid galvanic corrosion.
- Diagonal cross bars to protect the assembly from side (E-W) wind load vibration.
- Adjustable to each project's needs
- Value for money
- No maintenance required

### SINGLE POLE ARRAY MOUNTING SYSTEM

**DOUBLE PORTRAIT**



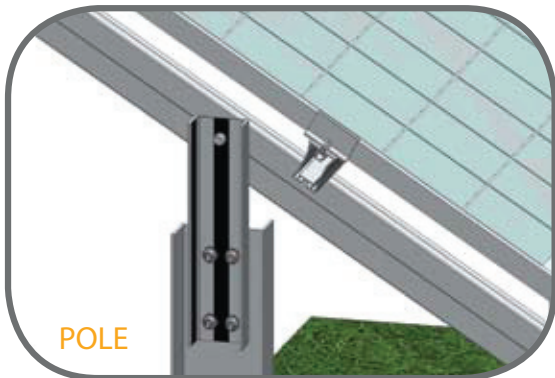
For framed modules of dimension up to 1.700 mm. & non framed HELIOSPHERA modules

## TECHNICAL DATA

- Unlimited capacity of extension with maximum distance between the legs of the structure 2.85 m.
- Capability of supporting further PV equipment (such as inverters) on the body of the structure.
- The mounting system has a fixed angle of gradient (25o - 30o).
- Ability of on-site adjustment of 5cm in height, 3cm in the N-S direction with the ability to turn 8° on the same time.

## FOUNDATION

Ready for installation on pole that minimizes installation time.

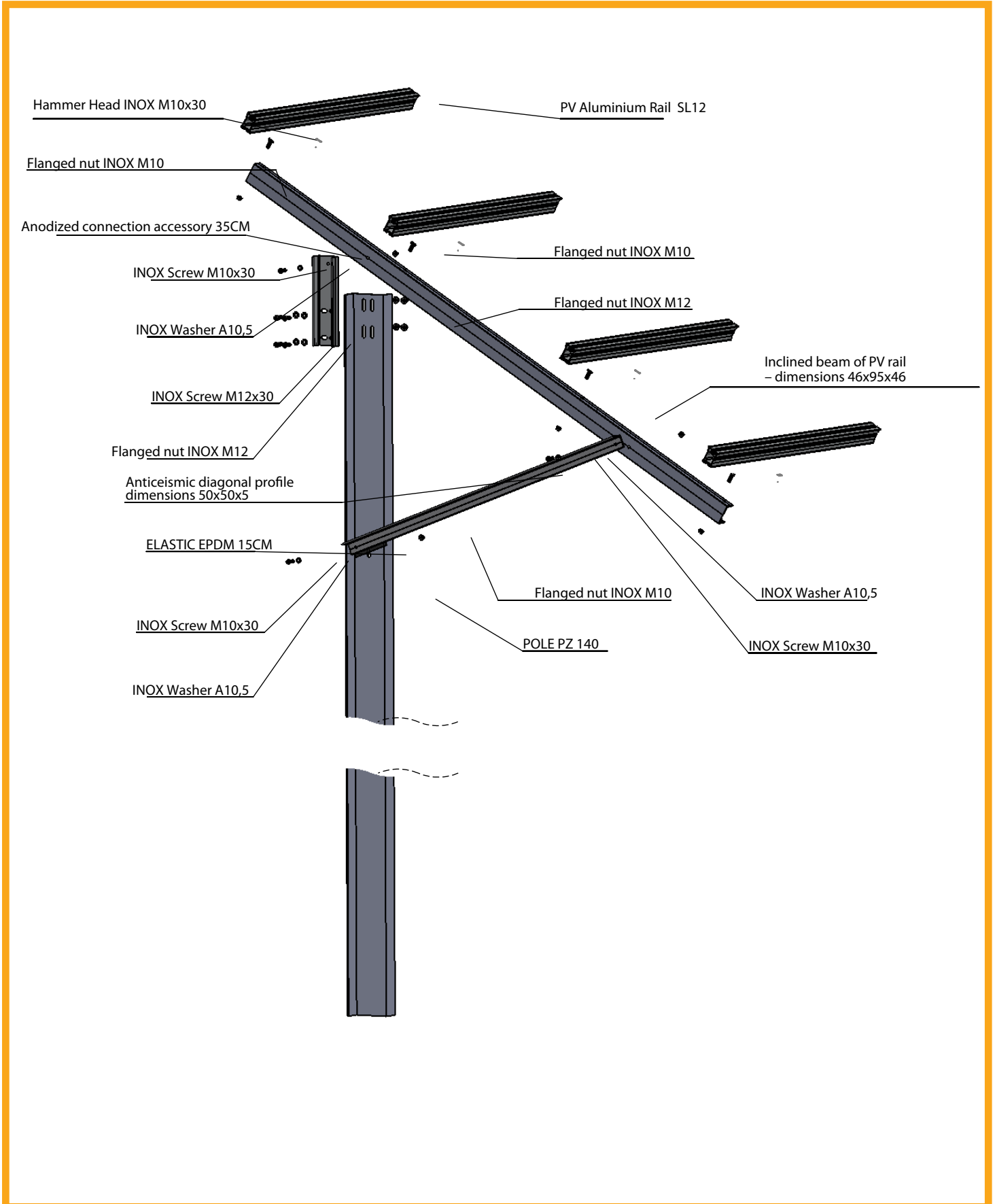


The height of the pole depends on the ground resistance (typical length 2,85 m).

















# TRIANGLE – SINGLE POLE

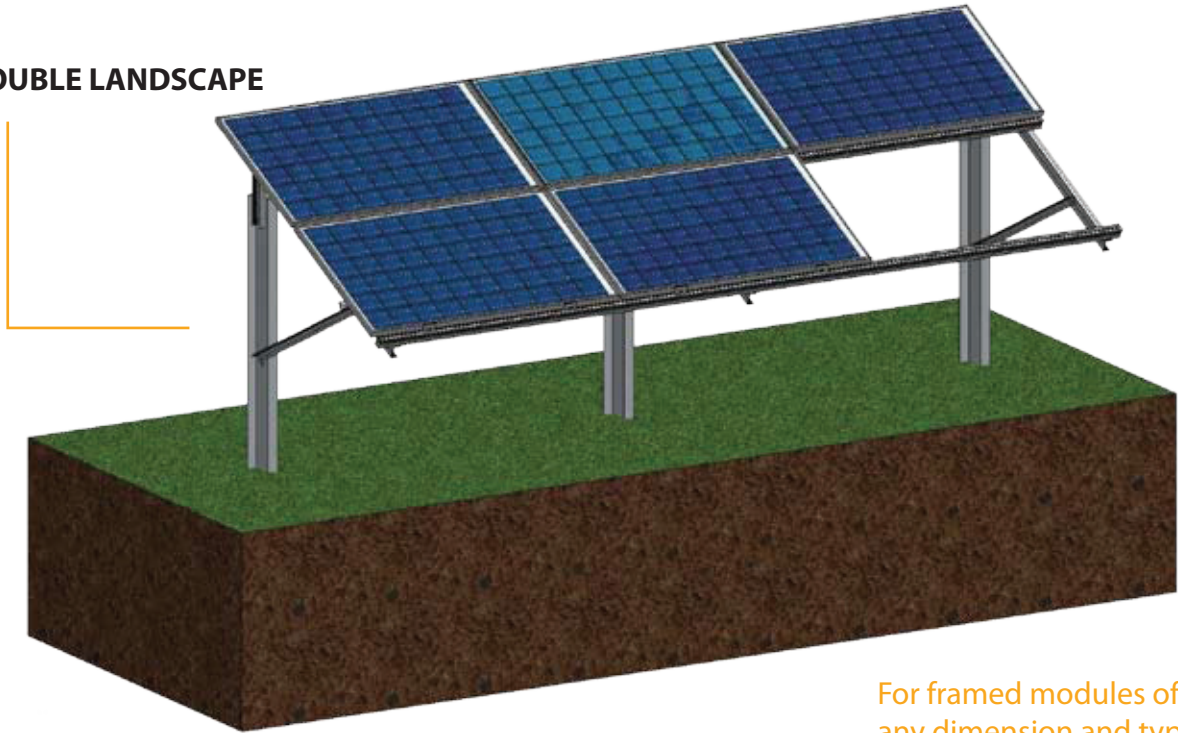


## MATERIAL – TRIANGE ACCESSORIES

Num.	MATERIAL	ILLUSTRATION	DESCRIPTION
1	SL12		PV Aluminium Rail SL12
2	SL23		Inclined beam of PV rail – dimensions 46x95x46
3	Accessorio anodizzato della congiunzione		Anodized connection accessory 35CM
4	SL05		Antiseismic diagonal profile – dimensions 50x50x5
5	TAU M10X30		Hammer Head INOX M10x30
6	M10x30		INOX Screw M10x30
7	M10 DIN 6923		Flanged nut INOX M10
8	A10,5/20		INOX Washer A10,5
9	M12x30		INOX Screw M12x30
10	M12 DIN 6923		Flanged nut INOX M12
11	A12,5/20		Washer INOX A12,5
12	Elastico EPDM		ELASTIC EPDM 15CM

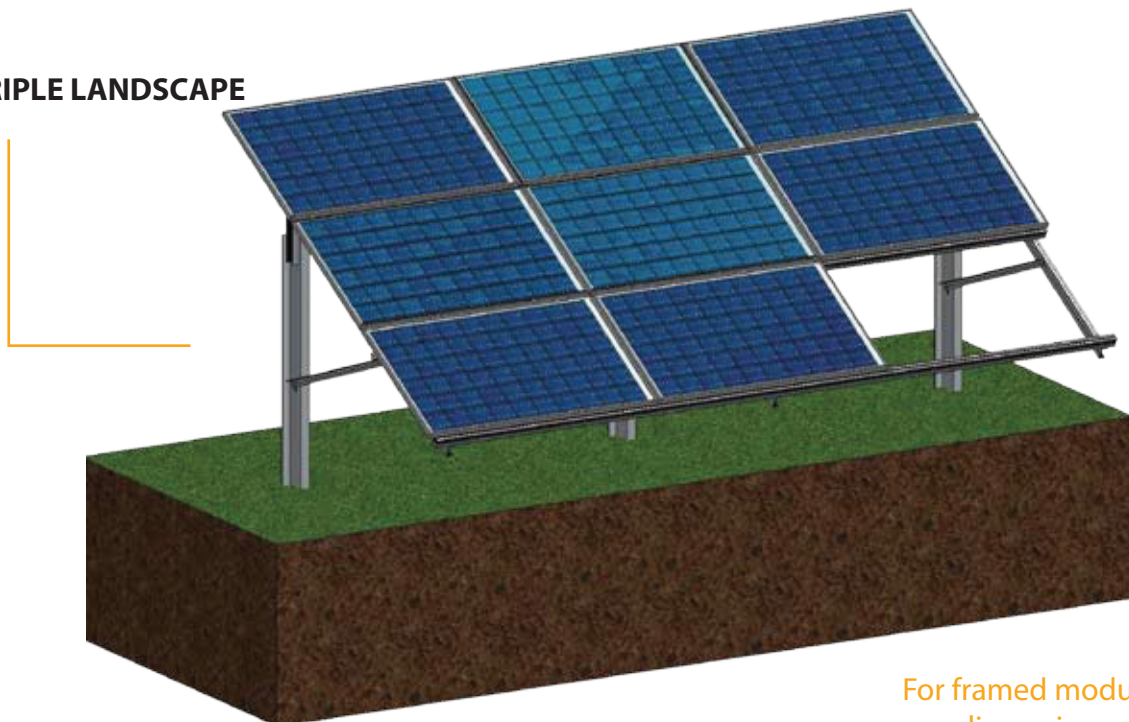
# landscape

**DOUBLE LANDSCAPE**



For framed modules of any dimension and type

**TRIPLE LANDSCAPE**

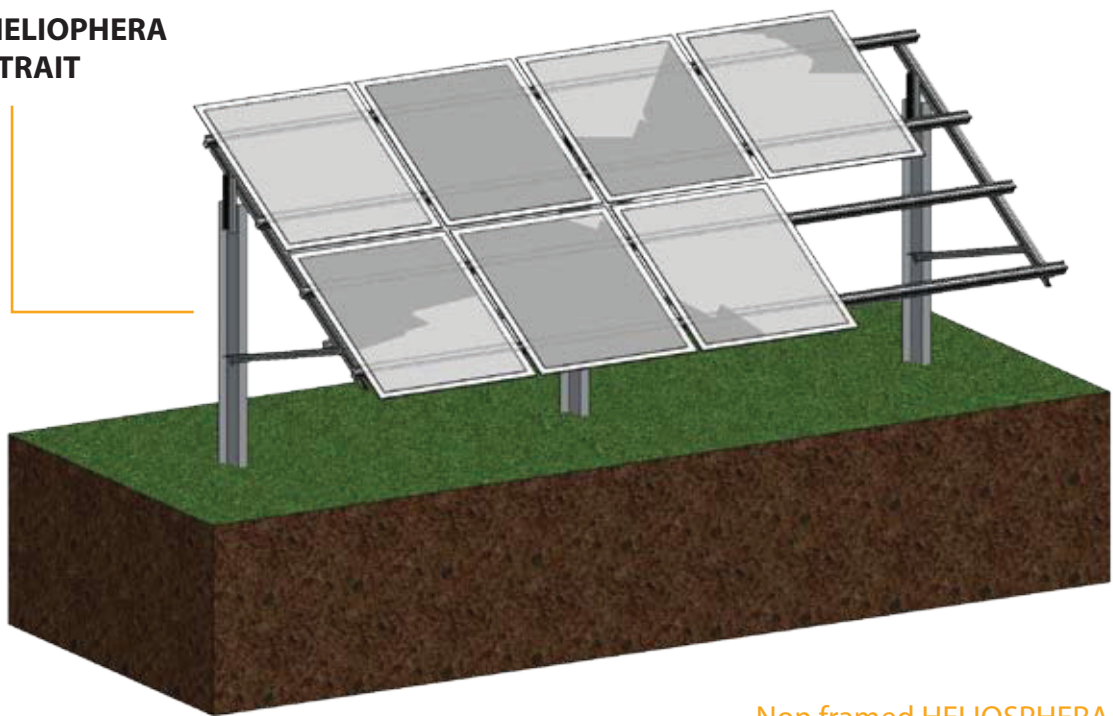


For framed modules of any dimension and type





**DOUBLE HELIOPHERA  
PORTRAIT**



Non framed HELIOSPHERA  
modules - THIN FILM



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