



Designed for European Union



Product Catalogue

Solar Mounting Solution



Last Updated - Nov. 2024



At **PVezRack®** our heritage is founded on the art of engineering and a culture of collaboration. We've built our legacy with a future focus that still stays true to the fundamentals of sustainable design. We have built a collaborative culture amongst stakeholders from across our industry, which was critical for us to deliver on our mission. We offer the solar industry, versatile mounting equipment for every application.

PVezRack® is the flagship product line from Clenergy, which has been designing products since 2007 and has grown into an Australian solar industry icon with its products sold across 30 countries. Our ongoing research and development is backed by a culture of open innovation, excellence through quality and being service focused.

We develop for optimal functionality, with an emphasis on simplicity for aesthetically brilliant projects.

Our technically advanced solar mounting gear is complemented by unique kliplok clamps and accessories, as well as our unparalleled logistics & operations team, with an emphasis on customer service.



Clenergy is a veteran manufacturer with startup roots in Melbourne, Australia, we have earned a solid reputation throughout the nation and across APAC, because of a proven track record of success.

We bring our expertise to the table to provide your company and engineers with creative insights, and attention to detail.

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Key Facts

Market Value

Founded in 2007
Public listed on the Shanghai Stock Exchange in 2017
Strategic investment by Chinese state-owned enterprises

Industry Leader

30GW of worldwide installations
Top 3 Solar Tracker Supplier in China
Largest share of AU rooftop solar PV market for 14 years
31 billion+ kWh green power generation capacity annually

Core Business

Global offering of solar products
Solar PV + Smart Energy Solution
1,000,000+ rooftop solar projects
15,000+ solar plants

Milestones



2021-Current New Heights

Clenergy enters the building industry with cable management solutions, and launches the RUNNUR brand.

Clenergy sealed a strategic partnership with Xiamen C&D Inc. and Xiamen Lide Group.

Launched country-wide distributed rooftop pilot program across Xiang'an district backed by the National Energy Administration.

Clenergy rebrands to reflect our new vision and mission.

Clenergy Xinjiang Subsidiary established. 2GW PV power generation demonstration base and 5GW ezTracker equipment manufacturing plant planned in Urumqi.



2011-2015 Global Expansion - Diversified Development

Added a Tianjin manufacturing base.

New Official Subsidiaries – Australia, US, Japan, Thailand and the Philippines.

Business Model – Global Market + Local Service + Global Supply Chain.



2007-2008 Startup - Foundation

Founded Manufacturing in Xiamen, China. Developed the Australian market. Great Industry brand awareness.

2016-2020 Public Listing

IPO application approved by the CSRC in 2016.

Successfully listed in the Shanghai Stock Exchange in 2017.

Doubled the sales volume in 2018, reaching 1.7GW.

Cooperated with Obton and Hunan Xinhua on 65MW and 77.1MW solar project respectively in 2019.

Pipeline of more projects across Asia, Japan, Germany & Australia.

Annual shipments reached 2GW in 2020; Bagged 293MW order in Shihezi, Xinjiang, making it the largest solar tracker project within China in 2020.



2009-2010 Turning Pointing

Successfully developed the "PVeZrack®" series.

Lead to Australia's No.1 Solar Mounting Equipment supplier.



SolarRoof Pro 2.0

The Clenergy PVezRack® SolarRoof Pro 2.0 is a roof-mounting solution suitable for most residential and commercial pitched roofs. Using our innovative rail, M module, and interface family, the SolarRoof Pro 2.0 delivers a quick, safe, and cost-effective solution for installers.

Main Benefits

Easy installation with a wide adjustment range

The innovative adjustable tile hook offers a wide range of adjustments for three positions, different thicknesses of tiles, different wooden structures, or building structure tolerance. The wide adjustment range allows faster and easier onsite installation.

Only one tool is required to install the whole system, owing to the unification of the connection point design.

A flexible layout plan fully utilises the roof area

The same kit and components are required for landscape and portrait layouts on residential roofs by simply rotating the L feet on top of the roof hook. It avoids two layers of rail requirement and makes the PV-layout arrangement for irregular roofs more flexible.

Flexible to rail and rail-less commercial solution

PV Panels could be fixed on U Support or Mycro-rail directly, or place on rail to make the whole system more stable. With small accessories, the commercial system can be transferred between rail solutions and rail-less solutions. The flexible and convenient hanger bolt allows the system to use the same SKU for both landscape and portrait PV layout, applicable to metal roofs, slate roofs, asphalt roofs, etc.

Hassle-free solution

The Clenergy PVezRack® SolarRoof Pro 2.0 is a hassle-free solution. House owners can be worry-free with the stable and high-strength mounting system. High-strength hooks and rails, and ETA-certified screws ensure that house owners need not worry about tile fracturing or mounting system safety on windy or snowy days.

**25 Year
Warranty**

Commercial

Residential



CE Certification

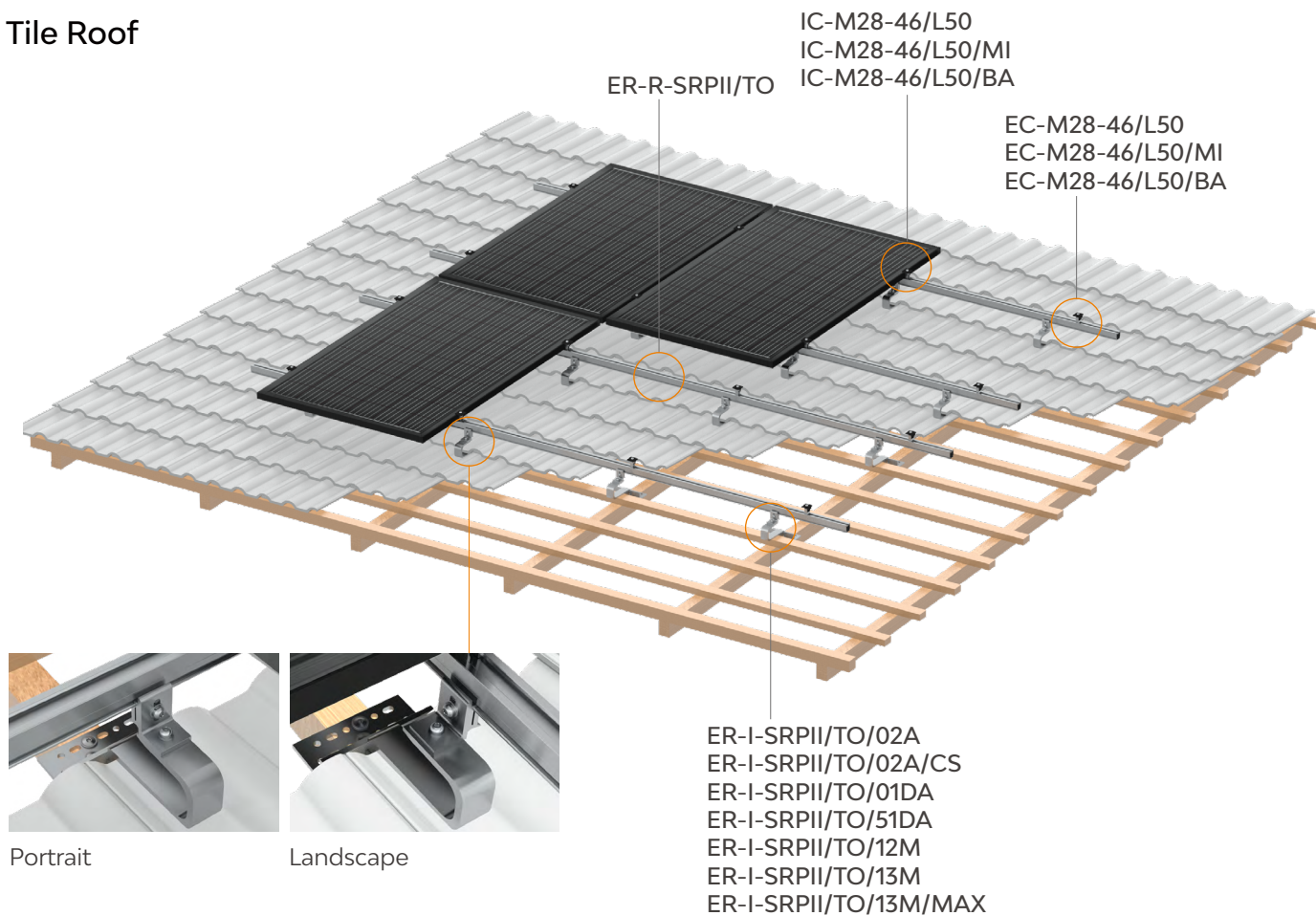


TUV Certification

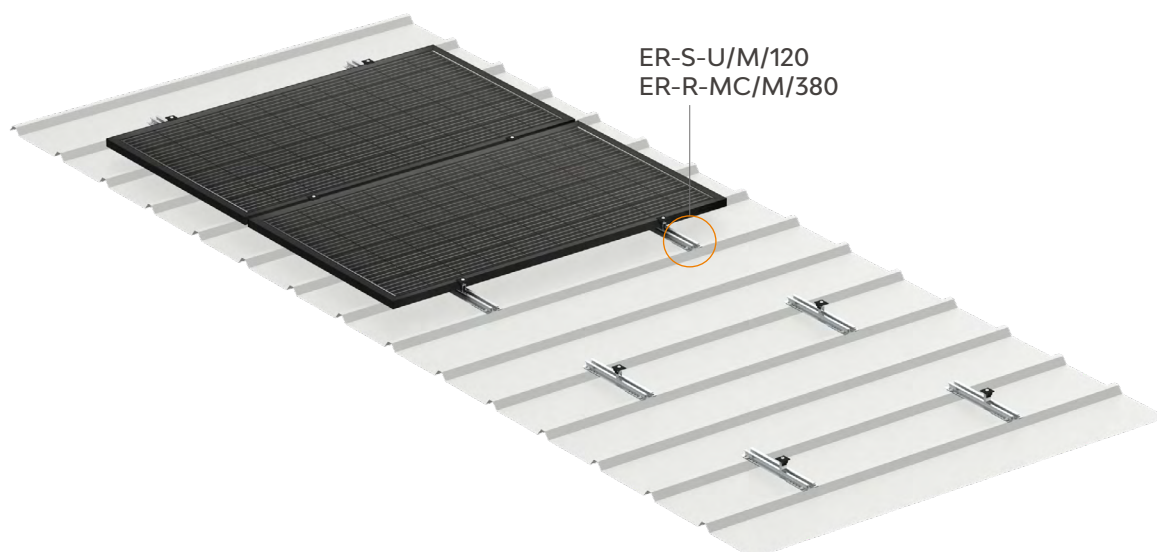


ETN Certification

Tile Roof



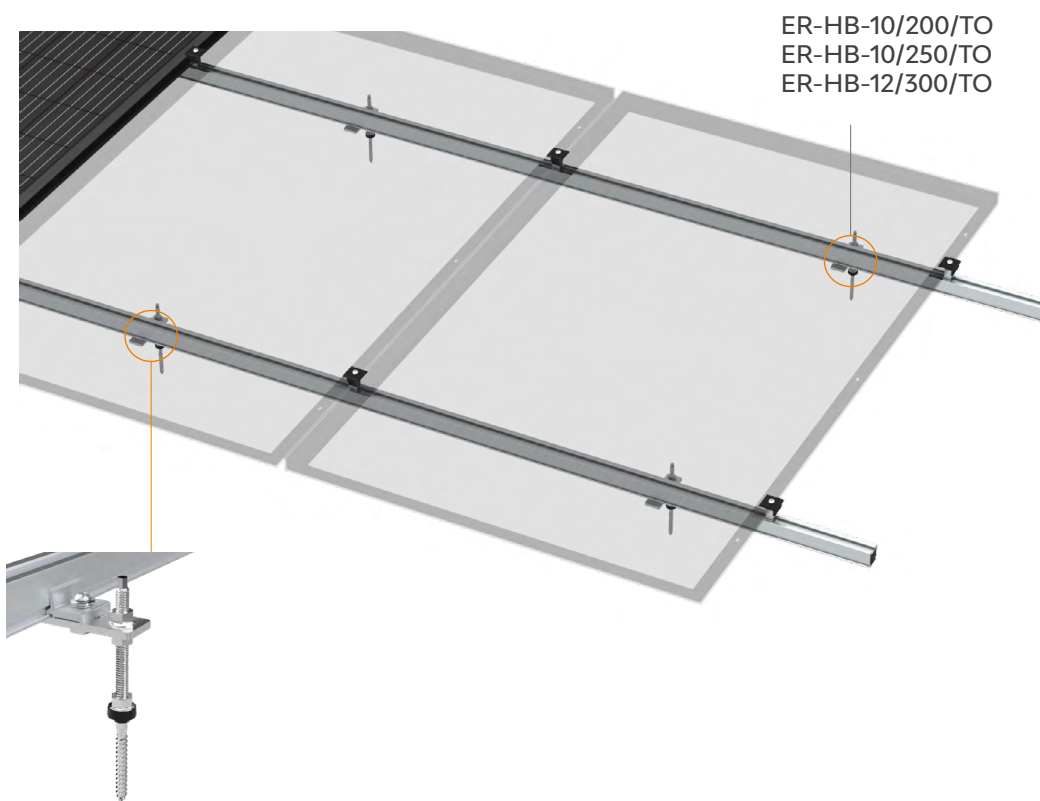
Trapezoidal Metal Roof (Penetrative)



Available accessories

■ Grounding/earthing ■ Cable clips ■ Rail caps

Metal Roof (Penetrative)

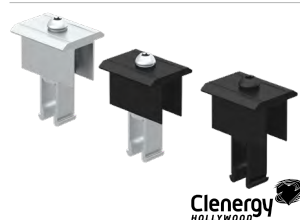




EC-M28-46/L50
EC-M28-46/L50/MI
EC-M28-46/L50/BA

End Clamp 28-46mm,
with M module

- Universal Clamp, Length 50mm, Anodised
- M Module 16.5*30.7mm
- Corrugated L-anchor Plate 3
- Button Head Torx Screws M8*35
- Lock washer 8
- Spring for Universal Clamp



IC-M28-46/L50
IC-M28-46/L50/MI
IC-M28-46/L50/BA

Inter Clamp 28-46mm,
with M module

- Universal Clamp, Length 50mm, Anodised
- M Module 16.5*30.7mm
- Button Head Torx Screws M8*35
- Lock washer 8
- Spring for Universal Clamp



ER-R-SRP/II/TO/40

Toroda Rail 40*Lmm

- Toroda Rail 40*Lmm



ER-SP-SRP/II/TO/40

Splice for Toroda Rail 40

- Splice for Toroda Rail 40
- Connection Clip



ER-I-SRP/II/TO/02A

Alu Adjustable Roof Hook
34-56 mm with Toroda rail
connection, wood screw
M8*100

- Roof hook plate of Alu Adjustable Hook 01
- Main body of Alu Adjustable Hook 02
- U-shaped shim 2
- L bracket for SRP interface
- Lower clamp for L bracket, Anodised
- Upper clamp for L bracket, Anodised
- ezClip Spring
- Lock Washer 8*18
- Button Head Torx Screws M8*20
- Button Head Torx Screws M8*27
- Button Head Torx Screws M8*30
- Washer 8
- Plain washer 8
- Wood screw M8*100 T40 ETA



ER-I-SRP/II/TO/02A/CS

Alu Adjustable Roof Hook 36-
58 with carbon steel main body

- Main body of SRP Adjustable Tile Interface, carbon steel
- Roof hook plate of Alu Adjustable Hook 01
- Lower clamp for L bracket, anodized
- Upper clamp for L bracket, anodized
- ezClip Spring
- Lock washer M8*18
- Button Head Torx Screws M8*27
- Button Head Torx Screws M8*30
- Spring Washer GB/T 93-8
- Plain Washer DIN 125-1-8
- Wood screw 8*100 T40
- U-shaped shim W45



ER-I-SRP/II/TO/01DA

Two way Adjustable Roof Hook
H118V

- Upper Part of Roof Hook Pro H117V
- Middle Part of Two way Adjustable Roof Hook 40-60mm
- Lower Part of Two way Adjustable Roof Hook 40-60mm
- Rail Clamp for Toroda Rail, version 2
- Button Head Torx Screws M8*27
- Button Head Torx Screws M8*25
- Conical spring Washer M8.5*20
- U-shaped shim wide 30mm
- ezClip Spring
- Spring Washer GB/T 93-8
- Plain Washer DIN 125-1-8
- Wood screw 8*100 T40



ER-I-SRP/II/TO/51DA

Two way Adjustable Roof Hook
H121V

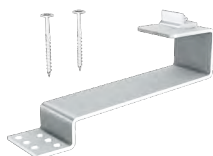
- Upper Part of Roof Hook Pro H117V
- Middle Part of Two Way Adjustable Roof H121V
- Lower Part of Two way Adjustable Roof Hook 40-60mm
- Rail Clamp for Toroda Rail, version 2
- Button Head Torx Screws M8*27
- Button Head Torx Screws M8*25
- U-shaped shim wide 30mm
- Conical spring Washer M8.5*20
- ezClip Spring
- Spring Washer GB/T 93-8
- Plain Washer DIN 125-1-8
- Wood screw 8*100 T40



ER-I-SRP/II/TO/12M

Plain Tile Interface H104 with
Toroda-rail Clamp, wood screw
8*100, MAC Steel

- Plain Tile Interface H104, MAC Steel
- Rail Clamp for Toroda Rai, Version 2
- Wood screw 8*100 T40 ETA
- Button Head Torx Screws M8*27
- Hexagon nut M8
- Tab washer 8
- ezClip Spring
- Conical spring Washer 8.5*20



ER-I-SRP/II/TO/13M

Beaver Tile Interface H119 with
Toroda-rail Clamp, wood screw
8*100, MAC Steel

- Beaver Tile Interface H119, MAC Steel
- Rail Clamp for Toroda Rail, Version 2
- Wood screw 8*100 T40 ETA
- Button Head Torx Screws M8*27
- Hexagon nut M8
- Tab washer 8
- ezClip Spring
- Conical spring Washer 8.5*20



ER-I-SRP/II/TO/13M/MAX

Beaver Tile Interface H119,
Width 150mm

- Beaver Tile Interface H119, Width 150mm, MAC Steel
- Rail Clamp for Toroda Rail, Version 2
- Wood screw 8*100 T40 ETA
- Button Head Torx Screws M8*27
- Hexagon nut M8
- Tab washer 8
- ezClip Spring
- Conical spring Washer 8.5*20



ER-S-U/M/120

U Support 120mm, with
M-Module channel

- U Support 120mm, with M-Module channel
- Rubber Pad for U Support



ER-R-MC/M/380

Mycro Rail 380mm, with
M-Module channel

- Mycro Rail 380mm, with M-Module channel
- Rubber Pad for U Support



ER-RC-TO/BW

Rail Clamp Set for Toroda -rail
(with Diamond module, bolt
and washer)

- Rail Clamp for Toroda Rail, Version 2
- Diamond module 22.6
- Lock washer M8*18
- Button Head Torx Screws M8*15



ER-HB-10/200/TO
ER-HB-10/250/TO
ER-HB-12/300/TO

Hanger Bolt for wood purlin,
with TO-rail Clamp

- Rail Clamp for Toroda Rail, Version 2
- Waterproof Gasket for Hanger Bolt
- Hanger Bolt for wood purlin
- Hexagon nut M8
- Button Head Torx Screws M8*30
- Nut fixed
- Hex Nut
- Mounting Plate T6*116, for Hanger Bolt
- Conical spring Washer M8.5*20
- ezClip Spring

Ascent 1.1

The PVezRack® Ascent 1.1 is a low ballast, south/north, east-west facing solution without rails for PV installation on flat roofs. With the special design and a tilt angle of 10° and 15°. Ascent 1.1 is suitable for most common flat roof installations.

Main Benefits

Wind Tunnel tested

Ballast reduction through aerodynamic optimized construction. Also tested in boundary layer wind tunnel by the independent wind tunnel test agency, to achieve optimum ventilation for maximum energy output.

Pre-assemble

Pre-assembled inter and end clamp with legs reduce SKU, and also save warehouse and pick up cost.

Click-in technology

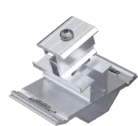
Easy installation and Tool-free assembly of the base rail due to click-in innovative patented design.

Roof friendly

With building protection rubber pad and optimal support surface, Ascent 1.1 achieves exceptional adaptability on flat foil, bitumen and concrete roofs.

Technical Details

Application	Flat roof up to 5°
Setting Angle	10°/15°
Module Orientation	North/South, East-West; Landscape
Roof covering	concrete roof, membrane roof, bitumen roof
Module Size	- When using 1500 and 2450mm base rail: width 1018-1190mm, height 28-40mm. - When using 2240mm base rail: width 1018-1134mm, height 28-40mm.
Snow Load	Customised
Wind Load	Customised
Material	Main Components: AL6005-T5 Wind Deflector/Ballast bar: MAC Steel Fasteners: SUS 304 Plate: Polypropylene (PP) and EPDM
Certification	TUV CE Wind Tunnel Test (I.F.I. Institute)
Standard	Eurocode 0-9 BRE489 AS NZS1170.2 JISC8955 ASCE 7-10
Warranty	25 years



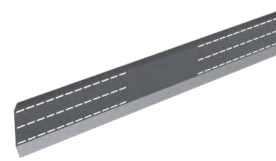
FL-ACV11/G/10 & FL-ACV11/G/15
FL-ACV11/G/10/MI & FL-ACV11/G/15/MI
Front Leg 10°/15°



RL-ACV11/G/10 &
RL-ACV11/G/10/MI
Rear Leg 10°



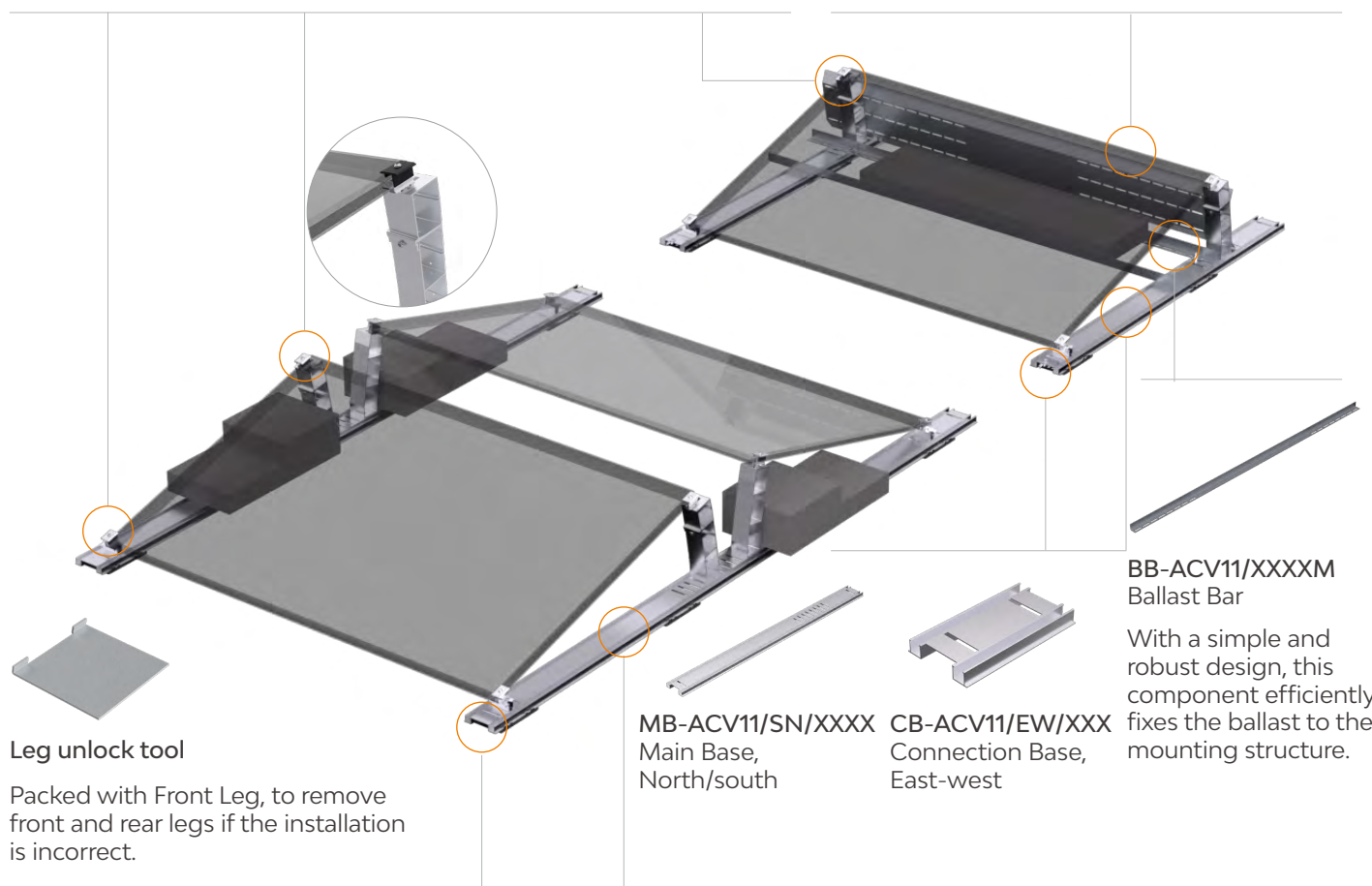
RL-ACV11/G/15 &
RL-ACV11/G/15/MI
Rear Leg 15°



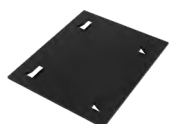
WD-ACV11/XX/XXXXM
Wind Deflector, 10° and 15°

Made of aluminium, preassembled with end clamp and inter clamp, Front Leg and Rear Leg are click-in assembly to the base rail that offer excellent corrosion resistance.

The wind deflector is fixed to the legs, normally installed on the end of array for deflecting wind and ensuring system stability.



EZ-PM-AC
Protection Mat



EZ-RB-200/240/10
EZ-FRB-200/240/10
EPDM Mat



SEB-ACV11/100
Start and End Base L100



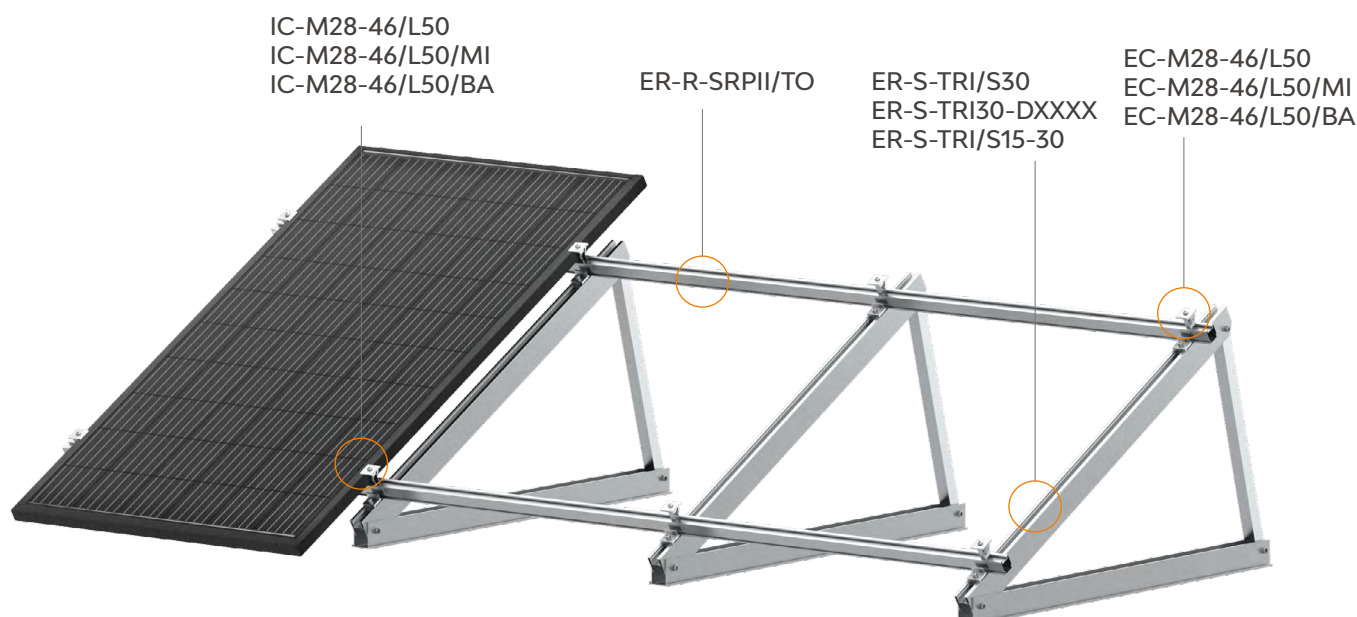
MB-ACV11/EW/XXXX
Main Base, East-west

The Polypropylene & EPDM mat offer a clearance between the roof surface and the base for water drainage. Also achieves exceptional adaptability on flat foil, bitumen and concrete roofs.

SolarTripod

Tilted flat roof frame designed for commercial installations

PVezRack® SolarTripod is designed for commercial PV-installations on flat roofs with tilted panels in portrait orientation. The supports are available in fix and adjustable tilt angles, in addition they are compatible with a wide range of purlin distances. The components are made entirely of structural grade (AL6005-T5) Anodised aluminium and stainless steel. SolarTripod is available in two designs: single and double row panels.



Main Benefits

Quick Installation

Completely pre-assembled, the SolarTripod supports simply need to be unfolded and secured to the roof structure for installation. For most installations each leg requires only 2 fixing points and the rails can suitably for large spans. The features result in a fast, easy and cost-efficient installation, which is crucial for residential projects.

Maximising Installation Size and Output on Small Roofs

The DoubleTripod has two rows of PV-panels in portrait orientation. It can utilise effectively narrow roof areas by doubling the installation size and output, which normally accommodate only one row of panels.

Simplicity and Intuitive

The basis BOM includes only 6 SKU, it's simple and intuitive to understand and operate.

**25 Year
Warranty**

Commercial

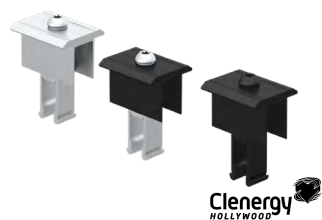
Residential



EC-M28-46/L50
EC-M28-46/L50/MI
EC-M28-46/L50/BA

End Clamp 28-46mm,
with M module

- Universal Clamp, Length 50mm, Anodised
- M Module 16.5*30.7mm
- Corrugated L-anchor Plate 3
- Button Head Torx Screws M8*35
- Lock washer 8
- Spring for Universal Clamp



IC-M28-46/L50
IC-M28-46/L50/MI
IC-M28-46/L50/BA

Inter Clamp 28-46mm,
with M module

- Universal Clamp, Length 50mm, Anodised
- M Module 16.5*30.7mm
- Button Head Torx Screws M8*35
- Lock washer 8
- Spring for Universal Clamp



ER-R-SRP11/TO/40

Toroda Rail 40*Lmm

- Toroda Rail 40*Lmm



ER-SP-SRP11/TO/40

Splice for Toroda Rail 40

- Splice for Toroda Rail 40
- Connection Clip

Available accessories

■ Grounding/earthing

■ Cable clips

■ Rail caps



ER-S-TRI/S30

Solar Tripod, Single Support

- Hexagon socket head cap screw M10 x 65
- Plain washer 10
- Washer 10
- Hexagon nut M10
- Tripod U Bracket
- Tripod, Al-Tube 35.5 x 35.5 x L
- Base Support 70 x L
- Upper Support 75 x L
- Bushing Ø18.5 x 35.5



ER-S-TRI30-DXXXX

Solar Tripod, Double Support

- Hexagon socket head cap screw M10 x 65
- Hexagon nut M10
- Plain washer 10
- Washer 10
- Tripod U Bracket
- Base Support 70 x L
- Upper Support 75 x L
- Tripod, Al-Tube 35.5 x 35.5 x L
- Tripod, Al-Tube 35.5 x 35.5 x L
- Bushing Ø18.5 x 35.5



ER-S-TRI/S15-30

Adjustable Tripod

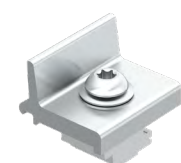
- Base Support 70 x 1350
- Upper Support 75 x 1250
- Leg Tube-358
- Leg Strug-348
- Bushing
- Double-Fixed Block(Anodised)
- Set screw M8 x 12
- Hexagon Socket bolt M10 x 65
- Hex nut M10
- Washer 10
- Flat washer 10
- U Bracket
- Bushing Ø18.5 x 35.5



DF6148-01

Ballast Tray

- SolarRoof Tripod, Ballast Tray



ER-RC-TO/ZBW/V2

Rail Clamp Set for Toroda Rail

- Rail Clamp for Toroda Rail, Version 2
- Z Module(Anodised)
- Button Head Torx Screws M8*25
- Lock Washer 8*18

SolarBalcony MAC

PVezRack® launches its latest series, 'Elevate', featuring its flagship product, SolarBalcony MAC. This pre-assembled mounting structure is designed for Solar PV installations on high-rise balconies, in gardens and on walls. Thanks to its fully pre-assembled components, the installation process is remarkably swift and doesn't require specialised technical skills.

Main Benefits

Easy Installation

Completely pre-assembled, the SolarBalcony MAC simply needs to be unfolded and secured to the balcony for installation. These features result in a fast, easy and cost-efficient installation, which is crucial for residential projects. Tools and manuals are also available in the package box.

Three-in-One Solution

The SolarBalcony MAC presents an ideal choice for solar installations on high-rise balconies, in gardens and on walls. The system is designed to offer multiple options by simply removing components or rearranging them. It's also compatible with microinverters.

Outstanding Compatibility

The standardised components are suitable for panels with widths up to 1134mm. With its extensive adjustment range, the mounting frame can accommodate the majority of commonly sized balconies. Additionally, it is compatible with metal railings.

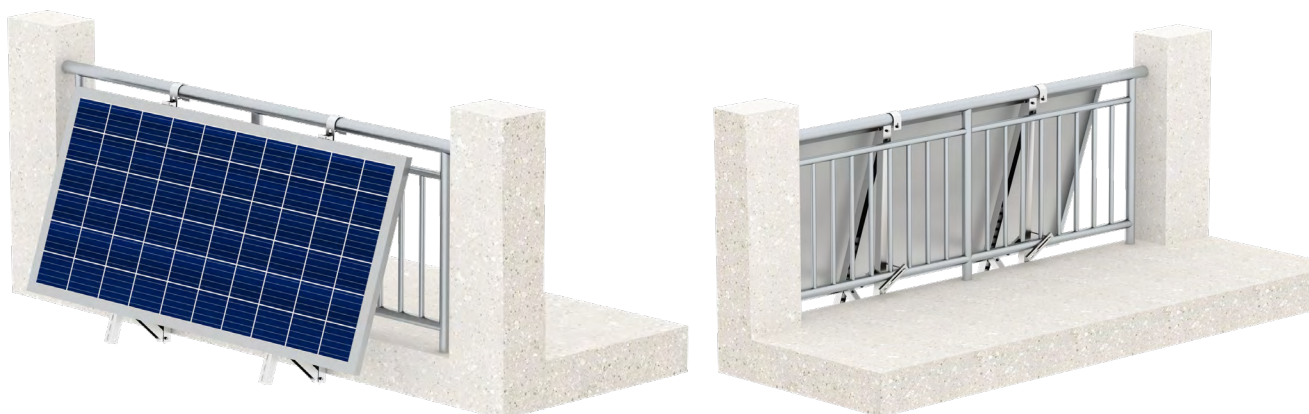


Technical Details

Application	Balcony with top railing, top railing diameter: 50-70mm; Garden and Wall (Compatible with Microinverters)
Module Orientation	Landscape
Module Type	Framed, width up to 1134mm
Wind Load	Customised
Tilt Angle	Customised
Material	Main Structure: MAC Steel Fasteners: SUS 304
Standard	Eurocodes ASCE 7-10 AS NZS1170.2 JISC8955-2017
Warranty	12 years

Installed on the Balcony

Installation angle: 60°, 65°, 70°, 75°



Installed on the ground

Installation angle: 75°



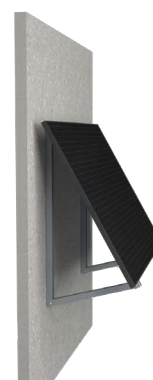
Installed on the ground

Installation angle: 30°



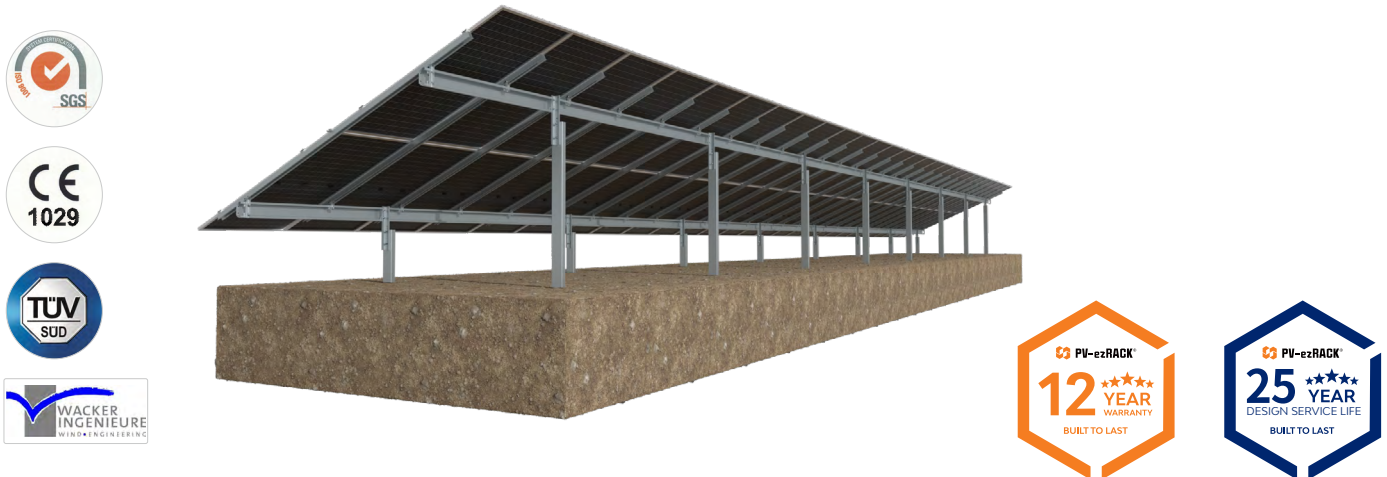
Installed on the wall

Installation angle: 60°



SolarTerrace Ikon

Effortless and Installation-friendly Ground PV Mounting Solution



PVezRack® SolarTerrace Ikon is an optimal ground mounting solution designed for commercial and utility-scale PV installations. Its innovative and efficient design, including quick positioning for panels, swift clamps for structure, back-locked panels, and self-grounding systems, enables effortless and safe installation on all terrains. This solution not only facilitates shorter station construction periods, but also delivers higher ROI and lower LCOE.

Main Benefits



Effortless and Quick Installation

Thanks to innovative clamps with fewer fasteners, the system can be swiftly assembled in seconds, requiring only one tool per person.



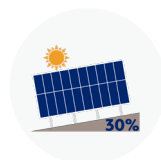
Rapid Positioning

The module positioning shim suspends the panel frame, enabling quick positioning and installation of PV modules.



Safe Installation

PV modules are secured using clamp bolts from the backside, eliminating the need for climbing and ensuring safe installation and convenient maintenance.



Excellent Terrain Adaptability

With the design of stepless adaptive connector between the crossbeam and post, the system can be installed along the slope.



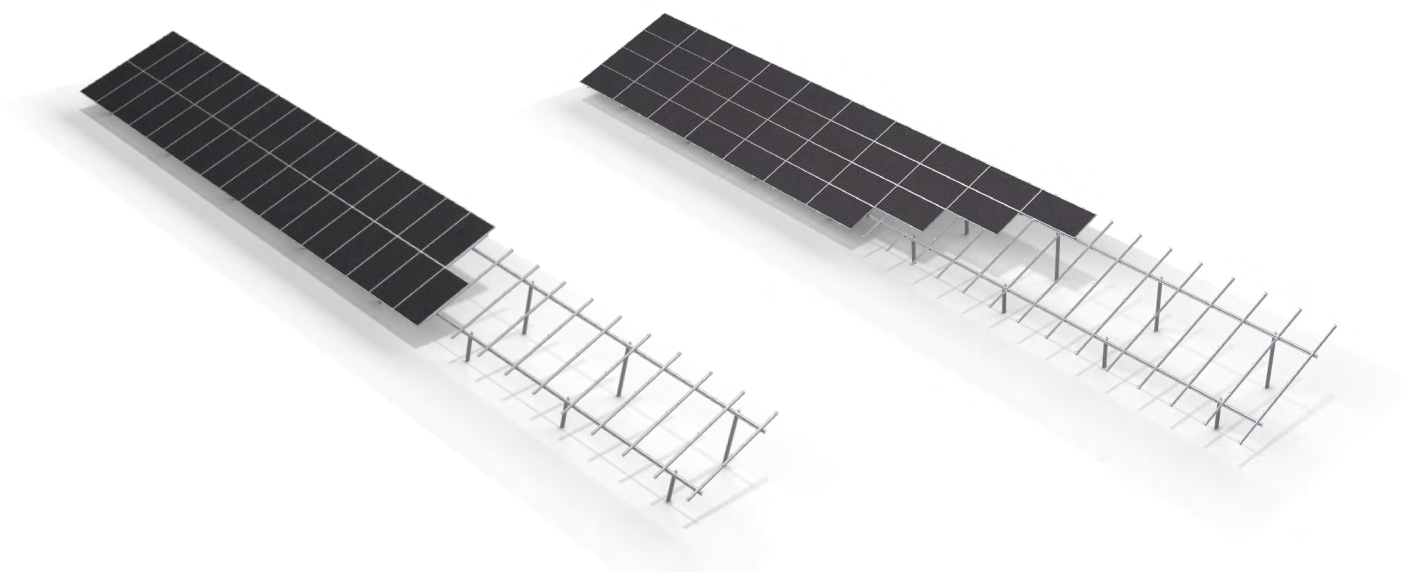
Self-Grounding Capability

Unique module clamps with a built-in grounding function, ensuring the grounding of PV modules without the need for additional parts.



Comprehensive Certification

ST Ikon has obtained ISO9001 certification, TÜV certification and CE certification, undergone wind tunnel testing, ensuring the system's stability and durability.



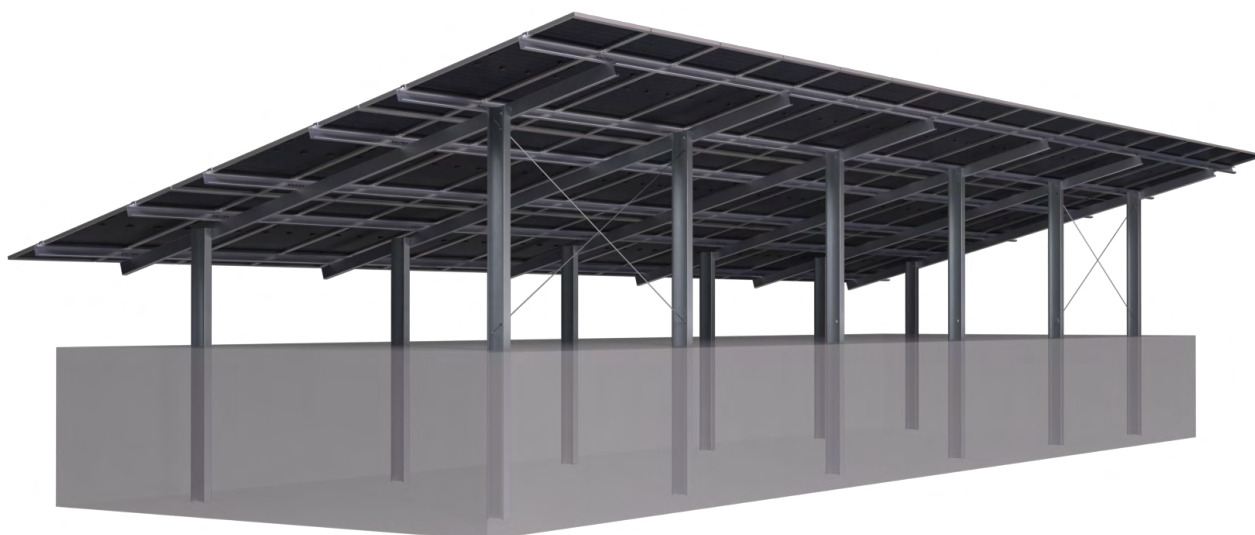
Technical Details

Module Orientation	Portrait or Landscape (2P / 3P / 4L / 6L)
Wind Load	25m/s according to EN1990 for standard, customisable
Snow Load	Up to 0.85 Kpa for standard, customisable
Tilt Angle	15-35°
Foundation	Ramming
Material	Post: HDG Crossbeam: ZAM (Zinc-Aluminum-Magnesium) Steel Purlin: ZAM (Zinc-Aluminum-Magnesium) Steel Fastener: SUS304 or HDG
Terrain Adaptability	N-S: Unlimited E-W: Up to 30% slope
Post Span	Perimeter Rows: Up to 4m for standard, customisable Interior Rows: Up to 6m for standard, customisable
Table Length	Standard Table Length: Up to 35m (3Px30 or 2Px30), customisable Maximum Table Length: Up to 100m (3Px90 or 2Px90), customisable
Standard	EURCODE 0-9 AS NZS 1170.2 ASCE 7-16 JISC 8955
Certification	CE, TUV, Wind Tunnel Test
Warranty	12 years

*for other values, please consult with Clenergy

SolarTerrace MAC

Dual Pile Ground Mounting Solution with Zn-Al-Mg Coating Steel



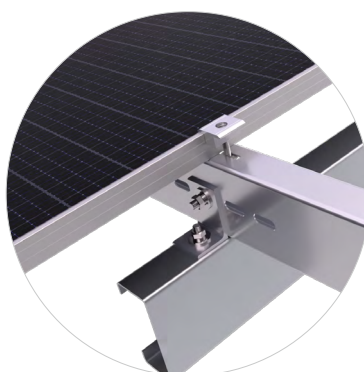
PVezRack® SolarTerrace MAC is a highly versatile ground-mounting solution suitable for commercial and utility-scale PV installations. Thanks to the well-considered design, the system is very cost-effective and convenient for PV installations. Manufactured from MAC steel (Zinc-Aluminium-Magnesium Coating) with excellent corrosion resistance and an elegant surface, PVezRack® SolarTerrace MAC offers a reliable and durable solution.

Main Benefits



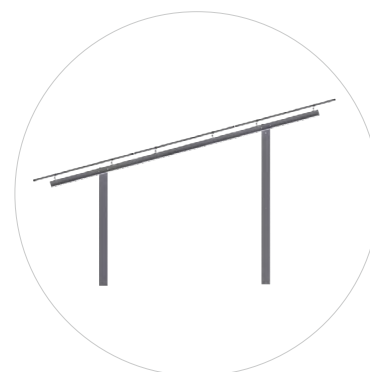
Easy and Quick Installation

Thanks to the efficient and simple design with fewer brackets and fasteners, the system can be completed with simple tools in a shorter time.



Excellent Corrosion Resistance

Manufactured from MAC steel with excellent corrosive resistance nature and self-healing function, the system ensures a reliable protection defending against site corrosion condition.



Excellent Flexibility

As a dual-pile installation system, the PVezRack® SolarTerrace MAC allows for a stable solution with a larger span and bigger array. With the design of adjustable slots, the system can be installed flexibly, with multiple adjustment options available.



Technical Details

Module Orientation	Max 3P or 6L*
Wind Load	Up to 42 m/s (EUROCODE 0-9)
Snow Load	Up to 3 kN/m ²
Tilt Angle	0-60°
Foundation	Ramming Concrete
Material	Main Structure: Zn-Al-Mg Coating Steel Post : HDG Steel Clamps: AL6005-T5 Fasteners: SUS304 or HDG Steel
Land Slope	Up to 30° in East-west direction, no limitation in South-north direction
Span	≤5000 mm*
Standard	ASCE 7-10 EUROCODE 0-9 JISC 8955 AS NZS 1170.2
Certification	CE
Warranty	12 years

*for other values, please consult with Clenergy

PostMount 1/2/3-A for XL Panels

Robust pole mount system with adjustable angle for one, two and three XL panels

Clenergy's PVezRack® PostMount 1/2/3-A for XL Panels delivers flexible and durable designs to mount from one to three panels, up to 2100X1100mm per post. It's ideal for remote off-grid applications such as water pumps or small residential and commercial systems. The panel tilt is easily adjustable between 10° and 60° throughout the year and comes with hassle-free mounting thanks to patented components such as the PVezRack® rails and clamps. The combination of high quality aluminium, stainless steel and galvanised steel components make this a robust, reliable system with excellent corrosion resistance.

Main Benefits

Suitable for Every Soil Condition

With its concrete foundation, PostMount-A can be installed on even or uneven ground or on a slope, making it suitable for any soil type and a wide range of applications.

Adjustable Tilt Angle

The steel cap (post head) is designed to tilt panels between 10° and 60° to ensure that you get the required power output you need anywhere, anytime. Changing the angle merely requires a single pair of spanners.

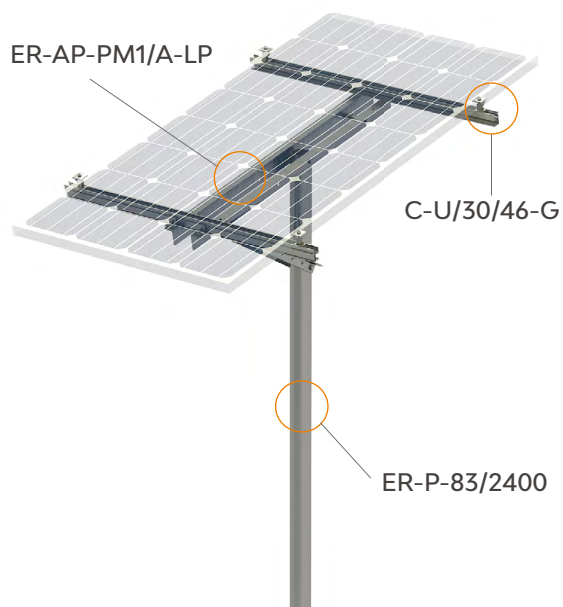
Robust and Reliable

Mounted on aluminium rails the panels are supported by robust galvanised steel landscape and master tubes secured with stainless steel bolts. The post can be fixed into a concrete foundation and also used as a ramming option.

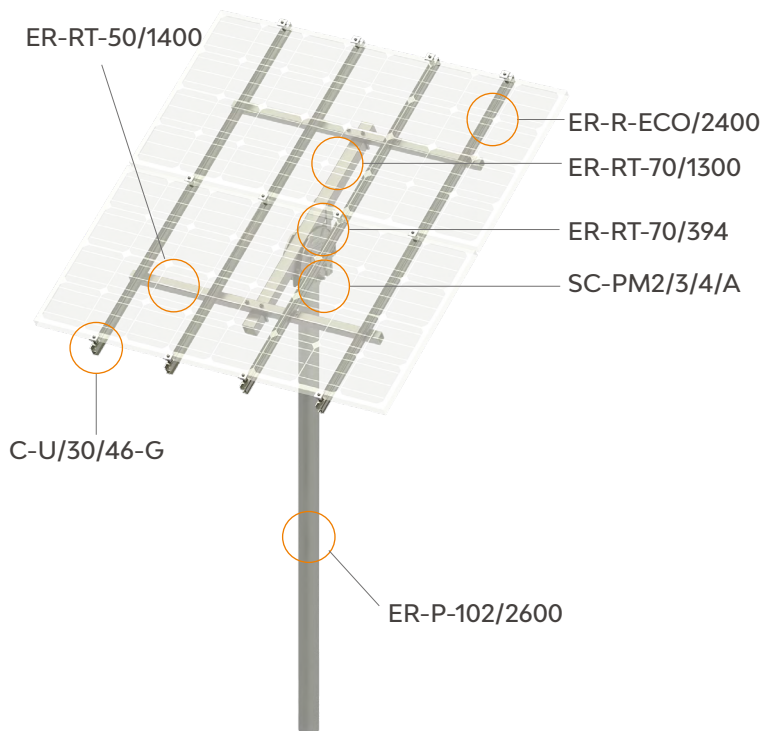
Quick and Easy Installation

Innovative and internationally patented, the Z-Module technology is used in almost all PVezRack® components. The Z-Module provides a quick, easy and safe installation method and can be inserted in to the rail at any given point, secured with just three hand grips.

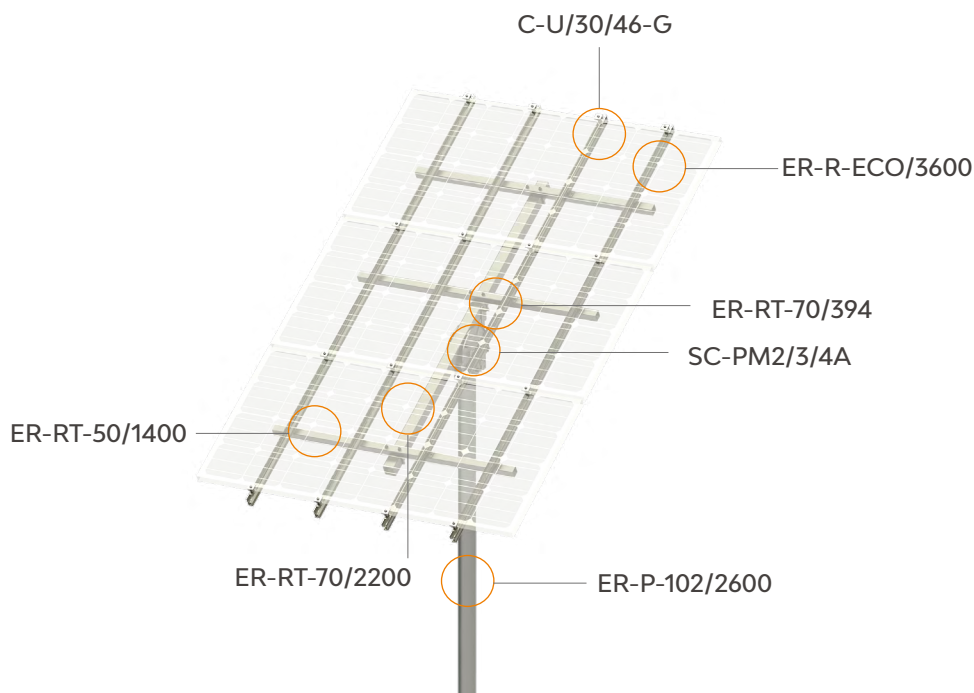
PM 1-A for XL Panels



PM 2-A for XL Panels



PM 3-A for XL Panels




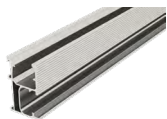




Available accessories

- Grounding/earthing
- Cable clips
- Rail and Girder cap

Components

 <p>ER-P-102/2600 ER-P-83/2400</p> <p>Pipe Diameter</p>	<ul style="list-style-type: none"> - Pipe Diameter Ø102 x 2600 (PM2, 3, 4-A Pole) - Pipe Diameter Ø83 x 2400 (PM1-A Pole)
 <p>ER-AP-PM1/A-LP</p> <p>PM1-A XL Accessory Package</p>	<ul style="list-style-type: none"> - Aluminum Profile Of ECO-rail 1250, L1250mm - Angle Steel 63 x 40 x 1010 x T4mm - Angle Steel 40 x 40 x 682 x T4mm, Right Supporting Rod - Angle Steel 40 x 40 x 682 x T4mm, Left Supporting Rod - Sleeve Ø20x83 x T3mm - Cross Connection Clamp of ECO-rail, L40mm - Cup Head Square Neck Bolts M8 x 25 - Hexagon Nut With Flange M8 - Hexagonal Bolt M12 x 120 - Plain Washer 12 - Spring Washer 12 - Hexagon Nut M12 - Capilano Cable Clip for PV Panels for holding 2 cables
 <p>ER-AP-PM2/A-LP</p> <p>PM2-A XL, Accessory Package</p> <p>ER-AP-PM3/A-LP</p> <p>PM3-A XL, Accessory Package</p>	<ul style="list-style-type: none"> - Capilano Cable Clip for PV Panels for holding 2 cables - Cross Connector Clamp of ECO-Rail - Hexagon Socket Head Cap Screw M8*70 - Plain Washer 8 - Spring Washer 8 - Hex Nut M8 - U bolt for Tube150 - Plain Washer 10
 <p>SC-PM2/3/4A</p> <p>Steel Cap Assembly</p>	<ul style="list-style-type: none"> - Steel Cap of PM2-A, PM3-A, PM4-A - Square washer for PM3-A, PM4-A - Hexagonal bolt M14 x 150 - Hexagonal bolt M14 x 110 - Plain washer 14 - Spring Washer 14 - Hexagon nut M14 - U washer T1.0 (for PM-A system) - U washer T2.0 (for PM-A system)
 <p>ER-RT-70/394</p> <p>Adjustable Tube 70 x 50 x 394</p>	<ul style="list-style-type: none"> - Adjustable Tube70 x 50 x 394 - Hexagonal bolt M14 x 120 - Hexagon nut M14 - Plain washer 14 - Spring Washer 14

 <p>ER-RT-70/1300 ER-RT-70/2000 ER-RT-70/2800 Rectangular Tube 70 x 70 x L</p>	<ul style="list-style-type: none"> - Rectangular Tube 70 x 70 x L
 <p>ER-RT-50/1000 Rectangular Tube</p>	<ul style="list-style-type: none"> - Rectangular Tube-Landscape 50 x 50 x 1000
 <p>ER-AB-75/45/550 Angle Bracket 75 x 45 x 550</p>	<ul style="list-style-type: none"> - Postmount4-A Angle Bracket 75 x 45 x 550 - U bolt for Tube 110 - Plain washer 10 - Spring Washer 10 - Hexagon nut M10 - Hexagon socket head cap screw M8 x 28 - Plain washer 8 - Spring Washer 8 - Hexagon nut M8 - Cross connection clamp
 <p>ER-R-ECO/XXXX ECO-Rail</p>	<ul style="list-style-type: none"> - Aluminium profile of ECO-Rail - With standard lengths 2400mm and 3600mm
 <p>C-U/30/46-G Universal Clamp</p>	<ul style="list-style-type: none"> - Akashi Clamp - Module for Akashi Clamp - Grounding Clip for Akashi Clamp - Hexagon socket button head screw M8 x 55 - Washer 8 - Spring for Akashi Clamp
 <p>EZ-GL-ST/UC Grounding Lug</p>	<ul style="list-style-type: none"> - Grounding Lug, with Clenergy logo - Hexagon Socket Head Cap Screw M8*25 - Z Module - Spring Washer 8 - Plain Washer 8 - Grounding Lug Bolt II M6*14 - U-Shape Copper Channe

PostMount 4/6-A for XL Panels

Robust pole mount system with adjustable angle for four and six XL panels

Clenergy's PVezRack® PostMount 4/6-A for XL Panels delivers flexible and durable designs to be mounted between four and six panels, up to 2100x1100mm per post. It's ideal for remote off-grid applications such as water pumps or small residential and commercial systems. The panel tilt is easily adjustable between 10° and 60° throughout the year and comes with hassle-free mounting thanks to patented components such as the PVezRack® rails and clamps. The combination of high quality aluminium, stainless steel and galvanized steel components make this a robust, reliable system with excellent corrosion resistance.

Main Benefits

Suitable for Every Soil Condition

With its concrete foundation, PostMount can be installed on even or uneven ground or on a slope, making it suitable for any soil type and a wide range of applications.

Adjustable Tilt Angle

The steel cap (post head) is designed to tilt panels between 10° and 60° to ensure that you get the required power output you need – anywhere, anytime. Changing the angle merely requires a single pair of spanners.

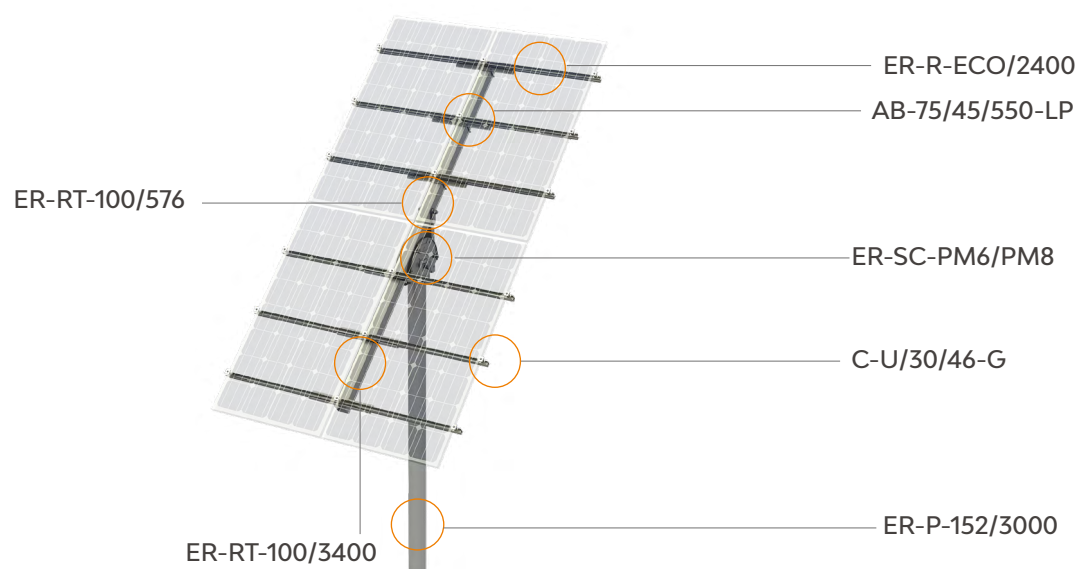
Robust and Reliable

Mounted on aluminium rails the panels are supported by robust galvanised steel landscape and master tubes secured with stainless steel bolts. The post can be fixed into a concrete foundation and also used as a ramming option.

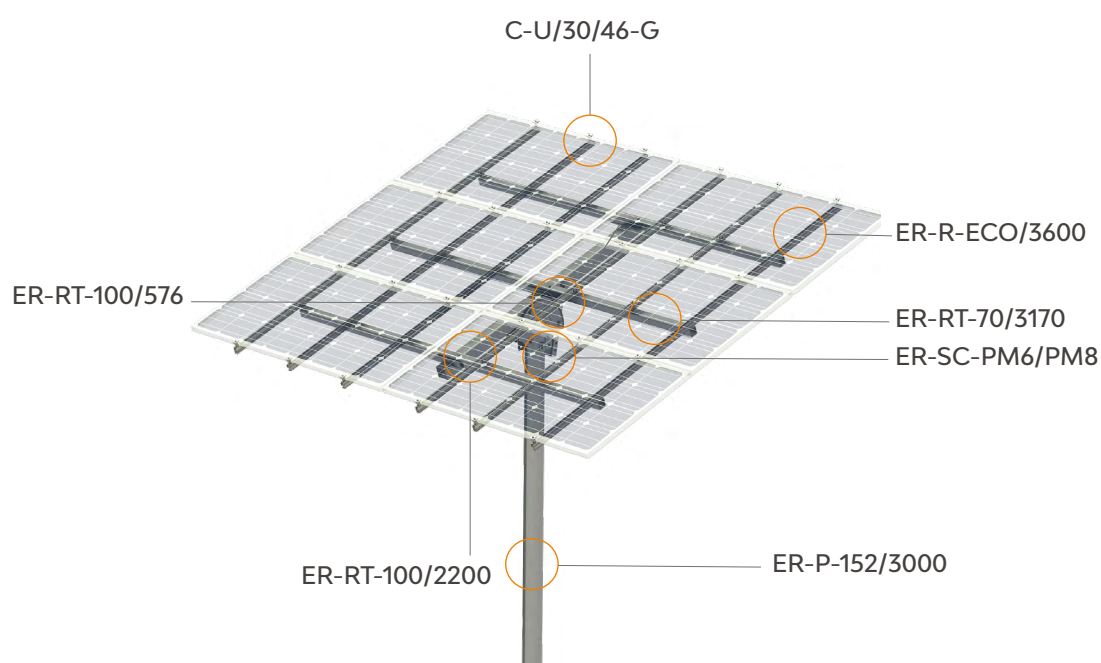
Quick and Easy Installation

Innovative and internationally patented, the Z-Module technology is used in almost all PVezRack® components. The Z-Module provides a quick, easy and safe installation method and can be inserted into the rail at any given point, secured with just three hand grips.

PM 4-A for XL Panels



PM 6-A for XL Panels








Available accessories




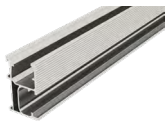


■ Grounding/earthing

■ Cable clips

■ Rail and Girder cap

Components

 <p>ER-P-102/2600 ER-P-83/2400</p> <p>Pipe Diameter</p>	<ul style="list-style-type: none"> - Pipe Diameter Ø102 x 2600 (PM2, 3, 4-A Pole) - Pipe Diameter Ø83 x 2400 (PM1-A Pole)
 <p>ER-AP-PM6/8/A-LP</p> <p>PM6-A XL & PM8-A XL, Accessory Package</p>	<ul style="list-style-type: none"> - Capilano Cable Clip for PV Panels for holding 2 cables - Hexagon Socket Head Cap Screw M8*28 - Large Plain Washer 8 - Spring Washer 8 - Hex Bolt M12*100 - Plain Washer 12 - Spring Washer 12 - Hex Nut M12 - Z Module - U washer T1.0 - U washer T2.0
 <p>ER-SC-PM6/PM8</p> <p>Steel Cap Assembly</p>	<ul style="list-style-type: none"> - Steel Cap of PM6-A, PM8-A - Square washer for PM6-A, PM8-A - Hexagonal bolt M20 x 210 - Hexagonal bolt M20 x 160 - Plain washer 20 - Washer 20 - Hexagon nut M20
 <p>ER-RT-100/576</p> <p>Adjustable Tube 100 x 50 x 576</p>	<ul style="list-style-type: none"> - Adjustable Tube 100 x 50 x 576 - Hexagonal bolt M20 x 160 - Hexagon nut M20 - Plain washer 20 - Spring Washer 20
 <p>ER-RT-100/2200</p> <p>Rectangular Tube 100 x 100 x 2200</p>	<ul style="list-style-type: none"> - Rectangular tube 100 x 100 x 2200 with pre-welded angle brackets

 <p>ER-RT-100/3400 Rectangular tube 100 x 100 x 3400</p>	<ul style="list-style-type: none"> - Rectangular tube 100 x 100 x 3400
 <p>ER-AB-75/45/550 Angle Bracket 75 x 45 x 550</p>	<ul style="list-style-type: none"> - Postmount4-A Angle Bracket 75 x 45 x 550 - U bolt for Tube 110 - Plain washer 10 - Spring Washer 10 - Hexagon nut M10 - Hexagon socket head cap screw M8 x 28 - Plain washer 8 - Spring Washer 8 - Hexagon nut M8 - Cross connection clamp
 <p>ER-RT-50/1000 Rectangular Tube</p>	<ul style="list-style-type: none"> - Rectangular Tube-Landscape 50 x 50 x 1000
 <p>ER-R-ECO/XXXX ECO-Rail</p>	<ul style="list-style-type: none"> - Aluminium profile of ECO-Rail - With standard lengths 2400mm and 3600mm
 <p>C-U/30/46-G Universal Clamp</p>	<ul style="list-style-type: none"> - Akashi Clamp - Module for Akashi Clamp - Grounding Clip for Akashi Clamp - Hexagon socket button head screw M8 x 55 - Washer 8 - Spring for Akashi Clamp
 <p>EZ-GL-ST/UC Grounding Lug</p>	<ul style="list-style-type: none"> - Grounding Lug, with Clenergy logo - Hexagon Socket Head Cap Screw M8*25 - Z Module - Spring Washer 8 - Plain Washer 8 - Grounding Lug Bolt II M6*14 - U-Shape Copper Channe

ezShade 2.0

Solar Parking Solution for Residential and Commercial Projects



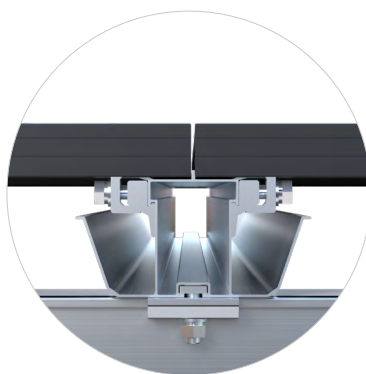
PVezRack® ezShade 2.0 is a solar parking solution providing solar panels support as well as car sheltering for residential and commercial projects. The high quality aluminum components and stainless steel fasteners ensure a robust and reliable system. With the exquisite structure design, the waterproof function is available without using a large amount of EPDM rubbers.

Main Benefits



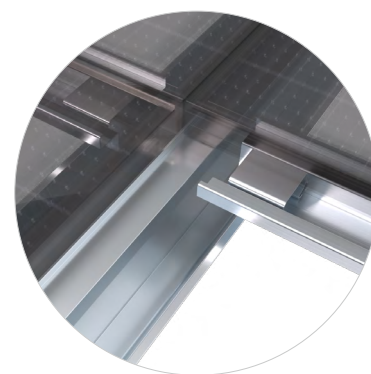
Easy Installation

Thanks to the innovative structural design, the system can be installed with less steps in a short time.



Safety

High safety performance and easily installation due to innovative clamp which can help fasten PV panels from bottom, avoiding the danger of cracking and preventing workers from falling.



Waterproof

With the special water guide rails and gutters install under the gap of PV panels, the PVezRack® ezShade 2.0 is totally waterproof. Water will flow along the gap into the gutters and water guide rails, finally into the ground.



Technical Details

Module Orientation	3P (module length is around 1800±100 mm) 2P (module length is around 2278±150 mm)
Module Type	Framed
Foundation	Concrete
Wind Load	Up to 50m/s (3s gust, MRI = 50Y)
Tilt Angle	5° (standard)*
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Span	5500 mm (standard)*
Standard	ASCE 7-10 EUROCODE 0-9 JISC 8955 AS NZS 1170.2
Mini Ground Clearance	2100mm*
Application	Carport, Backyard Shade, Swimming Pool Shade – Applications are endless
Certification	CE
Warranty	12 years

*for other values, please consult with Clenergy

ezShade Razor

Solar Parking Solution for Large Commercial and Utility Scale Projects



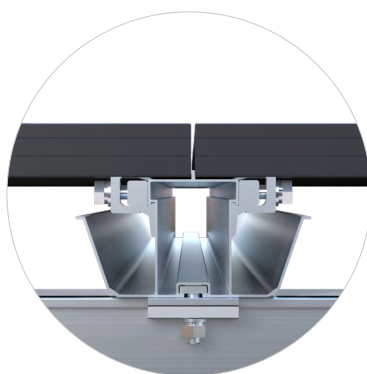
PVezRack® ezShade Razor is a solar parking solution generating clean solar energy as well as car sheltering to protect people and vehicles from solar irradiation, snow and rain. The main components are manufactured from high quality steel and aluminum to offer a reliable and robust solution. With multiple waterproof structures, the system is more intelligent and environmentally friendly.

Main Benefits



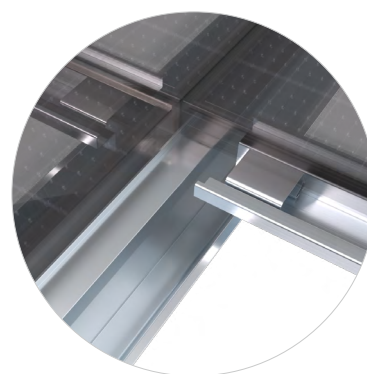
Parking Friendly

With the single post positioned at the end of Carport, ensuring optimal space utilization, people can easily drive in and out either straight or angled parking. We can also offer a back-to-back parking solution for maximum output.



Safety

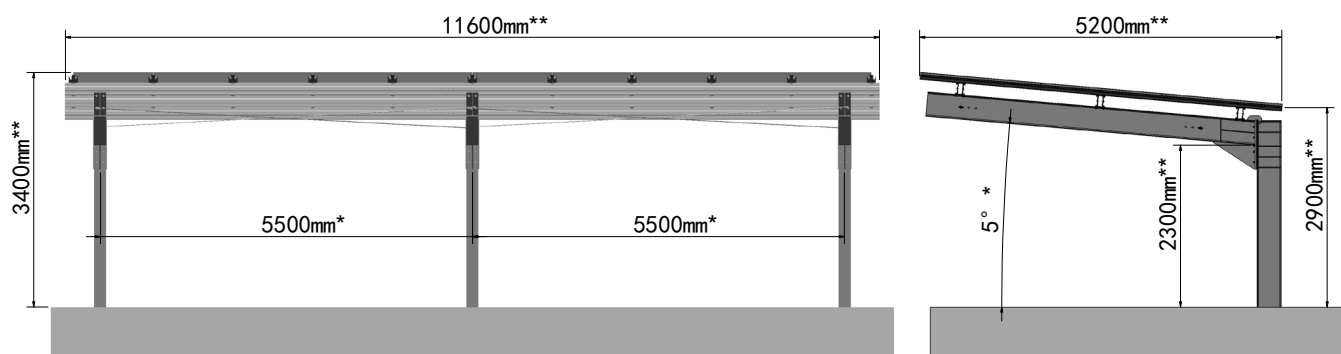
High safety performance and easily installation due to innovative clamp which can help fasten PV panels from bottom, avoiding the danger of cracking and preventing workers from falling. Furthermore, an innovative hook design for locating enables quicker installation.



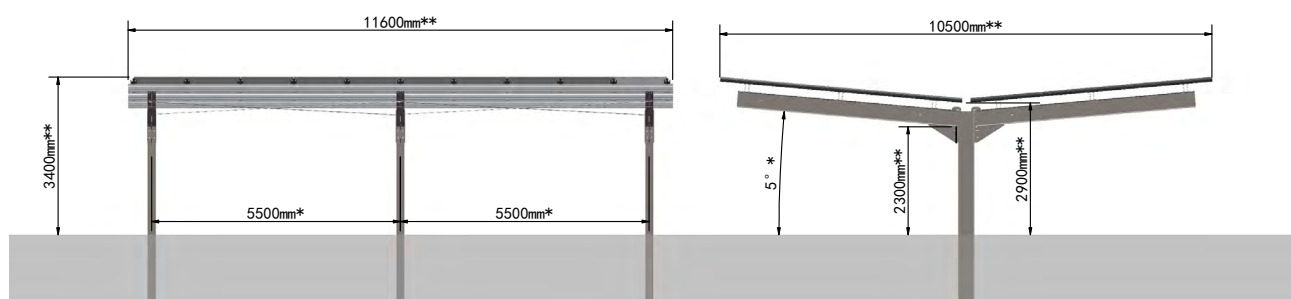
Waterproof

With the special water guide rails and gutters install under the gap of PV panels, the PVezRack® ezShade Razor is totally waterproof. Water will flow along the gap into the gutters and water guide rails, finally into the ground.

Single Wing/One Row Layout



Double Wings/Two Rows Layout



Technical Details

Module Orientation	3P (module length is around 1800±100 mm) 2P (module length is around 2278±150 mm)
Module Type	Framed
Foundation	Concrete
Wind Load	Up to 50m/s (3s gust, MRI = 50Y)
Tilt Angle	5° (standard)*
Material	Post & Girder: HDG Rails & Clamps: AL6005-T5 Fasteners: HDG or SUS304
Span	5500 mm (standard)*
Standard	ASCE 7-10 EUROCODE 0-9 JISC 8955 AS NZS 1170.2
Mini Ground Clearance	2900mm**
Application	Carport, Backyard Shade, Swimming Pool Shade – Applications are endless
Certification	CE
Warranty	12 years

*For other values, please consult with Clenergy

**Only for reference, actual projects may be slightly different

D1P One Portrait Horizontal Single-axis Tracker



Advantages

- Advanced Smart Control
- Flexible Layout for Irregular Terrains
- Comprehensive Certification
- Easy and Quick Installation

Power Generation Increased

Up to 25%

Compared to a Standard Fixed Tilt System

Features

Clenergy presents an adaptable, cost-effective solar tracker ideal for commercial or utility scale PV projects.

- Terrain adaptability – slope up to 20%
- Customisable foundation variations
- Easy-to-install structure
- Advanced AI control and excellent wind stability



Tracking



Backtracking



Diffuse
Tracking



Night
Stow



Wind
Stow



Snow
Stow



Rain Clean



Hail Stow



Flood Stow

Technical Details

PV-Modules	
PV-Modules supported	Compatible with modules up to 700W or 210 cells
Structure	
Type	Horizontal single-axis tracker
Maximum capacity per row	45.78kWp (Estimated with 545W PV-Modules)
PV-Modules quantity per row	90 PCS (1x90)
Tracking range	±60° (120°)
Tracking accuracy	≤2°
Structural materials	HDG steel, Zn-Al-Mg coating steel
Foundation	Steel pile, PHC pile, Concrete foundation
Quantity of foundation/MW	Normally about 250 PCS/MW (Estimated with 545W PV-Modules)
Electrical	
Motor type	24V DC Motor
Motor quantity	1 motor per row
Drive method	Slewing drive
Solar tracking method	Astronomical algorithm + closed-loop control
Control system	MCU
Signal transmission	Wire (RS485) or wireless (Zigbee)
Backtracking	Yes
Power supply	Self-powered or grid-powered
Commission	By mobile phone App
1000V System or 1500V System	Both available
Protection Function	
Night stow mode	Yes
Overheat prevention	Yes
Environment	
Wind load	Customisable according to local condition
Operating temperature	-30°C to +60°C
Civil and Installation	
Slope tolerance	Up to 20%
Special tools	Not required
Other	
Onsite training & commissioning	Yes
Design standards	ASCE 7-16 EURCODE 0-9 JISC 8955 AS NZS 1170.2 GB 50009
Warranty	10 years for main structure 5 years for drive and control components



TUV Certification



ETL Certification



CPP Wind Tunnel Test



DNV Bankability



CE Certification

D2P 120 Newest Generation Two Portrait Smart Solar Tracker



Advantages

- Multi-drive System for Maximum Aeroelastic Stability
- Advanced Smart Control
- Flexible Layout for Irregular Terrains

Power Generation Increased

Up to 25%

Newest Generation 2 x Portrait Smart Solar Tracking System

Features

The innovative model is characterized by its high system stability throughout the life of the solution, maximizing the energy output for solar plants. This system can be flexibly used for sites with challenging soils and delivers a perfect solution for Agrivoltaics and Fisheryvoltaics projects.

- Higher power density - supports up to 120 modules with 4×1,500V-strings
- Lower construction costs - requires 135 posts per MW
- Bifacial compatibility - secures the maximum power generation



Tracking



Backtracking



Diffuse Tracking



Night Stow



Wind Stow



Snow Stow



Rain Clean



Hail Stow



Flood Stow

Technical Details

PV-Modules	
PV-Modules supported	Compatible with modules up to 700W or 210 cells
Structure	
Type	Horizontal single-axis, independent row
Maximum capacity per row	65kWp (Estimated with 545W PV-Modules)
PV-Modules quantity per row	Up to 120 modules, depending on module string length
Bifacial features	Available with optimized central torque tube gap
PV-Modules configuration	2 in portrait 4 x 1,500 strings per standard tracker
PV-Modules attachment	Self-grounding and electrical tool-actuated
Tracking range	±60° (120°)
Tracking accuracy	≤2°
Ground coverage ratio (GCR)	30% to 50%
Structural materials	HDG steel, Zn-Al-Mg coating steel
Foundation	Steel pile, PHC pile, Concrete foundation
Quantity of foundation/MW	Normally about 135 PCS/MW (Standard W8 section foundation posts)
Electrical	
Motor type	24V DC Motor
Drive method	Patented multi-drive
Solar tracking method	Astronomical algorithm + closed-loop control integrated AI control tracking algorithm
Signal transmission	Wire (RS485) or wireless (Zigbee)
Backtracking	Yes
Power supply	Option1: Array powered, integrated backup battery Option2: AC powered, customer-provided AC circuit
Protection Function	
Night stow mode	Yes
Wind protection	Intelligent wind stowing with self-locking Multi-drive system for maximum array stability
Environment	
Wind load	Configurable up to 190 kph (35 gust)
Operating temperature	Array powered: -20°C to +60°C AC powered: -30°C to +60°C
Civil and Installation	
Slope tolerance	North-south up to 20%, East-west with no limits
Special tools	Not required
Other	
Onsite training & commissioning	Yes
Design standards	ASCE 7-16 EURCODE 0-9 JISC 8955 AS NZS 1170.2 GB 50009



TUV Certification



ETL Certification



CPP Wind Tunnel Test











DNV Bankability



CE Certification

Accessories

Earthing / Grounding components

	<p>EZ-GL-TO Grounding Lug for Toroda Rail top mount</p>	<ul style="list-style-type: none"> - DC Grounding Lug, Anodised - W Module 6.1mm, Anodised - Spring Washer 8 - Button Head Torx Screws M8*15
	<p>EZ-GL-TO/S Grounding Lug for Toroda Rail, side mount</p>	<ul style="list-style-type: none"> - Grounding Lug for Toroda Rail, side mount - Button Head Torx Screws M8*12 - Button Head Torx Screws M8*20
	<p>EZ-GL-U Rialto Grounding Lug</p>	<ul style="list-style-type: none"> - Rialto Grounding Lug - Grounding Lug Bolt
	<p>EZ-GL-U/12 Rialto Grounding Lug, with 12mm U-opening</p>	<ul style="list-style-type: none"> - Rialto Grounding Lug, with 12mm U-opening - Grounding Lug Bolt - Grounding Lug Bolt II M6*14
	<p>EZ-GL-ST Grounding Clip (standard)</p>	<ul style="list-style-type: none"> - Grounding Lug, with Clenergy Logo - Hexagon Socket Head Cap Screw M8*25 - Z Module - Washer 8 - Plain Washer 8 - Grounding Lug Bolt
	<p>EZ-GC-SII Grounding Clip</p>	<ul style="list-style-type: none"> - Grounding Clip II for Carbon Steel Mounting System
	<p>EZ-GC-ST Grounding Clip (standard)</p>	<ul style="list-style-type: none"> - Grounding Clip (standard)
	<p>GC-DT Grounding Clip for DT Rail</p>	<ul style="list-style-type: none"> - Grounding Clip for DT Rail

Cable clips



EZ-CC-PV/2

Universal Cable Clip for PV Panels for holding 2 cables



EZ-CC-PV/2/L

Universal Cable Clip for PV Panels for holding 2 cables, Landscape



EZ-CC-PV/4

Universal Cable Clip for PV Panels for holding 4 cables



EZ-CC-PV/4/L

Universal Cable Clip for PV Panels for holding 4 cables, Landscape

Rail caps



EZ-CAP-TO/40/G EZ-CAP-TO/40/B

Cap for Toroda Rail 40

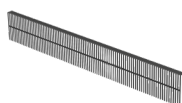


CAP-TM90

Cap for TM Rail 90



Other



EZ-SS-PV

DFendr - Solar Skirt for PV Panels

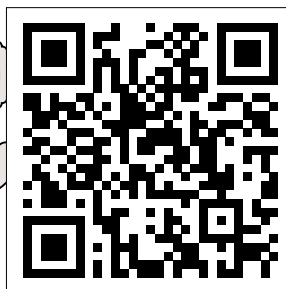


EZ-SC-PV

DFendr - Solar Skirt Clip for PV Panels



Merch Store



Merch Store



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