



## PV-ezRack Product Catalogue



Clenergy is proud to support its customers and is committed to making the world a cleaner and safer place for future generations.

# Introduction

With its genesis in Australia and foot print across the world, Clenergy has grown from being a boutique solar solutions provider into a passionate, globally renowned renewable energy company with nearly 400 employees and offices across four continents.

Clenergy's products and services have become synonymous with quality and innovation, delivering a wide range of solutions to industry.

Our mounting systems are universally recognised for their high quality, innovative design and ease of deployment. The service at Clenergy is renowned for being friendly, reliable and professional.

To drive continual improvement we invest heavily in research, development, service, our people and partners. It is this approach that makes Clenergy a trusted company with a reputation as the passionate expert in the renewable energy sector.

Clenergy is committed to delivering a wide range of products and services: local expert staff answer your questions, local logistic companies deliver our products and local engineers ensure that every regulation is fully complied with. Our partners rely on our expertise; support and experience before, during and after the installation, so you can rest assured that when you partner with Clenergy you've made the right decision.



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# PV-ezRack SolarRoof

## Penetrative

**Reliable, robust roof mounting system with high quality components designed for the harshest conditions.**

PV-ezRack SolarRoof has been developed for residential PV installations on tin and tile roofs. The components are easy to install and can be used for flush as well as tilted systems, on a large variety of roof types. The interfaces, rails and clamps use high quality, robust and corrosion resistant materials including structural grade aluminium alloy (AL6005-T5) and stainless steel (SUS304).



## Main Benefits

### Quick and easy installation

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

### Versatility

A large variety of roof hooks, tin roof fixings, tilt legs and adapters help ensure that you will find a suitable fixing method for almost every roof, where fixing with penetration is required.

### Wide range of tilting

With three adjustable tilt legs, these parts can tilt panels from between 10-60 degrees. Through its innovative design, the tilt legs can cope with all common purlin distances.

### Universal

SolarRoof has suitable inter and end clamps for every size of solar panel including frameless, thin film panels or special clamps for cyclonic regions. In the growing range of clamps, cable clips, adapters and accessories you are sure to find the parts you require for your residential rooftop mounting needs.

**10 Year  
Warranty\***

**Commercial**

**Residential**

**Available  
accessories**

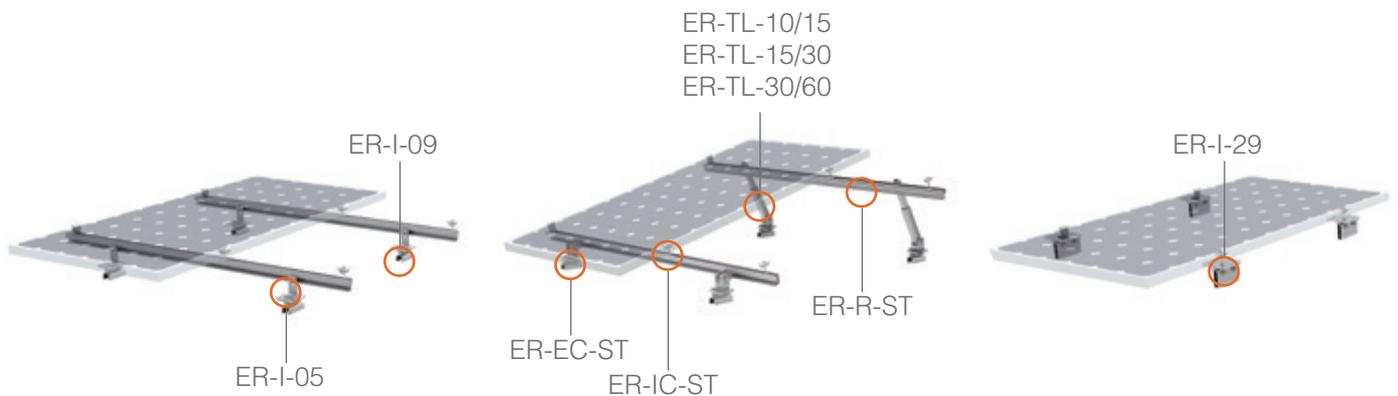
**Grounding/earthing  
Cable clips  
Rail caps  
Isolator Bracket**

# PV-ezRack SolarRoof

## Non-penetrative

**Reliable, robust roof mounting system with high quality components designed for concealed-fix roof claddings (Klip-lok, Longline).**

To achieve and maintain improved watertightness of solar installations on Klip-lok type tin roofs, PV-ezRack SolarRoof has been expanded with a range of non-penetrative brackets. Rigorous testing on real size roofing sheets ensures safety, compliance and structural integrity of the PV-installations. As a result, the Klip-lok type brackets can be used for installing flush to the roof as well as for tiled systems.



## Main Benefits

### No roof penetration

Watertightness is easily maintained with the SolarRoof clamps for concealed fix roofs, as there is no need for roof penetration. With Clenergy's thorough testing methods, this is made possible without any compromises on safety or structural integrity.

### Versatility

The non-penetrative clamps can be used for flush installations as well as for tilting. The two fixing methods for flush mounting include direct mounting (no rails) and bracket plus L-feet (with rails). For tilted systems, the adjustable tilt legs or SolarTripod can be used directly on the compatible non-penetrative clamps.

### Quick and easy installation

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

### Available accessories

Grounding/earthing  
Cable clips  
Rail caps  
Isolator Bracket

**10 Year  
Warranty\***

**Commercial**

**Residential**

# PV-ezRack SolarRoof

## I-05-SM6.3/85/41



### Tin Interface

- Tin Roof Hook
- Rubber Pad
- Z-Module
- Washer 8mm (5/16")
- Lock Washer 8mm (5/16") A2
- Hex Socket Head Bolt M8 x 28mm (5/16" x 1 1/8")
- Sharp Point Wood Screw 6 x 80mm (15/64" x 3-5/32"), thread: 80mm (3-5/32")

## ER-I-05/HB/MP



### Hanger Bolt with L-Bracket and Z module

- Hexagon socket head cap screw M8\*28
- Washer 8
- Lock washer M8\*18
- Z Module
- Hanger bolt M10\*200
- Waterproof gasket
- Hexagon nut with flange M10
- Tin roof hook L40

## ER-TL-10/15



### Tilt Legs, adjustable 10/15 degree

- U Bracket 38.1\*55\*40
- Fix foot 105\*70\*40
- L-feet 40\*40\*55
- Leg Strug-220
- Leg tube-220
- Fixed Block A
- Z Module
- Sharp-Point wood screw 6\*80
- Hexagon socket head cap screw M8\*25
- Hexagon socket head cap screw M8\*45
- Hexagon socket head cap screw M8\*65
- Hexagon nut M8
- Washer 8
- Set screw M10\*12
- Rubber Pad50\*25\*2

## ER-I-31



### Klip Lok Interface 400-700HS

- Main Hook
- Side Hook
- Hex Socket Head Bolt M8 x 25mm (5/16" x 63/64")
- Lock Washer 8.4mm (5/16")
- Washer 8 (5/16")
- Rubber pad
- Suitable for:
  - KLIP-LOK 700
  - KLIP-LOK 406
  - KingKlip
  - Speed Deck Ultra

## ER-I-13



### Klip-lok Interface (406)

- (406) Main hook L100
- (406) Side hook L100
- Hexagon socket head cap screw M8\*20
- Washer 8
- Flat washer 8

## ER-I-20



### Klip-lok interface for Angularity 18A

- Main hook 18A(L50)
- Side hook 18A(L50)
- Hexagon nut M8
- Washer 8
- Hexagon socket head cap screw M8\*20

## ER-R-TRI60



### PV-ezRack SolarRoof EVO, Triangle Rail

- With a standard length of
  - 1400mm
  - 2050mm
  - 2560mm
  - 3100mm
  - 3405mm
  - 4200mm

## ER-EC-OM



### PV-ezRack Module End Clamp, Omega series

- Omega End Clamp
  - 35mm
  - 40mm
  - 45mm
  - 46mm
  - 50mm
- Omega Module
- Hexagon socket head cap screw M8\*25mm
- Washer 8mm

## ER-IC-OM



### PV-ezRack Module Inter Clamp, Omega series

- U18-Inter Clamp
- Omega Module
- Hexagon socket head cap screw
  - M8\*30mm
  - M8\*35mm
  - M8\*40mm
- Washer 8mm

# PV-ezRack SolarRoof

## ER-IC-ST



### Inter Clamp, Standard

- Inter Clamp 28mm, 30mm, 35mm, 38mm, 40mm, 42mm, 45mm, 46mm, 48mm, 50mm, 55mm, 57mm (full or half anodized in silver grey or black available)
- 28mm, 30mm with Hex Socket Head Cap Screw M8x40mm
- 35mm with Hex Socket Head Cap Screw M8x45mm
- 38mm, 40mm, 42mm with Hex Socket Head Cap Screw M8x50mm
- 45mm, 46mm with Hex Socket Head Cap Screw M8x55mm
- 48mm, 50mm with Hex Socket Head Cap Screw M8x60mm
- 55mm with Hex Socket Head Cap Screw M8x65mm
- 57mm with Hex Socket Head Cap Screw M8x70mm
- Z-Module
- Lock Washer 8mm

## ER-EC-ST



### End Clamp, Standard

- End Clamp (full or half anodized in silver grey or black available)
- 28mm
- 30mm
- 32mm
- 35mm
- 38mm
- 40mm
- 42mm
- 45mm
- 46mm
- 48mm
- 50mm
- 55mm
- 57mm
- Z-Module
- Hex Socket Head Cap Screw M8 x28mm
- Lock Washer 8mm

## ER-R-ST-ECO



### Standard Rail

- With a standard lengths of 2560mm (8' 4-25/32"), 3150mm (10' 4-1/64"), 3405mm (11' 2-1/16"), 4200mm (13' 9-23/64")

## ER-SP-ST-ECO



### Splice for Standard Rail

- Splice with a standard length of 200mm (7/8")
- Hex Socket Head Bolt M8 x 18mm (5/16" x 45/64")

## ER-I-51



### Tile Interface, horizontal arm, self-tapping sheet metal screw

- Tile roof hook with 118mm horizontal arm
- Z Module
- Washer 8
- Lock Washer M8
- Hexagon socket head cap screw M8\*25
- Flange facing self-Tapping screw (with bonded washer) ST6.3\*25

## EZ-GL-ST



### Grounding Lug (standard)

- Grounding Lug L25
- Hexagon Socket Head Bolt M8 x 25mm (5/16" x 63/64")
- Z-Module L20
- Spring Washer M8.4 (21/64")
- Flat Washer M8.4 (21/64")
- Grounding Lug Bolt M6 x14mm (3/16" x 35/64")

## EZ-GC-ST

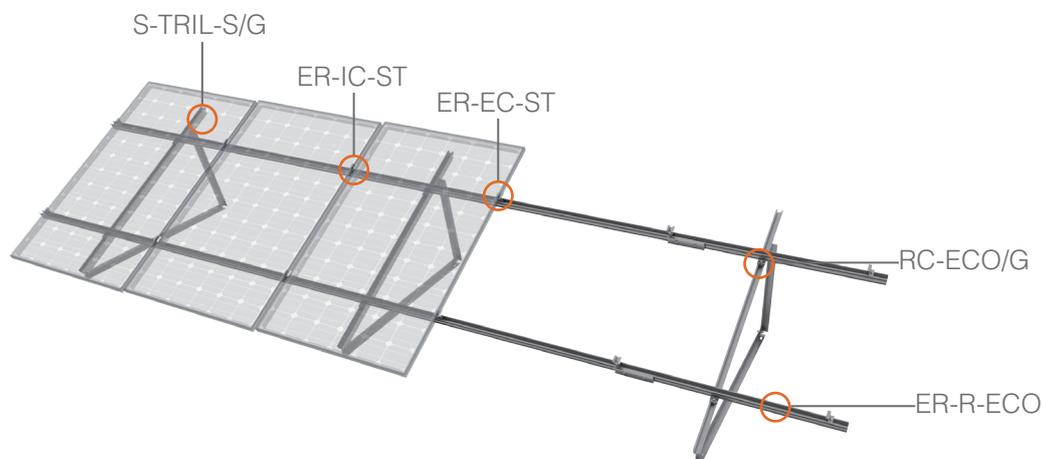


### Grounding Clamp (standard)

# PV-ezRack SolarTripod Light with Grounding Rail Clamp

Pre-assembled residential and commercial flat roof mounting system

The PV-ezRack SolarTripod Light with pre-assembled Supports, including pre-installed Rail Clamps, is an economical mounting system, which is suitable for residential and commercial flat roofs. It has one of the fastest installation speed in its class. This system is manufactured from structural grade aluminium alloy to ensure excellent corrosion resistance and light weight.



## Main Benefits

### Fast and easy Installation

The Tripod Light supports are delivered with pre-set tilt angles, pre-assembled, which include the Rail Clamps pre-installed at the right position. This allows a quick and easy installation.

### Cost Reduction

The combination of simple L-Shaped aluminium profiles with Z-Module channels in the support and the optimised ECO-Rail results in cost reduction without compromise in structural integrity.

### Grounding/Earthing Function

The Rail clamps include the earthing pins, which provide continuity between rail and support. On the ECO-Rail the standard earthing clips and lugs can be used.

### Universal application

Standardised components are suitable for 60cell as well as for 72cell panels with the base length of 1350mm or 1700mm and with the tilt angle of 15° or 30°. Customised lengths and tilt angles are available on order.

10 Year  
Warranty\*

Commercial

Residential

Available

accessories

Grounding/earthing

Cable clips

Rail caps

# PV-ezRack SolarTripod Light with Grounding Rail Clamp

## ER-EC-ST



### PV-ezRack End Clamp

- End Clamp (full or half anodized in silver grey or black available)
- 28mm
- 30mm
- 32mm
- 35mm
- 38mm
- 40mm
- 42mm
- 45mm
- 46mm
- 48mm
- 50mm
- 55mm
- 57mm
- Z-Module
- Hex Socket Head Cap Screw M8 x28mm
- Lock Washer 8mm

## ER-IC-ST/U18



### PV-ezRack Module Inter Clamp

- U18-Inter Clamp (full or half anodized in silver grey or black available)
- 28mm
- 30mm
- 35mm
- 38mm
- 40mm
- 42mm
- 45mm
- 46mm
- 48mm
- 50mm
- Z Module
- Washer 8mm
- Hexagon socket head cap screw
- M8\*40mm
- M8\*45mm
- M8\*50mm
- M8\*55mm
- M8\*60mm

## RC-ECO/G



### PV-ezRack Rail Clamp for ECO-Rail with grounding/earthing pins

- Hexagon socket head cap screw M8\*30
- Washer 8
- Rail Clamp for ECO-Rail with grounding/earthing pins
- Z Module

## ER-SP-ECO



### Splice for ECO Rail

- Splice with a standard length of 200mm
- Hexagon socket head cap screw M8\*12mm

## ER-R-ECO



### ECO-Rail

- With a standard length of
- 4200mm
- 3405mm
- 3150mm
- 2560mm
- 2100mm
- 1050mm
- 1000mm

## S-TRIL-S/G



### Support for SolarTripod Light, single

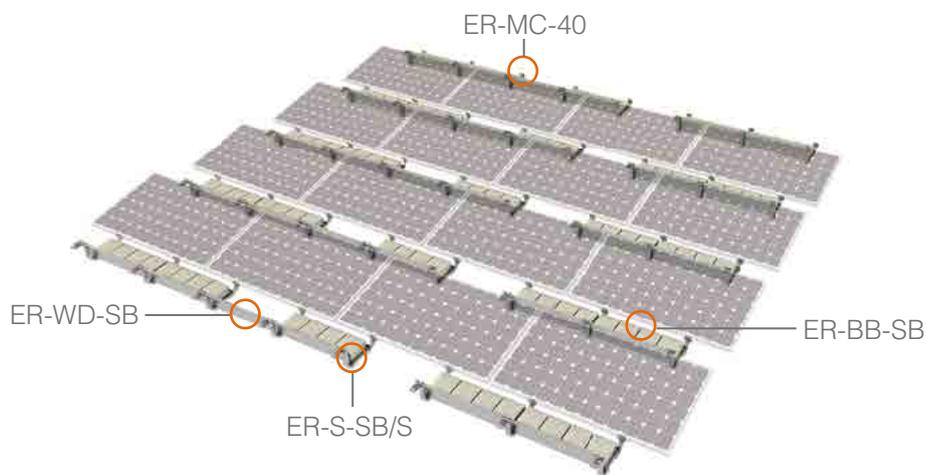
- Base support
- Upper support
- Base support
- 1350
- 1700
- Upper support
- 1500
- 1700
- Back support 15°
- Back support 30°
- Flat Bar 30\*9 (Washer)
- Hexagonal Bolt M8\*25
- Hexagonal Bolt M8\*30
- Hexagon nut M8
- Washer 8
- Plain washer 8
- Grounding Rail Clamp for ECO Rail
- Z-Module
- Hexagon socket head cap screw M8\*30

# PV-ezRack SolarBase

Designed for commercial installations

Clenergy's low ballast roof system is specifically designed for installation of commercial roof photovoltaic systems. Highly-efficient design greatly simplifies installation, and optimal use of available space.

Designed to be used as a non-penetrative, low-ballast mounting system can also be adapted to be positively fixed to roofs where required.



## Main Benefits

### Convenient installation

The pre-assembled support leg with convenient and firm buckle design and simple bolt fixation saves installation time and cost for installers.

### Advanced design

The design of ballast and wind deflector effectively increases the stability of the photovoltaic system. The rubber pad underneath the support leg raises the whole system from the roof surface for water draining, helps to prevent corrosion and avoids damaging the roof membrane. The innovative curved structure design integrates elegance & strength. This efficient design not only reduces materials and cost but still guarantees system strength & durability.

### Strict quality control

Clenergy conducts strict quality management and control of raw materials, purchasing and production process to guarantee structural integrity and service life of its manufactured systems.

### Maximized compatibility

Low-ballast, flat-roof system is compatible with most framed solar modules. The arrangement of arrays is very flexible, which maximizes power generation. Roof objects (air-con units, roof-lights, etc.) can be easily accommodated.

**10 Year  
Warranty\***

**Commercial**

**Residential**

**Available  
accessories**

**Grounding/earthing  
Cable clips**

# PV-ezRack SolarBase

## ER-MC-40



### Module Clamp (aluminum)

- PV-ezRack , Module Clamp 40 mm
- 40 Rim Clamp L35mm AL6005-T5
- Hexagon Socket bolt M8\*25mm SUS304

## ER-BB-SB



### Ballast bar (galvanized steel)

- PV-ezRack Ballast Bar for SolarBase, L900mm
- ballast Bar, L900\*40\*T3.0mm Q235B
- Hexagon nut M8mm SUS304
- Washer 8mm SUS304
- Plain washer large 8\*24mm SUS304

## ER-WD-SB



### Wind Deflector (2 options: aluminium or galvanized steel)

- PV-ezRack Wind Deflector for SolarBase, 10°
- Wind Deflectors 10 degree, 1700\*195.8\*263.6mm, aluminum AL/5052-H32
- U bolts M8\*58mm Q235B
- Hexagon nut M8mm SUS304
- Washer 8mm SUS304
- Plain washer 8mm SUS304
- Fixing plate for Wind Deflectors, 120\*38.1\*3.5mm AL6005-T5

## ER-S-SB/S



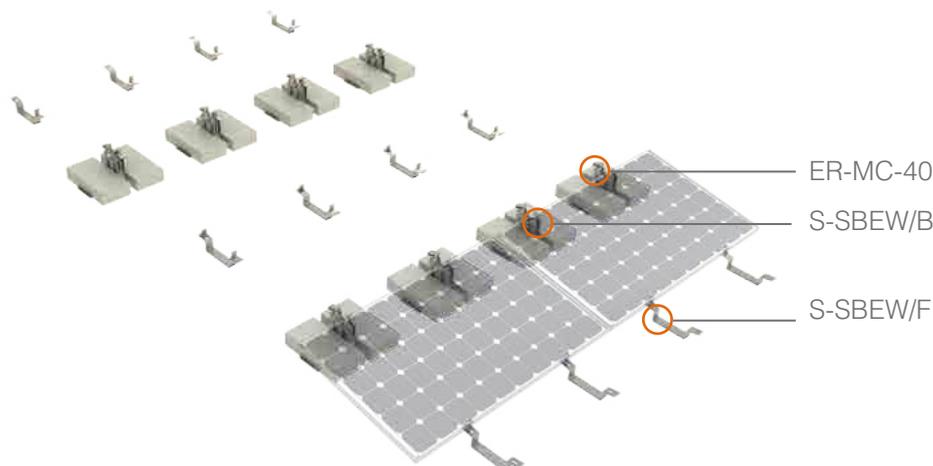
### Support Leg (galvanized steel)

- PV-ezRack Support Leg for SolarBase, 10°
- Support leg 579.9\*40\*269.6mm Q235
- Module Frame Front Mounting Clip 74.5\*62\*45mm AL6005-T5
- Hexagon socket head cap screw M8\*75mm SUS304
- Hexagon nut M8mm SUS304
- Module Frame Back Mounting Clip 91\*52\*36.6mm AL6005-T5
- Hexagon socket head cap screw M8\*35mm SUS304
- Washer 8mm SUS304
- Plain washer 8mm SUS304
- Cup head square neck bolts M8\*45mm SUS304
- Bushing  $\varnothing$  18.5\*20mm AL6005-T5
- O rubber rings  $\varnothing$  12\*3mm EPDM
- Rubber Pad for leg 80\*60\*25mm EPDM

# PV-ezRack SolarBase East-West

For residential and commercial flat roofs

PV-ezRack SolarBase East-West is our radical new generation flat roof mounting system. Conventional wisdom is to face solar modules South but PV-ezRack SolarBase East-West offers some powerful advantages. East-West smooth's the supply of power during the day, starting earlier and finishing later, so that more or all of the power generated is consumed on site. With no shading between rows 40% extra modules can be installed. Galvanized steel and anodized aluminium material ensures it is robust, cost-effective and has long lasting weather-resistance.



## Main Benefits

### Easy and fast installation

- Only three components, supplied in 1 kWp kits for minimal storage space.
- Simple design for straight forward assembly.
- Flat roof protection pre-fitted.
- Aerodynamic design reduces ballast.
- Pre-assembled front and back support legs and buckle design largely reduces installation time.

### Outstanding performance

- Fit 40% more modules maximizing roof area with very flexible design options.
- Up to 30% higher yield per annum. Ideal for self-consumption due to smoother power curve over South facing arrays.
- Cost per kWp are lower than standard South facing flat roof arrays,
- Less ballast due to optimal aerodynamics.
- No wind deflectors.
- No rail design ensures rainwater flows away unimpeded.
- Surprisingly low price.
- 10 year warranty.

**10 Year  
Warranty\***

**Commercial**

**Residential**

**Available  
accessories**  
Grounding/earthing  
Cable clips

# PV-ezRack

## SolarBase East-West

**ER-MC-40**



### Module Clamp 40 mm

- Module Clamp 40
- Hexagon Socket Bolt, M8\*25mm

**S-SBEW/F10/40**



### Front Support Leg, 10°

- Hexagon Socket Head Cap Screw , M8 x 35mm
- Washer 8
- Front Support Leg, 10°, 414 x 60 x 88.6mm
- Hex Nut M8
- Rubber Pad, 240 x 60 x 5mm
- Nut Fixed, 18 x 18 x 11mm
- End Clamp 40
- ezClip Spring

**S-SBEW/B10**



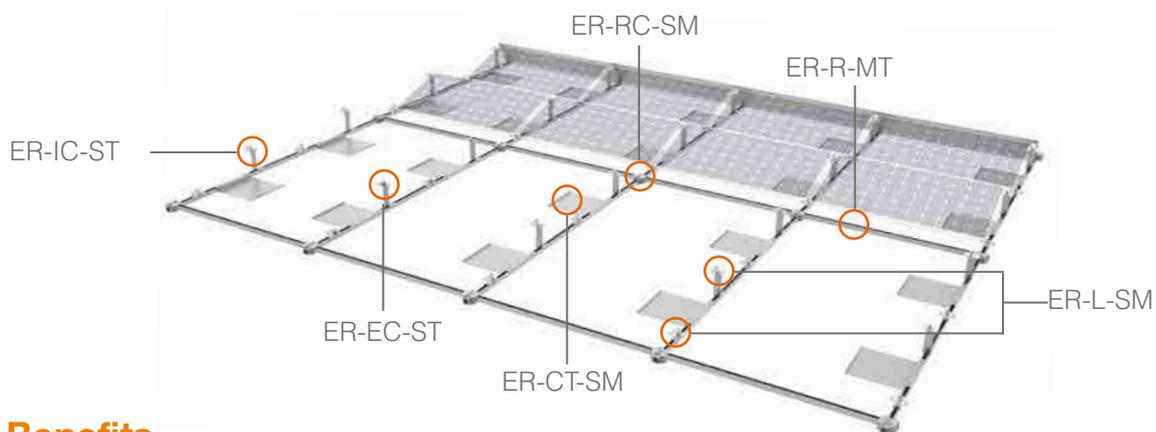
### Back Support Leg, 10°

- Back Support Leg, 10°, 250.3 x 170 x 234mm
- Hexagon Socket Head Cap Screw, M8 x 35mm
- Bushing  $\phi$ 18.5\*18
- Rubber Pad For Solar Base East West leg, 240 x 170 x 5mm
- Hexagon Nut M8
- Washer 8
- Plain Washer 8
- Hexagon Socket Head cap screw M8 x 70mm
- Module Frame Front Mounting Clip II, 7 4.5 x 38 x 45mm

# PV-ezRack SolarMatrix

Ballasted flat roof system with maximum roof utilisation ratio

PV-ezRack SolarMatrix is a non-penetrative mounting system for commercial concrete flat roof installations. Through its flexible and scalable design it enables perfect utilisation of roof surface available. The tilt angles range from 5° to 20° with the panels positioned in landscape orientation. A combination of high quality aluminium and stainless steel components make a robust, reliable system with excellent corrosion resistance.



## Main Benefits

### No roof penetration

Using ballast trays with mostly concrete ballast blocks, SolarMatrix is held securely in place without the need for roof penetration, ensuring that watertightness of the building remains intact.

### Maximum roof utilisation ratio

SolarMatrix allows maximum flexibility. Even the smallest roof section can be used for generating power and the modular design allows for easy layout customisation.

### Good corrosion resistance

The panels are mounted on stainless steel front and back legs, secured on the anodised aluminium base MT-Rails with our Diamond Modules.

### Quick and easy installation

A modular design and Diamond Module connection provide a quick, easy and safe installation method. Through its design, the Diamond Module safely clicks into its required position when turned inside of the MT-rail. It can be inserted into the rail at any given point, and secured with just three hand grips.

**10 Year  
Warranty\***

**Commercial**

**Residential**

**Available  
accessories**

**Grounding/earthing  
Cable clips**

# PV-ezRack SolarMatrix

**ER-R-MT/2560**



**MT-rail**

- Project specific customised lengths

**ER-CT-SM**



**Ballast Tray**

- Clamp Tray
- Hexagon socket head cap screw M8\*20
- Diamond module M8(for Solarmatrix)

**ER-RC-SM**



**Rail Cross Connector**

- Rail Cross Connector-Bottom
- Rail Cross Connector-Top
- M10\*45/Hexagon Socket head cap screw M10 \*45

**ER-L-SM**



**Front and Back Leg**

- Front and Back Leg 5°
- Front and Back Leg 10°
- Front and Back Leg 15°
- Front and Back Leg 20°
- Hexagon socket head cap screw M8\*20
- Diamond module M8(for Solarmatrix)

**ER-WD-SM**



**Wind Deflectors**

- Aluminium Wind deflector 5°
- Aluminium Wind deflector 10°
- Aluminium Wind deflector 15°
- Aluminium Wind deflector 20°
- Hexagon socket head cap screw M8\*20
- Plain washer large 8\*24
- Diamond module M8(for Solarmatrix)

**ER-EC-SM**



**End Clamp**

- End Clamp 28mm
- End Clamp 30mm
- End Clamp 35mm
- End Clamp 38mm
- End Clamp 40mm
- End Clamp 42mm
- End Clamp 45mm
- End Clamp 46mm
- End Clamp 48mm
- End Clamp 50mm
- End Clamp 57mm
- Washer 8
- Hexagon socket head cap screw M8\*25

**ER-IC-SM**



**Inter Clamp**

- Inter Clamp 28mm
- Inter Clamp 29mm
- Inter Clamp 30mm
- Inter Clamp 35mm
- Inter Clamp 38mm
- Inter Clamp 39mm
- Inter Clamp 40mm
- Inter Clamp 41mm
- Inter Clamp 42mm
- Inter Clamp 45mm
- Inter Clamp 46mm
- Inter Clamp 47mm
- Inter Clamp 48mm
- Inter Clamp 49mm
- Inter Clamp 50mm
- Inter Clamp 57mm
- Washer 8
- Hexagon socket head cap screw M8\*40

**ER-R-MT**



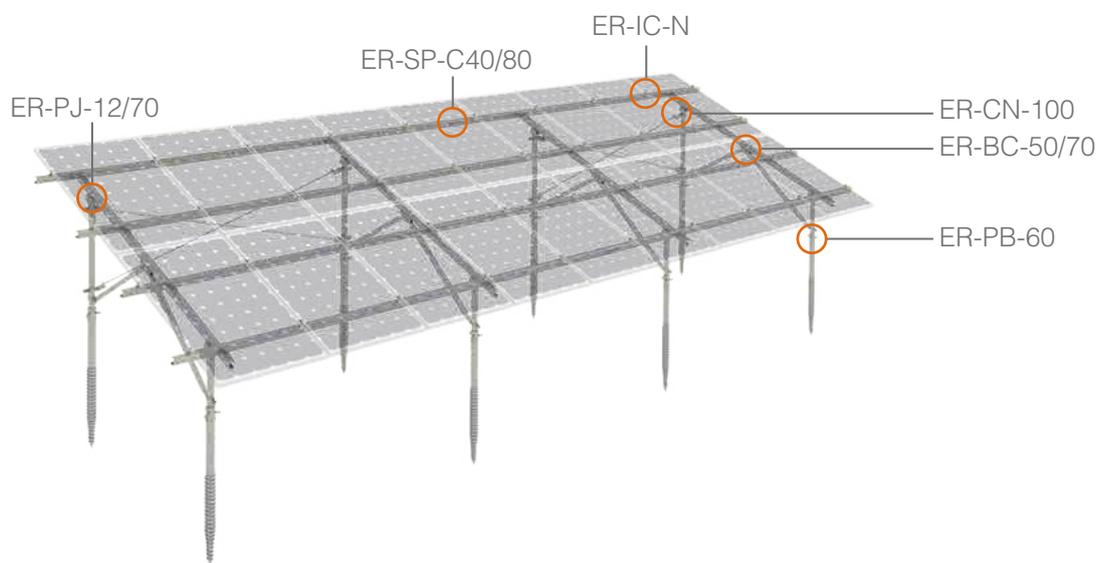
**MT-Rail**

- Aluminium profile of MT Rail

# PV-ezRack SolarTerrace I-D

Galvanized steel ground mount solution for large-scale projects

PV-ezRack SolarTerrace I-D is an economic ground-mounting system suitable for commercial- and utility-scale installations. Traditional hot-dip galvanized steel with an average thickness of 65 microns (ASTM A123 standard) ensures a robust, reliable and economic system.



## Main Benefits

### Price advantage

Thanks to low-cost hot-dip galvanized steel, a simple production process and batch production, the system offers a competitive price.

### Three foundation solutions

With the option of a concrete foundation, a ground screw or ramming, the system can be installed on even or uneven slopes, making it suitable for any soil type.

10 Year  
Warranty\*

Utility

Commercial

Available  
accessories

Grounding/earthing  
Cable clips

# PV-ezRack SolarTerrace I-D

## ER-EC-N



### End Clamp, nut series

- End clamp  
28mm  
30mm  
32mm  
35mm  
38mm  
40mm  
42mm  
46mm  
48mm  
50mm  
57mm
- Hexagon socket head cap screw  
M8\*28
- Plain washer large 8\*24
- Washer 8
- Hexagon nut M8

## ER-IC-N



### Inter Clamp, nut series

- U18-Inter clamp
- Hexagon socket head cap screw  
M8X40mm  
M8X45mm  
M8X50mm  
M8X55mm  
M8X60mm  
M8X70mm
- Plain washer large 8\*24
- Washer 8
- Hexagon nut M8

## ER-R-C80/40



### C-Steel 80\*40

- With a standard length of  
3200mm  
4900mm  
5000mm  
5200mm  
5400mm

## ER-PJ-12/70



### Pillar Joint with Bolt Hole Ø12

- Pillar connector L100\*70\*80\*T4.0
- Hexagonal bolt M10\*90
- Hexagonal bolt M10\*25
- Plain washer large 10\*30
- Washer M10
- Hex nut M10

## ER-P-60



### Pole - screw foundation use

- With a standard length of  
770mm  
1420mm

## P-60



### Pole with Quadrate Flange concrete foundation use

- Pole with quadrate flange 60\*2.5\*783
- Pole with quadrate flange 60\*2.5\*1435

## ER-BC-50/70



### Brace Connector

- Brace connector 200\*50\*70\*T3.0
- Hexagonal bolt M10\*70
- Hexagonal bolt M10\*25
- Plain washer large 10\*30
- Washer M10
- Hex nut M10

## ER-RT-40



### Rectangular Tube

- Rectangular tube 40\*1420

## ER-SP-C40/80



### Splice for C-Steel 80\*40

- Splice for C-steel 80\*40
- Hexagon socket head cap screw  
M8\*25
- Plain washer large 8\*24
- Washer M8
- Hexagon nut M8

## ER-AB-80/40



### Angle Bracket for C-Steel Rail 80\*40

- Angle bracket for C Steel 80\*40
- Hexagonal bolt M10\*25
- Plain washer large 10\*30
- Washer M10
- Hex nut M10

## ER-TR-11



### Tie Rod

- With a standard length of  
2300mm  
2400mm  
2500mm  
2600mm  
2800mm

## ER-CN-100



### Tie Rod Connector

- Tie rod connector 100\*63\*6\*L60
- Plain washer large 12\*37
- Washer 12 (Hot dip galvanizing)
- Hexagon nut M12 (Hot dip galvanizing)

# PV-ezRack SolarTerrace I-D

## ER-PB-60



### Pole Bracket Ø60

- Pole bracket Ø60
- Hexagonal bolt M10\*35
- Plain washer large 10\*30
- Washer M10
- Hex nut M10

## AP-GS/76/PIN



### Accessory Package for Ø76 Ground Screw (with hexagonal bolt M16\*120)

- Rubber ring
- Hexagonal bolt M16\*120
- Plain washer large 16\*50
- Washer M16
- Hexagon nut M16

## AP-GS/76/2STS



### PV-ezRack Accessory Package for Ø76 Ground Screw (with 2PCS Self-Tapping Screw)

- Rubber ring for pole 65
- Flange Facing Self-Tapping Screw (with bonded washer) ST6.3\*35

## GS-76/4



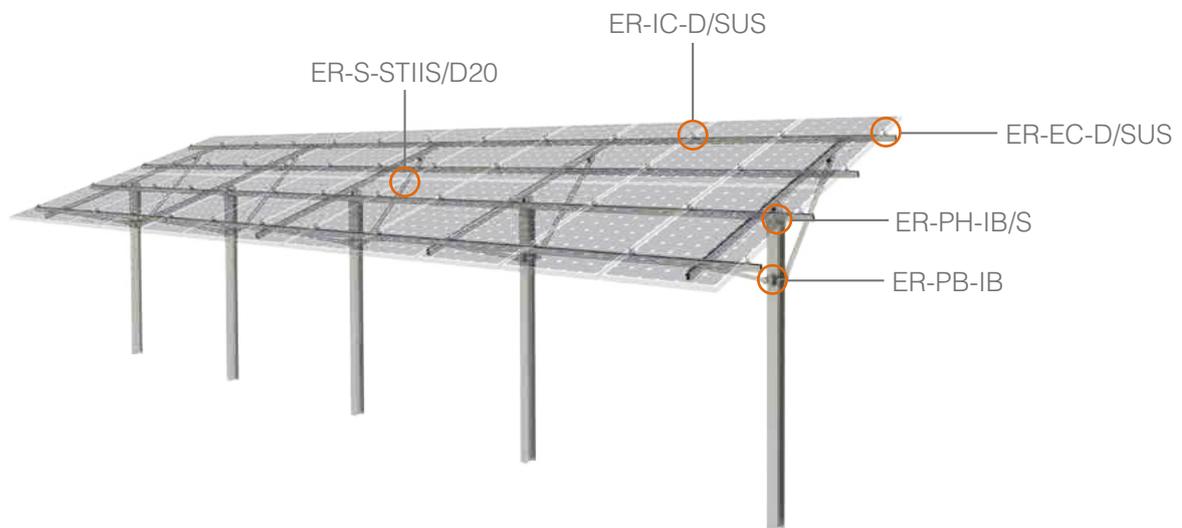
### Ground Screw with Three Nut Fixation and Continuous Small Blade

- Ground screw, Ø76\*4.0\*1300mm
- Ground screw, Ø76\*4.0\*1600mm
- Ground screw, Ø76\*4.0\*1900mm
- Hexagonal bolt M16\*30 (Hot dip galvanizing)

# PV-ezRack SolarTerrace II-S

Galvanized steel ground mounting system for large- and utility-scale installation

PV-ezRack SolareTerrace II-S is an economical mounting system with pre-assembly that is suitable for large- and utility-scale installations. All components are manufactured with hot-dip galvanized steel for reliable corrosion resistance.



## Main Benefits

### Economy

Thanks to low-cost hot-dip galvanized steel, a simple production process and batch production, the system carries a preferential price.

### Suitable for varied landscapes

Deployed with a single post for ramming, the system is suitable for various uneven locations, such as hilly land and slopes.

### Wide range of adjustments

Thanks to its unique post head design, the system offers sufficient horizontal and vertical adjustments to balance out inaccuracies during on-site construction.

### Easy and convenient installations

Highly pre-assembled girders help to save significant time and cost during on-site installation.

10 Year  
Warranty\*

Utility

Commercial

Available  
accessories

Grounding/earthing  
Cable clips

# PV-ezRack SolarTerrace II-S

## ER-EC-D50/SUS



### Module End Clamp

- End Clamp L50mm  
28mm  
30mm  
32mm  
35mm  
38mm  
40mm  
42mm  
45mm  
46mm  
48mm  
50mm  
55mm  
57mm
- Hexagon socket head cap screw M8\*30
- Washer 8mm
- Diamond Module with teeth 35\*19\*6mm
- Diamond Washer 50\*30\*23mm

## ER-IC-D48/50/SUS



### Module Inter Clamp

- U18-Inter Clamp L50mm
- Hexagon socket head cap screw M8\*40  
M8\*45  
M8\*50  
M8\*55  
M8\*60  
M8\*70
- Washer 8mm
- Diamond Module with teeth 35\*19\*6mm
- Diamond Washer 50\*30\*23mm

## ER-SP-C41/62



### Steel Rail Splice

- Splice for C-Steel L200\*50\*60\*T3.0 mm
- Hexagon socket head cap screw M8\*25
- Plain washer large 8\*24mm
- Washer 8mm
- Hexagon nut M8

## ER-R-C41/62



### Rail

- With a standard lengths of L4200\*41\*62\*T2.0 mm  
L3900\*41\*62\*T2.0 mm

## ER-S-STIIS/D20



### PV-ezRack SolarTerrace II-S, C-Steel Double Support (Pre-assembled) 20 degree with 3200mm C-Steel

- Rectangular Tube 40\*40\*T2\*1038mm
- Rectangular Tube 40\*40\*T2\*1501mm
- C-Steel L3200\*41\*62\*T2.5mm
- Delta Joint for STII-S 100\*50\*70\*T3.0mm
- Hexagonal bolt M12\*70
- Plain washer 12mm
- Washer 12mm
- Hexagon nut M12
- Hexagon socket head cap screw M8\*25
- Plain washer large 8\*24mm
- Washer 8mm
- Hexagon nut M8

## ER-PH-IB/S



### PV-ezRack SolarTerrace II-S, Head for I-147\*100 Beam

- Head for I-147\*100 Beam 140\*157\*124mm
- Head Base for I-147\*100 Beam 146\*120\*103.5mm
- Washer 36\*100\*4 mm
- Cup head square neck bolts M12\*35
- Hexagonal bolt M12\*70
- Sleeve Ø20\*32\*T3mm  
Ø20\*136\*T3mm
- Hexagonal bolt M12\*180
- Plain washer 12mm
- Washer 12mm
- Hexagon nut M12

## ER-PB-IB



### PV-ezRack SolarTerrace II-S, Brace for I-147\*100 Beam

- Rotation joint 1 100\*54\*84
- Rotation joint 2 120\*75\*50
- Sleeve Ø20\*65\*T3
- Hexagonal bolt M12\*110
- Hexagonal bolt M12\*70
- Plain washer 12
- Washer 12
- Hexagon nut M12

## ER-IB-2800



### I-147\*100 Beam

Beam L147\*100\*2800mm

## ER-BSUS-HS8/80



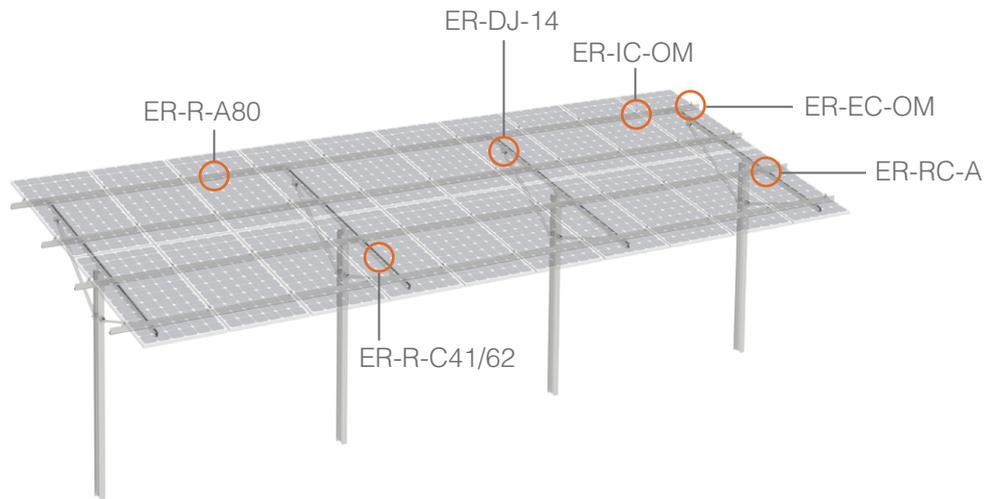
### Bolt and nut assembly of hexagon socket flange bolt

- Hexagon socket head cap screw M8\*80mm
- Plain washer large 8\*24mm
- Washer 8mm
- Hexagon nut M8

# PV-ezRack SolarTerracell-H

Large-scale Utility and Power Plant Ground Mount Solution

PV-ezRack SolarTerracell-H is a ground mounting system with a piling solution for large-scale utility and power plant projects. It is suitable for locations with medium and low wind loads. The combination of an aluminum alloy track and a (hot-dip galvanized) steel support frame delivers a robust and reliable system with excellent corrosion resistance.



## Main Benefits

### Quick and easy installation

Innovative easy-click rail fixing attachments and the patented omega-shaped clamp enable quick and easy installation.

### Durable in harsh environments

Anodized aluminum and hot-dip galvanized steel parts make the system suitable for even the toughest of corrosive environments, such as coastal areas.

### Variable tilt angles

Pre-engineered tilt angles facilitate a higher ground-coverage ratio based on site-specific conditions.

10 Year  
Warranty\*

Utility

Commercial

Available  
accessories  
Grounding/earthing

# PV-ezRack SolarTerraceII-H

## ER-EC-OM



### End Clamp, Omega

- Omega End Clamp  
35mm  
40mm  
45mm  
46mm  
50mm
- Omega Module
- Hexagon socket head cap screw  
M8\*25mm
- Washer 8mm

## ER-IC-OM



### Inter Clamp, Omega

- U18-Inter clamp
- Omega module
- Hexagon socket head cap screw  
M8\*30  
M8\*40
- Washer 8

## ER-R-A80



### A-Rail 80

- With a standard lengths of  
4900mm

## ER-R-C41/62



- With a standard lengths of  
3200mm

### C-steel 41\*62

## ER-IB-147/75



### I147\*75 Beam

- I-147\*75 Beam\*2800
- I-147\*75 Beam\*2200
- I-147\*75 Beam\*2400
- I-147\*75 Beam\*2600
- I-147\*75 Beam\*3000

## ER-RC-A



### Rail Clamp for A-Rail

- Hexagon socket head cap screw  
M8\*30
- Washer 8
- T-Rail clamp
- Diamond module with teeth
- Diamond washer

## ER-SP-A80



### Splice for A-Rail 80

- Splice for A-80 rail
- Self-drilling screw ST4.8\*16

## ER-PH-STIIH/15



### Post Head for I-147\*75 Beam

- Head for I-147\*75 Beam, 15°
- T slide clamp, 80mm
- Corrugated shim (t6)
- Hexagon socket head cap screw  
M8\*20
- Plain washer large 8\*24
- Washer 8
- Hexagonal bolt M12\*40
- Plain washer 12
- Washer 12
- Hexagon nut M12

## ER-PB-STIIH



### Post Brace for Rectangular Tube 40\*25

- Joint for rectangular tube 40\*25
- Hexagonal bolt M12\*35
- Hexagonal bolt M12\*70
- Plain washer 12
- Washer 12
- Hexagon nut M12

## ER-DJ-14



### Delta Joint, with bolt hole $\Phi 14$

- Delta joint for STII-H
- Hexagon socket head cap screw  
M8\*25
- Plain washer large 8\*24
- Washer 8
- Hexagon nut M8
- Hexagonal bolt M12\*70
- Plain washer 12
- Washer 12
- Hexagon nut M12

## ER-RT-40/25



### Rectangular Tube 40\*25

- With a standard lengths of  
1160mm  
1477mm

# PV-ezRack SolarTerrace III-A

Universal ground mount frame for corrosive environments and for tough soil conditions

Manufactured from high quality structural grade and anodised aluminium PV-ezRack SolarTerrace III-A is the perfect mounting solution for corrosive environments. The support legs can be installed either with concrete ballast footing or on ground screws which makes it suitable for almost every soil condition. Its user friendly high level of prefabrication makes it easy to install and therefore practical for smaller commercial and even for residential installations. STIII-A is also suitable for fixing thin film panels.



## Main Benefits

### Durable even in harsh environments

STIII-A contains only 6005-T5 Aluminium alloy and 304 stainless steel (316 on request), which makes it suitable for even the toughest environments, such as corrosive sites close to coastlines.

### Support leg is delivered in one piece

The support legs of the STIII-A are completely pre-assembled, they only need to be opened up and secured to the foundation. They even have the positioning rail clamps pre-installed, so you don't need to measure and mark the rail positions anymore. The combination of these features is saving valuable time in assembly and logistics, making it one of the fastest system on the market.

### Suitable for all soil and ground types

The support legs can be installed either with a concrete ballast footing or with ground screws. This makes STIII-A suitable for the most challenging soil conditions where ramming is not possible.

### Simplicity

Sometimes bill of materials can be confusing and complicated. Not with Clenergy, on a BOM for STIII-A you will only find 6 components: support legs, rails, rail clamps, splices, mid and end clamps. Keeping it simple and transparent helps all parties to understand and work with the product better.

**10 Year  
Warranty\***

**Commercial**

**Residential**

**Utility**

**Available  
accessories**

**Grounding/earthing**

**Cable clips**

**Cable trays**

**Inverter/joint box bracket**

**Rail and Girder cap**

# PV-ezRack SolarTerrace III-A

**ER-S-STIII A**



**SolarTerrace III-A Support (pre-assembled)**

- Back Leg
- N-Beam Joint
- S-Anchor Plate
- Enforcement Tube
- Hexagon Bolt M12 x 25 (15/32"x 63/64")
- Lock Washer 12.4 (31/64")
- Flange Facing Nut M12 (15/32")
- Hexagon Bolt M12 x 90 (15/32"x 3-35/64")
- Hexagon Bolt M12 x 80 (15/32"x 3-5/32")
- Hexagon Nut M12 (15/32")
- Flat Washer 12.4 (34/64")
- Hexagon Nut M16 (5/8")
- Lock Washer 16.4mm (46/64")
- Flat Washer 16.4mm (46/64")
- N-anchor Plate
- Front Leg
- S-Beam Joint
- Tri Groove Beam

**ER-IC-ST/U18**



**Inter Clamp, Standard**

- Inter Module Clamp 28mm (1-7/64"), 35mm (1-3/8"), 40mm (1-37/64"), 46mm (1-13/16"), 50mm (1-31/32"), 57mm (2-1/4")
- 28mm (1-7/64") with Hex Socket Head Bolt A2-70 M8x40 (5/16" x 1-37/64")
- 35mm (1-3/8") with Hex Socket Head Bolt A2-70 M8x45 (5/16" x 1-49/64")
- 40mm (1-37/64") with Hex Socket Head Bolt A2-70 M8x50 (5/16" x 1-31/32")
- 46mm (1-13/16") with Hex Socket Head Bolt A2-70 M8x55 (5/16" x 2-11/64")
- 50mm (1-31/32") with Hex Socket Head Bolt A2-70 M8x60 (5/16" x 2-23/64")
- 57mm (2-1/4") with Hex Socket Head Bolt A2-70 M8x70 (5/16" x 2-3/4")
- Z-Module
- Lock Washer 8.4mm (21/64")

**ER-EC-ST**



**End Clamp, Standard**

- End Clamp (full or half anodized in silver grey or black available)
- 28mm
- 30mm
- 32mm
- 35mm
- 38mm
- 40mm
- 42mm
- 45mm
- 46mm
- 48mm
- 50mm
- 55mm
- 57mm
- Z-Module
- Hex Socket Head Cap Screw M8 x28mm
- Lock Washer 8mm

**ER-RC-T**



**Rail Clamp for T-Rail**

- Rail Clamp 50 x 30 x 11.8mm (1-31/32" x 1-3/16" x 15/32")
- Hex Socket Head Bolt M8 x 30 (5/16" x 1-3/16")
- Z-Module
- Spring Washer M8 (5/16")

**ER-R-T110**



**T-Rail 110mm**

- T-Rail 65 x 110mm (2-9/16" x 4-21/64")
- Length from 2000mm (6' 6-47/24") to 6100mm (20' 5/32")
- Standard Lengths 4200mm (13' 9-23/64") and 5200mm (17' 23/32")

**ER-SP-T110**



**Splice for T-Rail 110**

- Splice 45.7 x 105.6mm (1-51/64" x 4-1/15")
- Flange Face Self-Tapping Screw
- Self tapping screw M6.3 x 22 (1/4" x 55/64")

**ER-RC-T/A**



**Positioning Rail Clamp for T-Rail**

- Positioning Rail Clamp 50 x 27.25 x 11.5mm (1-5/64" x 1-5/64" x 29/64")
- Hex Socket Head Bolt M8 x 30 (5/16" x 1-3/16")
- Spring Washer M8 (5/16")
- Z-Module

**ER-RC-T/G**



**Rail Clamp for T-Rail with grounding/earthing pins**

- Rail Clamp with pins 50 x 30 x 11.8mm (1-31/32" x 1-3/16" x 15/32")
- Hex Socket Head Bolt M8 x 30 (5/16" x 1-3/16")
- Spring Washer M8 (5/16")
- Z-Module

**ER-CAP-T55**



**Cap for T-55 Rail**

- Cap for T-55 Rail

# PV-ezRack SolarTerrace III-A

## BR-R110/EW



### PV-eRack East/West Adjustable Bracket for T-Rail 110

- East/West Adjustable Bracket-top, L50\*95\*63mm
- Bushing Ø18.5\*9
- East/West Adjustable Bracket-bottom, L50\*105\*54mm
- Hexagon Socket Head Cap Screw, M8\*28
- Washer 8mm
- Z Module, L20mm
- Hexagonal Bolt ,M12\*50
- Plain Washer 12mm
- Washer 12mm
- Hexagon Nut M12
- Corrugated Shim (t6) With Ø8.5 hole, L50\*30\*6mm
- Hexagon Socket Head Cap screw, M8\*30
- O Rubber Rings Ø12\*3
- Rail Clamp For T-Rail, L50mm

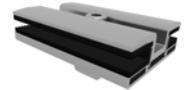
## ER-JK-STIIIA



### PV-ezRack STIII-A Joint kit for C Post 140

- Joint on C Post 140 for STIII-A, L180\*140\*67mm
- Bushing Φ18.5\*66mm
- Hexagonal bolt M16\*50
- Hexagon nut M16
- Plain washer 16mm
- Washer 16mm
- Hexagonal bolt M12\*110
- Hexagon nut M12
- Washer 12mm
- Plain washer 12mm

## IC-FL/GE/6.8



### Inter Clamp for 6.8mm Frameless Module (glued EPDM), Length 80mm, 120mm, 150mm, 200mm

- Frameless Module (glued EPDM) Inter clamp-Upper part
- Frameless Module (glued EPDM) Inter clamp-Lower part
- Up Rubber Mat for Frameless module clamp (glued EPDM)
- Below Rubber Mat for Frameless module clamp (glued EPDM)
- Plain washer SUS304, 1.8mm
- Washer 8
- Hexagon socket head cap screw M8\*30
- Z Module 2

## SP-T55



### Splice for T-Rail 55

- Splice for T-Rail 55
- Flange Facing Self-Tapping Screw(washer) ST6.3\*22

## R-T55/4200



### T-Rail, 55\*4200mm

- T-Rail, 55\*4200mm

## EC-FL/GE/6.8



### End Clamp for 6.8mm Frameless Module (glued EPDM), Length 80mm, 120mm, 150mm, 200mm

- Frameless Module (glued EPDM) End clamp-Upper part
- Frameless Module (glued EPDM) End clamp-Lower part
- Up Rubber Mat for Frameless module clamp (glued EPDM)
- Below Rubber Mat for Frameless module clamp (glued EPDM)
- Plain washer SUS304, 1.8mm
- Washer 8
- Hexagon socket head cap screw M8\*30
- Z Module 2

## C-BM/2.3



### Back mounting bracket for PV module frame thickness 2.3mm

- Back mounting bracket for PV module frame thickness 2.3mm
- Z Module
- Hexagonal Bolt M8\*25
- Washer 8

## C-BM/2.3/G



### Back mounting bracket for PV module frame thickness 2.3mm with grounding/earthing pins

- Back mounting bracket for PV module frame thickness 2.3mm with grounding/earthing pins
- Z Module
- Hexagonal Bolt M8\*25
- Washer 8

## ER-CAP-T80



### Cap for T-80 Rail

- Cap for T-80 Rail

## SP-T80



### Splice for T-Rail 80

- Splice for T-Rail 80
- Flange Facing Self-Tapping Screw(washer) ST6.3\*22

## ER-CAP-T100



### Cap for T-100 Rail

- Cap for T-100 Rail

## R-T80/4200



### T-Rail, 80\*4200mm

- T-Rail 80\*4200

# PV-ezRack SolarTerrace III-A Landscape

## IC-W/U18



### LS Module Inter Clamp with 18mm U-shape profile and W module

- U18-Inter Clamp
- W Module Aluminum
- Washer 8
- Hexagon socket head cap screw  
M8\*35  
M8\*40  
M8\*50  
M8\*55

## EC-W



### LS Module End Clamp with 18mm U-shape profile and W module

- Inter Clamp
- W Module Aluminum
- Washer 8
- Hexagon socket head cap screw  
M8\*38  
M8\*45  
M8\*55  
M8\*60

## R-LS



### LS-Rail

- LS-Rail 100, 4200mm
- LS-Rail 70, 4200mm

## SP-SLR



### Splice for LS Rail

- Splice for LS Rail 100
- Splice for LS Rail 70
- Flange Facing Self-Tapping  
Screw(washer) ST6.3\*22

## C-LSR



### - Module Clamp 40 for LS-Rail

- Module Clamp 40-Upper part for  
LS-Rail
- Module Clamp 40-Lower part for  
LS-Rail
- Hexagon socket head cap screw  
M8\*12

## C-LSR/G



### Grounding Module Clamp 40 for LS Rail with conductive part

- Grounding Module Clamp 40-Upper  
part for LS Rail with conductive part
- Grounding Module Clamp 40-Lower  
part for LS Rail with conductive part
- Hexagon socket head cap screw  
M8\*12

## C-CD/LSR100



### - Clamp for Cable Duct on LS-Rail 100

- Clamp for Cable Duct on LS-Rail
- T-head bolt M8\*25
- Plain washer 8
- Washer 8
- Hexagon nut M8
- Set screw M8\*12

## GC-LSR



### - Grounding Clip for LS-Rail

- Grounding Clip for LS-Rail

## CAP-SLR

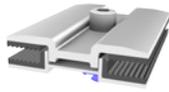


### Cap for LS-Rail

- Cap for LS-70 Rail
- Cap for LS-100 Rail

# PV-ezRack SolarTerrace III-A Landscape

## IC-FL/LS



**Inter Clamp for Frameless Module(5mm, 6mm, 6.8mm and 7.4mm) for LS Rail, Length 80,120,150 and 200mm**

- Inter Clamp for LS Rail-Upper part
- Inter Clamp for LS Rail-Lower part
- Up Rubber Mat for Frameless module clamp (glued EPDM)
- Below Rubber Mat for Frameless module clamp (glued EPDM)
- Washer 8
- Hexagon socket head cap screw M8\*25
- W Module (Aluminum)
- W Module Washer

## EC-FL/LS



**End Clamp for Frameless Module(5mm, 6mm, 6.8mm and 7.4mm) for LS Rail, Length 80,120,150 and 200mm**

- End Clamp for LS Rail-Upper part
- End Clamp for LS Rail-Lower part
- Up Rubber Mat for Frameless module clamp (glued EPDM)
- Below Rubber Mat for Frameless module clamp (glued EPDM)
- Washer 8
- Hexagon socket head cap screw M8\*25
- W Module (Aluminum)
- W Module Washer

## IC-W



**LS Module Inter Clamp, standard**

- Inter Clamp
- W Module Aluminum
- Washer 8
- Hexagon socket head cap screw M8\*38
- M8\*45
- M8\*50
- M8\*55
- M8\*60

## EC-W



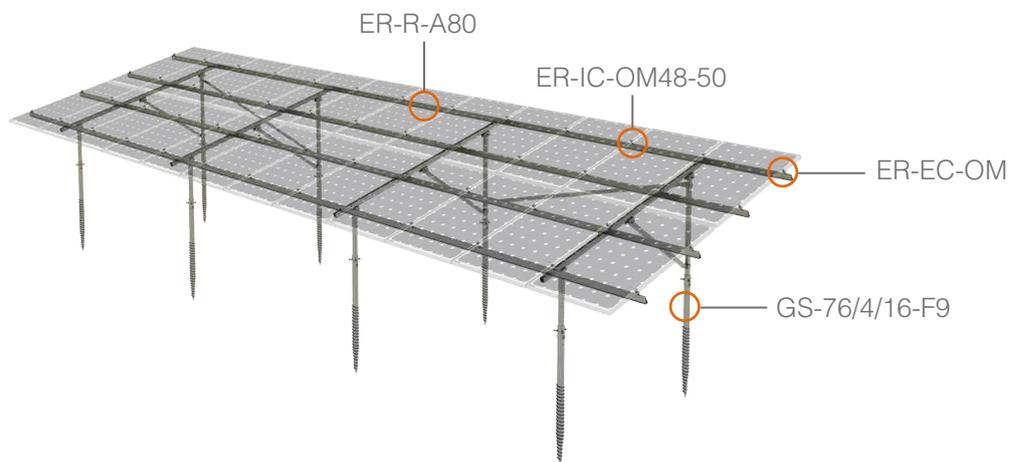
**LS Module End Clamp, standard**

- Inter Clamp
- W Module Aluminum
- Washer 8
- Hexagon socket head cap screw M8\*40

# PV-ezRack SolarTerrace III-B

Universal ground mount frame for corrosive environments and for tough soil conditions

PV-ezRack SolarTerrace III-B is an economical aluminum ground mounting system that is suitable for residential, commercial and large ground power stations in low wind speed regions. The product has good weather resistance thanks to the use of high-quality aluminum alloy components.



## Main Benefits

### Economy

The Patented A-Rail and Omega Clamps save cost by reducing material usage while guaranteeing system strength and durability.

### Durable in harsh environments

The use of 6005-T5 aluminum alloy makes the solution suitable for even the toughest environments.

### Easy installation

Pole connectors with adjustable heights enable easy for Angle aluminum rod installation. Using the T-Rail clamps and A-Rails make installations easier. Installation efficiency is improved through the use of unique Omega clamp components.

10 Year  
Warranty\*

Commercial

Residential

Utility

Available  
accessories  
Grounding/earthing

# PV-ezRack SolarTerrace III-B

## ER-EC-OM



### Module End Clamp, Omega series

- Omega End Clamp  
35mm  
40mm  
45mm  
46mm  
50mm
- Omega Module
- Hexagon socket head cap screw  
M8\*25
- Washer 8mm

## ER-IC-OM



### Module Inter Clamp, Omega series

- U18-Inter Clamp
- Omega Module
- Hexagon socket head cap screw  
M8\*30  
M8\*35  
M8\*40
- Washer 8mm

## ER-SP-A80



### PV-ezRack Splice for A-Rail 80

- Splice for A-80 Rail, L300mm
- Self-drilling screw ST4.8\*16

## ER-RC-T/Z2



### Rail Clamp for T-Rail with Z-Module 2

- Hexagon socket head cap screw  
M8\*30mm
- Washer 8mm
- T-Rail Clamp
- Z-Module 2

## ER-R-A80



### PV-ezRack A-Rail 80

- With the standard length of  
4600mm

## CO-P/SG-12/72



### PV-ezRack Connector, Pole Ø65 to Square Girder 60 with bolt hole Ø12

- U joint, L100\*72\*72.5
- T Slide Clamp, L 100mm
- Hexagon socket head cap screw  
M8\*20
- Plain washer large 8\*24mm
- Washer 8mm
- Hexagonal Bolt M10\*90
- Plain washer 10mm
- Washer 10mm
- Hexagon nut M10

## CO-P/RT-65/AL



### PV-ezRack Connector, Pole Ø65 to Rectangular Tube

- Pole bracket Ø65
- Hexagonal Bolt M10\*20
- Hexagonal Bolt M10\*90
- Plain washer 10mm
- Washer 10mm
- Hexagon nut M10

## CO-P/RT-65/AL/B



### PV-ezRack Connector, Pole Ø65 to Rectangular Tube (with Bushing)

- Pole bracket Ø65
- Hexagonal Bolt M10\*20
- Hexagonal Bolt M10\*90
- Plain washer 10mm
- Washer 10mm
- Hexagon nut M10
- BushingΦ18.5\*64.5

## SG-60/3150



### PV-ezRack Square Girder

- Square Girder 60\*3150mm

# PV-ezRack SolarTerrace III-B

**ER-RT-65/40/1445**



**PV-ezRack, Rectangular Tube  
65\*40\*1445mm**

- Rectangular tube 65\*40\*1445mm

**P-65**



**PV-ezRack Pole**

- pole 65\*2.5\*800mm
- pole 65\*2.5\*1450mm

**ER-AA-50/3240/10**



**Angle Aluminum**

- Angle Aluminum 50.8\*3240mm with bolt hole Ø10.5

**AP-GS/76/65/2STS**



**PV-ezRack Accessory Package for  
Ø76 Ground Screw and pole 65 (with  
2PCS Self-Tapping Screw)**

- Rubber ring for pole 65
- Flange Facing Self-Tapping Screw (with bonded washer) ST6.3\*35

**AP-GS/76/65/PIN**



**Accessory Package for Ø76 Ground  
Screw and pole 65 (with hexagonal  
bolt M16\*120)**

- Rubber ring for pole 65
- Hexagonal bolt M16\*120 (Hot dip galvanizing)
- Plain washer large 16\*50 (Hot dip galvanizing)
- Washer M16 (Hot dip galvanizing)
- Hexagon nut M16 (Hot dip galvanizing)

**GS-76/4/16-F9**

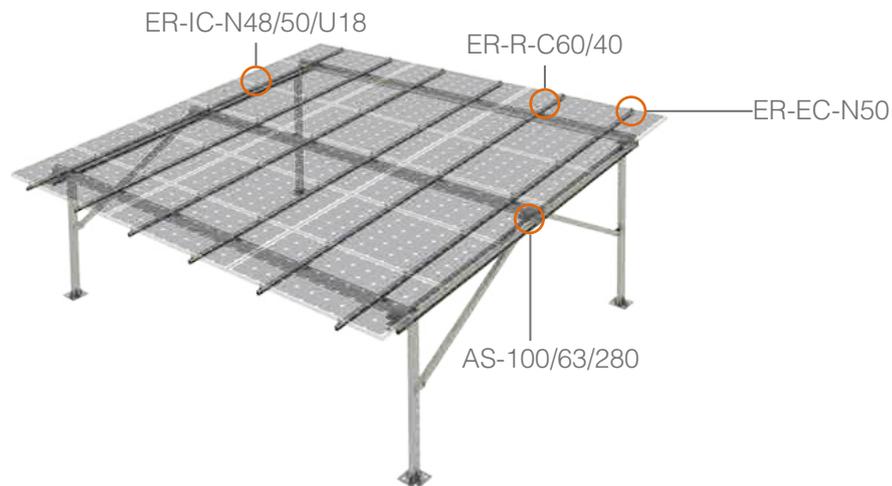


**PV-ezRack Ground Screw  
Ø76\*4.0\*1600mm, with Three nut  
fixation and Continuous Small blade**

- Ground Screw Ø76\*4.0\*1600mm, with Three nut fixation and Continuous Small blade
- Hexagonal bolt M16\*30(Hot dip galvanizing)

# PV-ezRack Carbon Steel Carport

PV-ezRack Carbon Steel Carport is a versatile, economical parking system for commercial ground-mounting installations. The Carport is manufactured from hot-dip galvanized steel to ensure reliable corrosion resistance in all kinds of natural environments. The modularized design enables easy adjustment and arrangement of the system for single, double or row carports. The professional design ensures system stability. With a concrete foundation, the system is suitable for every soil type and a wide range of applications.



## Main Benefits

### Economical and practical

The entire system is made of carbon steel for a simple parts manufacturing process. The system is both economical and practical.

### Supply convenience

The Carport features robust products, quick prep time, a short delivery cycle and easily transportable packaging.

10 Year  
Warranty\*

Utility

Commercial

Available  
accessories

Cable clips

# PV-ezRack Carbon Steel Carport

**D-260/240**



## **PV-ezRack Solar carbon steel Carport**

- Leg 2374mm, 2374\*260\*240
- Leg 1989mm, 1989\*260\*240

**RT-80/60/2205**



## **Rectangular Tube**

- Rectangular Tube, 80\*60\*T3\*2205

**R-C80/40/K**



## **C-Steel 80\*40\*5070 kit**

- C-Steel ,80\*40\*15\*T2.5\*5070

**ER-R-C60/40**



## **C-Steel**

- With a standard length of 2570mm
- 3580mm

**ER-SP-C41/52**



## **Splice for C-Steel Rail**

- Splice for Steel Rail, for C-Steel 60\*40
- Hexagon Socket Head Cap screw, M8\*25
- Plain washer large, M8\*24
- Washer 8
- Hexagon Nut M8

**AS-100/63/280**



## **Angle supporter**

- Angle supporter 100\*63\*280\*T6
- Hexagonal bolt M10\*35 (Hot dip galvanizing)
- Flat washer M10 (Hot dip galvanizing)
- Hexagon nut M10 (Hot dip galvanizing)
- washer 10mm (Hot dip galvanizing)

**R-C140/T4/5415**



## **C-Steel1**

- C-Steel 140\*70\*T4\*5415

**ER-EC-N50**



## **End Cap for Portrait Waterproof Bar**

- End Clamp 50, L40
- Hexagon Socket Head Cap screw M8\*25
- Washer 8
- Plain washer large 8\*24
- Hexagon nut M8

**ER-IC-N48/50/U18**



## **PV-ezRack Inter Clamp, nut series**

- U18-Inter Clamp,L40
- Washer 8mm
- Hexagon Socket Head Cap screw M8\*60
- Plain washer large 8\*24
- Hexagon nut M8

**ACS-180/100/T4**



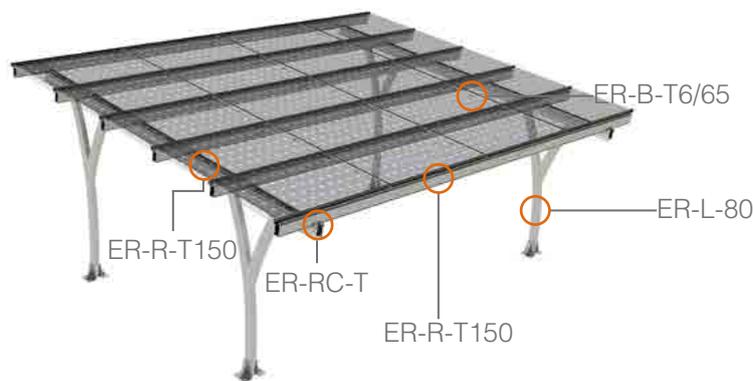
## **Back up pad**

- Back up pad 180\*100\*T4

# PV-ezRack Carport I / II

The Universal Ground Mounted Solution

PV-ezRack Carport I / II is a universal ground mount PV-mounting system for landscape orientation, which provides covered parking for vehicles, primarily cars, etc. The advanced design incorporates adaption to high wind and snow loads, waterproofing and cost reduction at the same time. Patented aluminum base rails, Z-module technology and rail splicing eliminate on-site cutting and enable particularly fast installation. The unique design of Y post and covering make carport I / II very eye-catching.



## Main Benefits

### Customized solution

We offer customized solution for PV-ezRack Carport I / II. One-car span or two-car span can be selected.

### Innovative design

The design highlight--Y post, simple and graceful, makes it easy for parking and walking. The space utilization is maximized while saving substantial installation cost and time. The smart structural design in T-rail and main support beam enables modules sliding into the rails for easy installation.

### Waterproof function

Unique waterproof function shelters the cars from rain and enables people to walk under the carport.

### Maximized Compatibility

Designed as a universal mounting system, PV-ezRack Carport I / II is applicable to most framed solar modules on the market.

### Strict quality control

Clenergy conducts strict quality management and control of selection, purchasing and production process, to guarantee structure strength and service life of system are optimal.

10 Year  
Warranty\*

Utility

Commercial

Available  
accessories

Cable clips  
Rail and Girder cap

# PV-ezRack Carport I / II

## ER-R-T150



### PV-ezRack T-Rail

- Aluminum profile of T Rail 150\*91\*2300
- Aluminum profile of T Rail 150\*91\*2360
- Aluminum profile of T Rail 150\*91\*4200

## ER-SP-T150



### PV-ezRack Splice for T-150Rail

- Splice for T-150 Rail 125.5\*57.2\*500
- Corrugated Shim 60\*6\*500
- Sharp-Point wood screw ST6\*32

## ER-B-P5105

( Carport II )



### Waterproof Bar-Portrait 5105

- Waterproof Bar-Portrait 32\*11.5\*5105
- Rubber for Waterproof Bar 6.8\*3.9\*5200

## ER-B-L



### Waterproof Bar-Landscape (with Bushing)

- Waterproof Bar-Landscape 43\*42\*1623
- 43\*42\*1637
- Rubber for Waterproof Bar 6.8\*3.9\*1750
- T head bolt M6\*55
- Hexagon nut M6
- Curved spring washer  $\Phi 6.7$
- Bushing  $\Phi 12*36.5$

## ER-B-L/A

( Carport II )



### Waterproof Bar-Landscape

- Waterproof Bar 43\*42\*1623
- 43\*42\*1637
- Rubber for Waterproof Bar 6.8\*3.9\*1750
- T-head bolt M6\*55
- Hexagon nut M6
- Curved spring washer  $\Phi 6.7$

## ER-B-T6/65



### T bolt kit

- T-head bolt M6\*65
- Washer  $\Phi 6.5$
- Hexagon nut M6

## ER-CC-B/L

( Carport II )



### Cross Connection for Waterproof Bar -Landscape

- Cross Connection for Waterproof Bar 52\*42\*42

## ER-CAP-B/P

( Carport II )



### End Cap for Portrait Waterproof Bar

- End Cap for Portrait Waterproof Bar 32\*12\*15

## ER-CAP-B/LTop

( Carport II )



### Cover for Landscape Waterproof Bar

- Top Cover for Landscape Waterproof Bar 18.4\*10\*1623
- 18.4\*10\*1637

## ER-RC-T



### PV-ezRack Rail Clamp for T-Rail

- ezRack Rail Clamp for T-Rail L50\*30\*11.8
- Z Module L20
- Hexagon socket head cap screw M8\*30
- Washer 8

## ER-B-150



### Main Support Beam

- PV-ezRack composite beam 150\*31.2\*5200

## ER-SP-B150



### Splice for Main Support Beam

- PV-ezRack Splice for beam 80\*40\*200
- Cup head square neck bolts M8\*30mm
- Plain washer 8
- Washer 8
- Hexagon nut M8

## ER-L-80



### PV-ezRack Solar Carport, Post

- Carport post 2250\*936\*80
- 2529\*936\*80

## ER-D-200



### PV-ezRack Solar Carport, Carport Plate

- Carport Plate 200\*200\*120
- Hexagonal bolt M16\*130
- Plain washer 16
- Washer 16
- Hexagon nut M16

# Accessories

## Accessories - Rail caps

### EZ-CAP-ST



Cap for Standard Rail

## Accessories - Cable clips and trays

### EZ-CC-R/ST/6



Cable Clip for ST- and PRO-Rail  
- hold up to 6 cables

### EZ-CC-PV/2



Universal Cable Clip for PV Panels for  
holding 2 cables

- Universal Cable Clip for PV Panels for  
holding 2 cables

### EZ-CC-PV/4



Universal Cable Clip for PV Panels for  
holding 4 cables

- Universal Cable for PV Panels for  
holding 4 cables  
31.6 x 18.2 x T0.5mm  
(1-1/4" x 23/32" x T1/64")

## Accessories - Brackets for inverter / combiner box

### EZ-UB-STIIIA



SolarTerrace III-A, Bracket kit for  
Inverter / Combiner Box

- U-Fixing Bracket for Tube  
60 x 60mm (2-23/64" x 2-23/64")
- T-head bolt M8 x 25mm (5/16" x 63/64")
- Plain washer large  
8 x 24mm (5/16" x 53/64")
- Washer 8mm (5/16")
- Hexagon nut M8 (5/16")
- Self-drilling screw ST6.3 x 25mm  
(1/4" x 63/64")

### EZ-UB-STIIA



SolarTerrace II-A, Bracket kit for  
Inverter / Combiner Box

- U-Fixing Bracket for Tube  
60 x 60mm (2-23/64" x 2-23/64")
- T-head bolt M8 x 25mm (5/16" x 63/64")
- Plain washer large  
8 x 24mm (5/16" x 53/64")
- Washer 8mm (5/16")
- Hexagon nut M8 (5/16")

### EZ-RT-60/60/740



Slotted Al-Tube for Bracket kit for  
Inverter / Combiner Box

- Slotted Al-Tube 60 x 60 x 740mm  
(2-23/64" x 2-23/64" x 2' 1-13/64")

### ER-R-C41/61/800



C-Channel for Bracket kit for  
Inverter / Combiner Box

- 41 x 62 x 800mm  
(1-39/64" x 2-7/16" x 2' 7-1/2")

## Accessories - Rubber pads

### ER-DM-MT8



Diamond module M8 with Hexagon  
Socket bolt M8x20 (for AU)

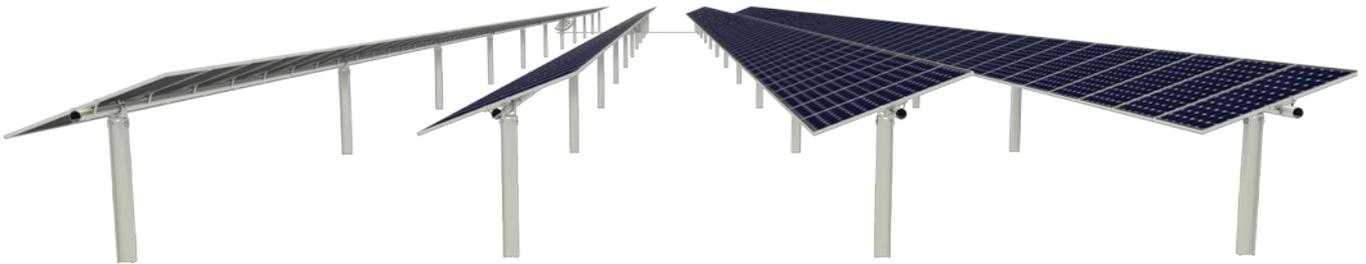
### EZ-Z-ST



Z-Module

# Clenergy EzTracker-M1 Solar Tracker

Clenergy EzTracker-M1 tracking system developed by Clenergy provides the next-generation tracking solution via the mechanic “clutch slip devices”. It can automatically tracking the Sun based on the “astronomical algorithm + closed loop control”, ultimately increasing the power generation, 20% more than the fixed-tilt system. Furthermore, the overall system design lowers levelized cost of energy, compare to our competitors, resulting in a much higher yield.



## Design Philosophy

Design from the perspective of investors to lower LCOE with a guarantee of higher yield

- ◆ High power capacity: More panels per unit to increase land use capacity;
- ◆ High installation efficiency: Minimum construction period to optimize capital utilization;
- ◆ High reliability and performance: More reliable system to increase power generation
- ◆ Routine maintenance free: Minimum maintenance to lower O&M cost;

## Application case



Project Site: Keping, Xinjiang, China

## Features and Advantages

1. Flexible rotary drive shafts enable a great slope tolerance – “N-S slope  $\leq 10^\circ$ , E-W slope  $\leq 40^\circ$ ”.



2. Single-bolt per module clamp , 58% less than average competitors
3. Torque clutch adopted to protect the system from overload damages (wind load, foundation settlement, obstacles and etc.)
4. Self lubricating bearing and full sealing gear assembly equipped to accommodate outdoor environment, making it 25 years maintenance free.
5. Innovating self-calibrate system allows each row to work independently, achieving  $\pm 1^\circ$  tracking accuracy, thus increasing power generation.
6. No welding or other heavy equipments needed on site, making installation extra convenient.
7. Three-axis post adjustment reduce the installation requirements, greatly increasing the installation efficiency.

# Clenergy EzTracker-M1 Solar Tracker

## Application

Mountainous Area	Desert Area	Agriculture+PV project	Fishery+PV project
			

## Specification

Structural and Mechanical Features	
Tracking Type	Horizontal single axis
kW per Drive Motor	650-750kW
Tracking Range of Motion (East-West)	$\pm 52^\circ$
Tracking Accuracy	$\pm 1^\circ$ standard, field adjustable
Maximum Row Size	80 modules
Maximum Linked Rows	28
Array Height	1.37m standard 1.17m minimum
Drive Type	Worm gear assembly with flexible rotary drive shaft
Supported Modules	Framed and frameless crystalline and thin film modules
Structural Materials	Hot dip galvanized steel/ Aluminum components
Foundation	Steel pile, concrete foundation
Electronic Controller Features	
Motor Type	1.1kW/3PH/400VAC
Motors per 1MW AC	2
Solar Tracking Method	astronomical algorithm + closed loop control
Control System	PLC
Data Feed	RS485
Backtracking	Yes
Manual Control Mode	Yes
Protection Features	
Night-time Stow	Yes
Wind Stow	Yes
Limit-angle Protection	Yes
Motor Overheat Protection	Yes
Motor Overload Protection	Yes
Driving Abnormal Self-diagnosis	Yes
Installation, Operation and Maintenance	
Connection Type	Fully bolted connections, no welding
Grounding Method	Self-grounding structure
In-field Fabrication	None required
On-site Training & System Commissioning	Yes
Dry Slide Bearings & Articulating Driveline Connections	No lubrication required
General	
Slope Tolerance	N-S slope $\leq 10^\circ$ , E-W slope $\leq 40^\circ$
Wind Load	40m/s
Operating Temperature	-30°C to +60°C
Annual Power Consumption	400 kWh per MW per year, estimated
Land Area Required per 1MW	5 to 5.75 acres per MW, 33% GCR
Ground Cover Ratio	28-45%
Warranty	5 years parts only, 10 years extended available
Codes and Standards	GBT29320-2012 UL3703/2703

# Integrated String Combiner Box

In order to reduce the wire connections between PV arrays and inverters, and for better maintenance and reliability of PV power generation system, a confluence device is usually needed. Based on years of design experiences, Clenergy developed ISCB series solar string combiner box. ISCB series solar string combiner box collects the multiple DC output from solar panels. With this advantage, the front connections in inverters are greatly reduced. In addition, ISCB is able to enhance the efficiency, safety and reliability of the system by monitoring status of components' output and providing system protection and fault alarm. By working with Clenergy grid connected inverters, the PV power generation system solution is completed and perfected.



## Characteristics

Connect up to 16 strings of PV arrays at the same time

Up to 1000VDC input voltage and maximum DC input current is 15A

Each channel has a high precision sensor which detects input voltage and input current

With high voltage fuse for PV system

100V~1000VDC and 110~250VAC Power supply optional

Reverse current detection and PSD status detection

Alarm for over-current, over-voltage, imbalance of current and PSD invalid

Show the current, output voltage, address and the baud rate, easy to check

RS485 interface, suit for remote data transmission

Easy to set up the threshold value of over-current, over-voltage, imbalance of current and the baud rate

Users can choose the configuration, Fuse, DC switch, Lightening arrester

Multiple power supply mode

IP65 metal enclosure for outdoor installation

Compact structure to occupy smaller space, easy to install

Utility

Commercial

# Integrated String Combiner Box

## Model description

ISCB: Integrated String  
Combiner Box

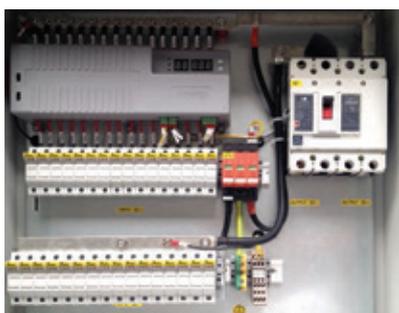
8/10/12/16:

The maximum input strings

M: With monitoring

PV: PV power supply

AC: AC power supply



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our qualified resellers  
for a personalised  
quotation today.**

## Specification

Model	ISCB-8M	ISCB-8
<b>Input</b>		
Rated input voltage range	200-850VDC	
Max. Input voltage	1000VDC	
No. of input channel	8	
Input Terminal	15A	
Input Terminal	MB12-08	
<b>DC Fuse</b>		
Number of Fuse per String	1	
Number of the Fuse	8 (per pole)	
DC.Over-Voltage alarm	Yes	NO
DC.Over-Current Protection	Yes	
<b>Output</b>		
Max.Output Current	120A	
Output Terminal	MB25-18	
Grounding Terminal	MB16-10	
<b>Communication and Mechanical</b>		
Communication	RS485	NO
Power Supply	100~1000VDC, 110~250VAC Optional	NO
Fault Alarm	Yes	NO
Operating Temperature	-30°C~+55°C	
Relativity Humidity	0~95%, non-condensing	
Protection Degree	IP66	
Size(H×W×D)	550×600×199mm	
Weight(Kg)	21.5	21
Certification	CQC Golden Sun Certificate EN50178, EN61439-1/2, EN60529	



## Worldwide network



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**10 Year  
Warranty\***