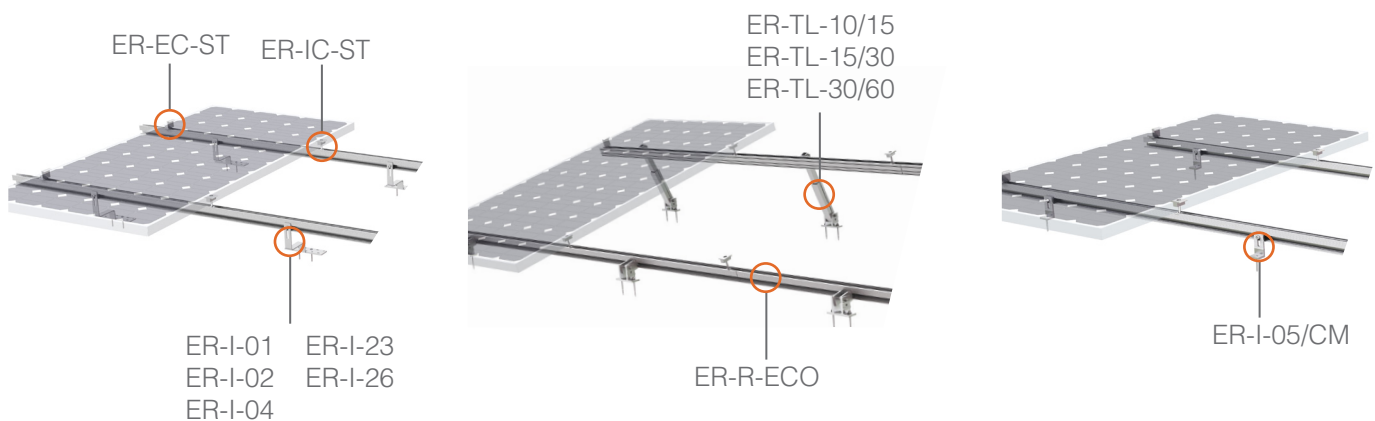# Clenergy
Innovating renewable energy

PV-ezRack Product Catalogue

PV-ezRack SolarRoof

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).

ER-EC-ST   ER-IC-ST

ER-TL-10/15
ER-TL-15/30
ER-TL-30/60

ER-I-01   ER-I-23
ER-I-02   ER-I-26
ER-I-04

ER-R-ECO

ER-I-05/CM

Main Benefits

Quick and easy installation
Innovative and internationally patented, the Z-Module and Click Module technology are used in almost all SolarRoof components. The Z-Module and Click Module quick provide easy and safe installation method. They can be inserted into the rail at any given point, and secured with just two or 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
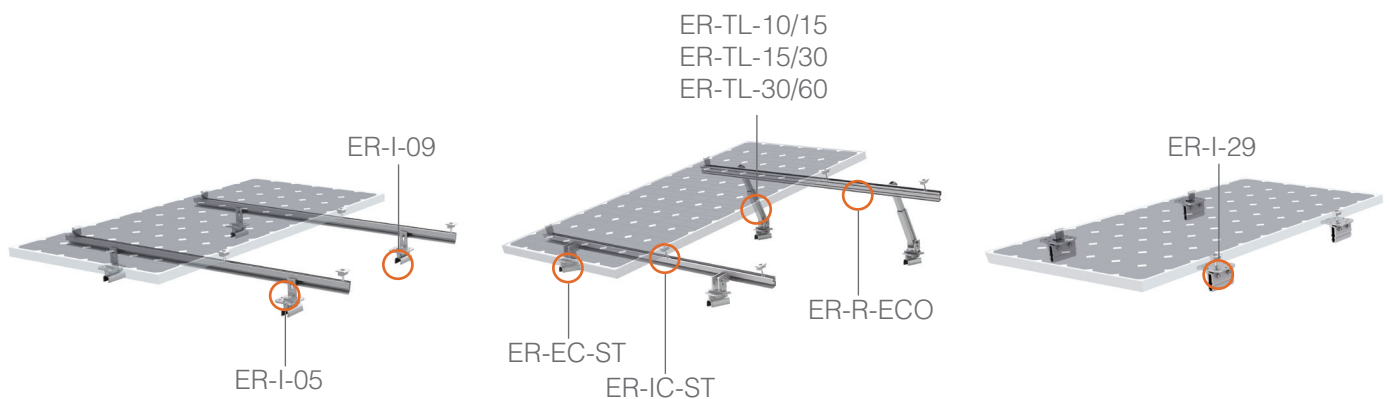
Residential

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 tilted systems.

ER-TL-10/15
ER-TL-15/30
ER-TL-30/60

ER-I-09

ER-I-29

ER-I-05

ER-EC-ST

ER-IC-ST

ER-R-ECO

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 and Click Module technology are used in almost all SolarRoof components. The Z-Module and Click Module quick provide easy and safe installation method. They can be inserted into the rail at any given point, and secured with just two or three hand grips.

Available accessories
Grounding/earthing
Cable clips
Rail caps
Isolator Bracket

10 Year Warranty*

Commercial

Residential

PV-ezRack SolarRoof

ER-I-01

Tile Interface

– Tile Roof Hook 1
– Z-Module
– Washer 8mm(5/16")
– Lock washer 8mm (5/16") A2
– Hex Socket Head Bolt M8 x 25mm
  (5/16" x 63/64") 933 A2-70
– Sharp Point Wood Screw 6 x 80mm
  (15/64" x 3-5/32"), thread: 80mm
  (3-5/32")

ER-I-02

Flat Tile Interface

– Flat Tile Roof Hook
– Z-Module
– Washer 8mm(5/16")
– Lock Washer 8mm (5/16")
– Hex Socket Head Bolt M8x25mm
  (5/16" x 63/64")
– Sharp Point Wood Screw 6 x 80mm
  (15/64" x 3-5/32"), thread: 80mm
  (3-5/32")

ER-I-23

Tile Interface - Landscape

– Tile Roof Hook 3
– Z-Module
– Washer 8 (5/16") DIN 9021 A2
– Lock Washer 8mm (5/16") A2
– Hex Socket Head Bolt M8x25mm
  (5/16" x 63/64") 933 A2-70
– Sharp Point Wood Screw 6 x 80mm
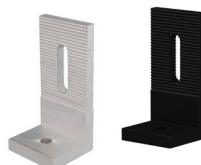 (15/64" x 3-5/32"), thread: 80mm
  (3-5/32")

ER-I-04

Slate Interface

– Slate Roof Hook
– Z-Module
– Washer 8mm (5/16")
– Lock Washer 8mm (5/16") A2
– Hex Socket Head Bolt M8 x 25mm
  (5/16" x 63/64")
– Sharp Point Wood Screw 6 x 80mm
  (15/64" x 3-5/32"), thread: 80mm
  (3-5/32")

ER-I-05
ER-I-05/BA

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")

ER-I-05/CM

Tin Interface with Click Module Assembly

– Tin Roof Hook
– Rubber Pad38*38*2
– Main Click Module
– Side Click Module
– Washer 8
– Lock WasherM8*18
– Hexagon socket head cap screw M8*28
– Self-Tapping Universal Screw, Buildex
  Cyclonic RoofZip M6.5x70 (Thread:50)
  with 16mm Aluminum bonde

ER-I-26

Tile Interface - Side Mount

– Tile Roof Hook 2
– Z-Module
– Washer 8mm (5/16")
– Lock Washer 8mm (5/16")
– Hex Socket Head Bolt M8 x 25mm
  (5/16" x 63/64")
– Sharp Point Wood Screw 6 x 80mm
  (15/64" x 3-5/32"), thread: 80mm
  (3-5/32")

ER-I-09

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
  • Topdek 700

ER-I-29

Klip-lok Interface for LONGLINE 305

– Main Hook for Klip-lok Interface for
  longline 305
– Side Hook for Klip-lok Interface for
  longline 305
– Rubber Pad for Klip-lok Interface for
  longline 305
– Hexagon Socket bolt M8 x 30mm
  (5/16" x 1-3/16")
– Washer M8
– Flat Washer M8

PV-ezRack SolarRoof

ER-I-32

Klip-lok Interface 406 with U-opening

– Main Hook for Klip-lok Interface 406 with U-opening
– Side Hook for Klip-lok Interface 406 with U-opening
– Rubber Pad 55*100*2
– Washer 8
– Hexagon socket head cap screw M8*25

ER-I-09/100/45

Klip-lok Interface 400-700 with 100x45mm plate

– Main Hook for klip-lok interface 400-700HS,L100*45
– Side Hook for klip-lok interface 400-700HS,L100
– Rubber Pad 65*100*2
– Hexagon socket head cap screw M8*25
– Washer 8
– Plain Washer 8

ER-I-29/100/45

Klip-lok Interface 305 with 100x45mm plate

– Main Hook for Klip-lok Interface for longline 305,L100*45
– Side Hook for Klip-lok Interface for longline 305,L100
– Pad for Klip-lok Interface for longline 305
– socket head cap screw M8*30
– Washer8
– Flat Washer8

ER-I-32/100/45

Klip-lok Interface 406 with 100x45mm plate

– Main Hook for Klip-lok Interface 406 with U-opening,L100*45
– Side Hook for Klip-lok Interface 406 with U-opening,L100
– Rubber Pad 55*100*2
– Hexagon socket head cap screw M8*25
– Washer 8
– Plain Washer 8

ER-TL-10/15
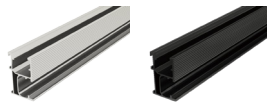## ER-TL-10/15/BA

Tilt Legs, adjustable 10/15 degree

– Front Leg Bracket 53.3*38.4*39.5
– Fix foot II 105*40*59.3
– L-feet 40*40*55
  Leg Strug II-220
  Leg Tube II-220
– Corrugated shim 52*32*11.8
– Z Module
– Self-Tapping Universal Screw, Buildex Cyclonic RoofZip M6.5x70 with 16mm Aluminium bonded washer
– Hexagon socket head cap screw M8*25
  Hexagon socket head cap screw M8*28
  Hexagon socket head cap screw M8*45
  Hexagon socket head cap screw M8*65
– Hexagon nut M8
– Washer 8
– Set screw M10*12
– Rubber Pad 40*25*2

ER-TL-15/30
ER-TL-15/30/BA

Tilt Legs, adjustable 15/30 degree

– Front Leg Bracket 53.3*38.4*39.5
– Fix foot II 105*40*59.3
– L-feet 40*40*55
  Leg Strug II-350
  Leg Tube II-350
– Corrugated shim 52*32*11.8
– Z Module
– Self-Tapping Universal Screw, Buildex Cyclonic RoofZip M6.5x70 with 16mm Aluminium bonded washer
– Hexagon socket head cap screw M8*25
– Hexagon socket head cap screw M8*28
– Hexagon socket head cap screw M8*45
– Hexagon socket head cap screw M8*65
– Hexagon nut M8
– Washer 8
– Set screw M10*12
– Rubber Pad 40*25*2

ER-TL-30/60

Tilt Legs, adjustable 30/60 degree

– Front Leg Bracket 53.3*38.4*39.5
– Fix foot II 105*40*59.3
– L-feet 40*40*55
  Leg Strug II-635
  Leg Tube II-635
– Corrugated shim 52*32*11.8
– Z Module
– Self-Tapping Universal Screw, Buildex Cyclonic RoofZip M6.5x70 with 16mm Aluminium bonded washer
– Hexagon socket head cap screw M8*25
– Hexagon socket head cap screw M8*28
– Hexagon socket head cap screw M8*45
– Hexagon socket head cap screw M8*65
– Hexagon nut M8
– Washer 8
– Set screw M10*12
– Rubber Pad 40*25*2

ER-R-ECO
ER-R-ECO/BA

ECO Rail

– With a standard lengths of 2100mm (8' 4-25/32"), 3150mm (10' 4-1/64") 4200mm (13' 9-23/64")

ER-SP-ECO
ER-SP-ECO/BA

Splice for ECO Rail

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

PV-ezRack SolarRoof

C-U/30/46-G
C-U/30/46-G/BA

Universal Clamp for Frame Height 30-46mm with Grounding Clip

– Universal Clamp
– Module for Universal Clamp
– Grounding Clip for Universal Clamp
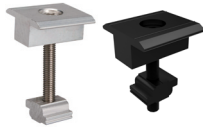– Hexagon socket button head screw M8*55
– Washer 8
– ezClip Spring

C-U/30/46
C-U/30/46/BA

Universal Clamp for Frame Height 30-46mm

– Universal Clamp
– Module for Universal Clamp
– Hexagon Socket Button Head Screw M8*55
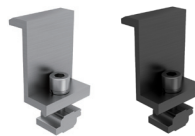– Washer 8
– Spring for Universal Clamp

ER-IC-ST
ER-IC-ST/BA

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head Bolt A2-70 M8x45mm (5/16" x 1-49/64")
– 40mm (1-37/64") with Hex Socket Head Bolt A2-70 M8x50mm (5/16" x 1-31/32")
– 46mm (1-13/16") with Hex Socket Head Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head Bolt A2-70 M8x60mm (5/16" x 2-23/64")
– 57mm (2-1/4") with Hex Socket Head Bolt A2-70 M8x70mm (5/16" x 2-3/4")
– Z-Module
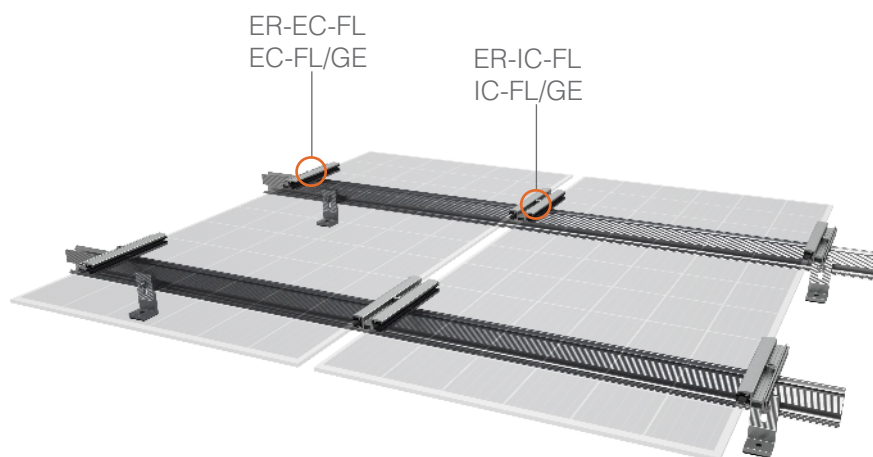– Lock Washer 8.4mm (21/64")

ER-EC-ST
ER-EC-ST/BA

End Clamp, Standard

– End Module Clamp
  28mm (1-7/64")
  30mm (1-3/16")
  32mm (1-17/64")
  35mm (1-3/8")
  38mm (1-1/2")
  40mm (1-37/64")
  42mm (1-21/32")
  46mm (1-13/16")
  48mm (1-57/64")
  50mm (1-31/32")
  57mm (2-1/4")
– Z-Module
– Hex Socket Head Bolt A2-70 M8 x 28mm (5/16"x 1-1/10")
– Lock Washer 8.4mm (21/64")

PV-ezRack ThinFilm

Designed for thin film and frameless or double glass PV-panels

Clenergy clamps for frameless panels are suitable for most thin film and most frameless or double glass PV-panels. Furthermore the clamps are compatible with all PV-ezRack rails for roof and ground mount installations.

ER-EC-FL
EC-FL/GE

ER-IC-FL
IC-FL/GE

Available accessories

Grounding/earthing
Cable clips
Cable trays
Rail caps

Clamps for frameless panels approved by

Trinasolar

CanadianSolar

First Solar.

协鑫 GCL

JinKO Solar

10 Year Warranty*

Commercial

Residential

PV-ezRack ThinFilm

ER-IC-FL/5

Inter Clamp for 5mm Frameless Module, Length 80, 100, 120, 130, 150, 200 and 250mm

– 5mm Frameless Module Inter Clamp-Upper part
– 5mm Frameless Module Inter Clamp-Lower part
– Upper Rubber Mat
– Below Rubber Mat
– Washer 8
– Hexagon Socket Head Cap Screw M8 x 30mm
– Z-Module

ER-EC-FL/5

End Clamp for 5mm Frameless Module, Length 80,120,150 and 200mm

– 5mm Frameless Module End clamp-Upper part
– 5mm Frameless Module End clamp-Lower part
– Upper Rubber Mat
– Below Rubber Mat
– Washer 8
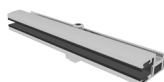– Hexagon Socket Head Cap Screw M8 x 30mm
– Z-Module

ER-IC-FL/6.8

Inter Clamp for 6.8mm Frameless Module, Length 80,120,150 and 200mm

– 6.8mm Frameless Module Inter Clamp-Upper part
– 6.8mm Frameless Module Inter Clamp-Lower part
– Upper Rubber Mat
– Below Rubber Mat
– Washer 8
– Hexagon Socket Head Cap Screw M8 x 35mm
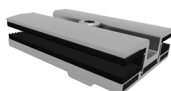– Z-Module

ER-EC-FL/6.8

End Clamp for 6.8mm Frameless Module, Length 80,120,150 and 200mm

– 6.8mm Frameless Module End clamp-Upper part
– 6.8mm Frameless Module End clamp-Lower part
– Upper Rubber Mat
– Below Rubber Mat
– Washer 8
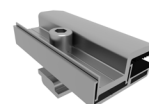– Hexagon Socket Head Cap Screw M8 x 35mm
– Z-Module

IC-FL/GE/6

Inter Clamp for 6mm 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, 1mm
– Washer 8
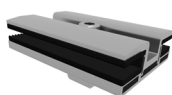– Hexagon socket head cap screw M8*30
– Z Module 2

EC-FL/GE/6

End Clamp for 6mm 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, 1mm
– Washer 8
– Hexagon socket head cap screw M8*30
– Z Module 2

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
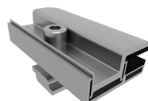– Hexagon socket head cap screw M8*30
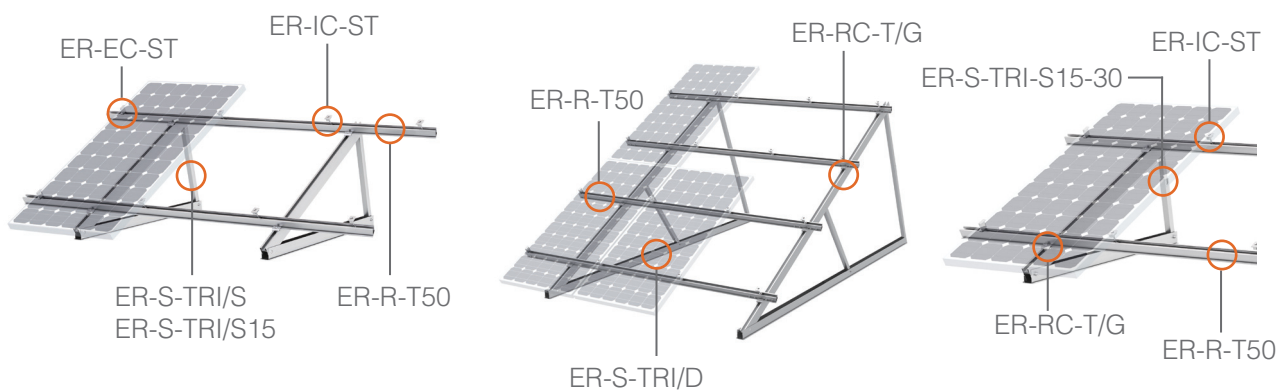– Z Module 2

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

PV-ezRack SolarTripod

Tilted flat roof frame designed for commercial installations

PV-ezRack 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.

ER-EC-ST ER-IC-ST ER-RC-T/G ER-IC-ST

ER-R-T50 ER-S-TRI-S15-30

ER-S-TRI/S
ER-S-TRI/S15 ER-R-T50

ER-S-TRI/D

ER-RC-T/G ER-R-T50

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 the legs require only 2 fixing points each and the rails can overcome large spans. All these features result in a fast, easy and cost efficient installation, crucial for commercial projects.

Suitable for corrosive environments
As the materials used in this product are stainless steel (SUS304) and 10µm anodised aluminium it can be installed even in the harshest corrosive environments.

Maximising installation size and output on small roofs
The DoubleTripod has two rows of PV-panels in portrait orientation. This allows you to perfectly utilise narrow roof sections while doubling the installation size and output, where you would normally only be able to fit one row of panels.

Simplicity
Bill of materials can be confusing and complicated. On a basic BOM for SolarTripod you will only find 6 components, keeping it simple and transparent for all parties to better understand and work with the product.

10 Year Warranty*

Commercial

Residential

Available accessories
Grounding/earthing
Cable clips
Cable trays
Rail caps

PV-ezRack SolarTripod

ER-S-TRI/S

**Support
Single Tripod**

– M10mm (25/64")
– Base Support 70*1350
– Upper Support 75*1350
– Tripod, Al-Tube
  10°
  15°
  20°
  25°
  30°
– Tripod U Bracket
– Hexagon socket head cap screw M10*65
– Hexagon nut M10
– Washer 10
– Plain washer 10
– Bushing Φ18.5*35.5

ER-S-TRI/D

**Support
Double Tripod**

– Base Support70*3000
– Upper Support 75*3000
– Tripod, Al-Tube
  10°
  15°
  20°
  25°
  30°
– Tripod U Bracket
– Hexagon socket head cap screw M10*65
– Hexagon nut M10
– Washer 10
– Plain washer 10
– Bushing Φ18.5*35.5

ER-S-TRI/S15-30

Adjustable Tripod

– Base Support 70*1350
– Upper Support 75*1250
– Leg Tube-358
– Leg Strug-348
– Bushing
– Double-Fixed Block(Anodized)
– Set screw M8*12
– Hexagon Socket bolt M10*65
– Hex nut M10
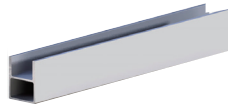– Washer 10
– Flat washer 10
– U Bracket
– Bushing Φ18.5*35.5

ER-R-T50

T-Rail 50

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

ER-SP-T50

Splice for T-Rail 50

– S plice with standard length of
  300mm (11-13/16")
– Self-Tapping Screw ST6.3x22
  (1/4" x 55/64")

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 30mm
  (5/16" x 1-3/16")
– Spring Washer M8 (5/16")
– Z-Module

ER-IC-ST

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head
  Bolt A2-70 M8x45mm (5/16" x 1-37/65")
– 40mm (1-37/64") with Hex Socket Head
  Bolt A2-70 M8x50mm (5/16" x 2-10/64")
– 46mm (1-13/16") with Hex Socket Head
  Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head
  Bolt A2-70 M8x60mm (5/16" x 2-5/3")
– 57mm (2-1/4") with Hex Socket Head
  Bolt A2-70 M8x70mm (5/16" x 2-3/4")
– Z-Module
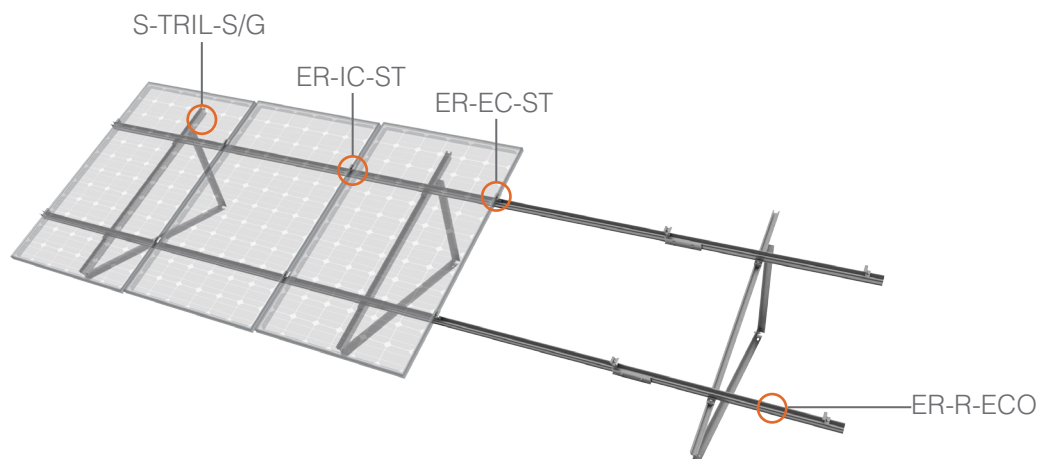– Lock Washer 8.4mm (21/64")

ER-EC-ST

Inter Clamp, Standard

– End Module Clamp
  28mm (1-7/64")
  30mm (1-3/16")
  32mm (1-17/64")
  35mm (1-3/8")
  38mm (1-1/2")
  40mm (1-37/64")
  42mm (1-21/32")
  46mm (1-13/16")
  48mm (1-57/64")
  50mm (1-31/32")
  57mm (2-1/4")
– Z-Module
– Hex Socket Head Bolt A2-70
  M8 x 28mm (5/16"x 1-1/10")
– Lock Washer 8.4mm (21/64")

PV-ezRack SolarTripod Lite with Grounding Rail Clamp

Pre-assembled residential and commercial flat roof mounting system

The PV-ezRack SolarTripod Lite 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 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
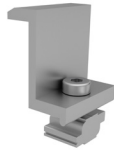
Residential

Available accessories
Grounding/earthing
Cable clips
Rail caps

PV-ezRack SolarTripod Lite 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

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head Bolt A2-70 M8x45mm (5/16" x 1-49/64")
– 40mm (1-37/64") with Hex Socket Head Bolt A2-70 M8x50mm (5/16" x 1-31/32")
– 46mm (1-13/16") with Hex Socket Head Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head Bolt A2-70 M8x60mm (5/16" x 2-23/64")
– 57mm (2-1/4") with Hex Socket Head Bolt A2-70 M8x70mm (5/16" x 2-3/4")
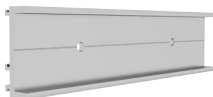– Z-Module
– Lock Washer 8.4mm (21/64")

S-TRIL-S/G

Support for SolarTripod single Rail clamps pre-assembled

- 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

ER-SP-ECO

Splice for ECO Rail

– Splice with a standard length of 200mm
– Hexagon socket head cap screw M8*12mm
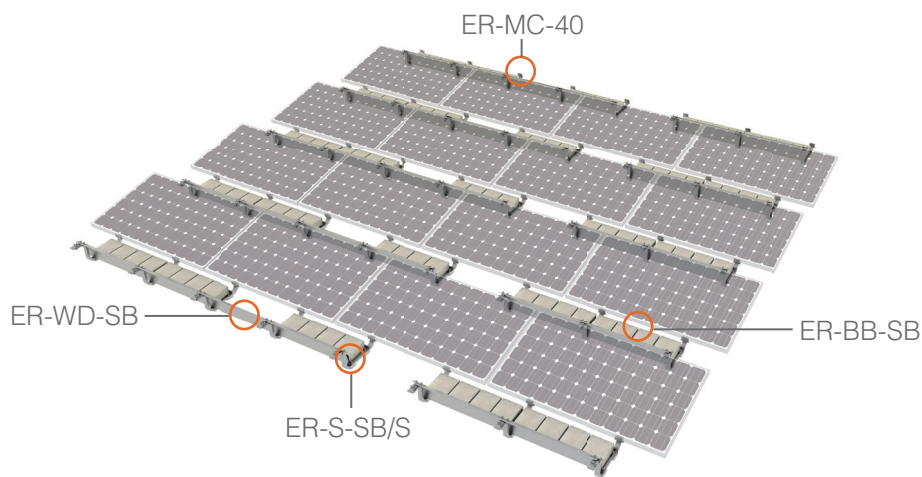
ER-R-ECO

ECO-Rail

– With a standard length of
  4200mm
  3150mm
  2100mm

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.

ER-MC-40

ER-WD-SB

ER-BB-SB

ER-S-SB/S

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 intergrity 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.
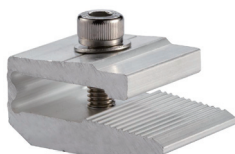
10 Year Warranty*

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,
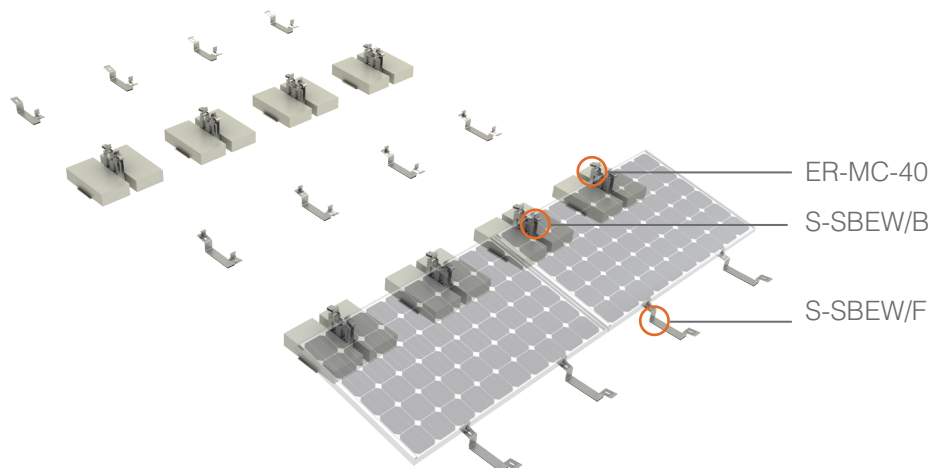 120*38.1*3.5mm AL6005-T5

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 ∮ 18.5*20mm AL6005-T5
- O rubber rings ∮ 12*3mm EPDM
- Rubber Pad for leg 80*60*25mm
  EPDM

PV-ezRack
SolarBase East-West

Commercial flat roof mounting system

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.

ER-MC-40
S-SBEW/B
S-SBEW/F

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
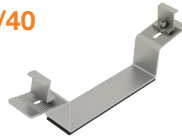# SolarBase East-West

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

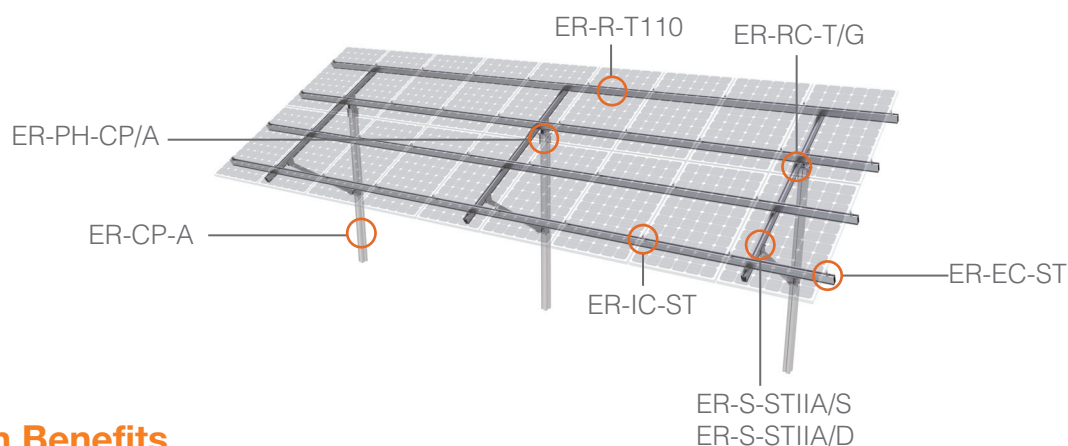**Back Support Leg, 10°**

- Back Support Leg, 10°,
  250.3 x 170 x 234mm
- Hexagon Socket Head Cap Screw,
  M8 x 35mm
- Bushing φ18.5*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 SolarTerrace II-A

Pre-assembled, durable ground mount frame with ramming

PV-ezRack SolarTerrace II-A is a pre-assembled ground mount system suitable for commercial and utility scale installations. This quality frame is trimmed at every angle for fast deployment reducing labour costs. It was designed with a unique post profile which allows reduced embedment and therefore saves on material and labour. Furthermore it has an industry leading 80μm hot dip galvanisation and 10μm anodisation thickness as standard which ensures a long life circle. These features, combined with its high grade of pre-assembly make SolarTerrace II-A one of the best ground mount system you can find.

Main Benefits

Reduced labour costs
Through our unique, patented component design and pre-assembled supports with pre-installed positioning clamps labour time and costs are greatly reduced.

Reduced component costs
Our unique C-Post was designed specifically for ramming. This results in an increased friction against up-lift and it therefore requires less embedment as conventional standard posts or I-beams, which reduces not only labour time for ramming but also material costs.

Wide range of adjustments
As ramming can never be 100% accurate the Post head is designed with sufficient horizontal rotation and vertical adjustments. This combined with a generous design tolerance levels makes it easy to get the panels perfectly aligned even if the ramming isn't 100%.

Simplicity
Sometimes bill of materials can be confusing and complicated. Not with Clenergy, on a BOM for STII-A you will only find 9 components. Keeping it simple and transparent helps all parties to understand and work with the product better.

10 Year Warranty*

Utility

Commercial

Available accessories
Grounding/earthing
Cable clips
Cable trays
Inverter/joint box bracket
Rail and Girder cap

PV-ezRack SolarTerrace II-A

ER-CP-A

C-Post

– Foundation C-Post 140 x 95 mm
  (5-37/64" x 3-47/64")

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-PH-CP/A

Post Head for C-Post

– Clasp AL/6005-T5
– V-Spring
– T-Head 142 x 170 x 127mm
  (5-19/32" x 6-11/16" x 5")
– T-Head Base 142 x 170 x 140.25mm
  (5-19/32" x 6-11/16" x 5-33/64")
– Hex Socket Head Bolt M12 x 35
  (15/32" x 1-3/8")
– Hex Socket Head Bolt M12 x 130
  (15/32" x 5-1/8")
– Flat Washer 12mm (15/32")
– Spring Washer 12mm (15/32")
– Hexagonal Nut

ER-PB-CP/A

Post Brace for C-Post

– Hinge Leaf
– Post Joint
– Rivet 2
– Hex Socket Head Bolt M10 x 30mm
  (25/64" x 1-3/16")
– Hex Socket Head Bolt M14 x 100mm
  (35/64" x 3-15/16")
– Spring Washer 12mm (15/32")
– Flat Washer 12 (15/32")
– Hexagonal Nut M14 (35/64")

ER-S-STIIA/S
ER-S-STIIA/D

Support (pre-assembled)

– Tri Groove Beam
– H-Joint
– Hex Socket Head Bolt M14 x 115
  (35/64"x 4-17/32")
– Hex Socket Head Bolt M14 x 100
  (35/64" x 3-15/16")
– Hex Socket Head Bolt M12 x 30
  (15/32" x 1-3/16")
– Spring Washer 12mm (15/32")
– Joint Shoe 60 x 73 x 116.6mm
  (2-23/64" x 2-7/8" x 4-19/32')
– Tube Support
– Flange Facing Nut M12 (15/32")
– Spring Washer 12mm (15/32")
– Flat Washer 14 (35/64")
– Hexagonal Nut M14 (35/64")
– Corrugated H-Joint
– Corrugated Shim

ER-IC-ST

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head
  Bolt A2-70 M8x45mm (5/16" x 1-49/64")
– 40mm (1-37/64") with Hex Socket Head
  Bolt A2-70 M8x50mm (5/16" x 1-31/32")
– 46mm (1-13/16") with Hex Socket Head
  Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head
  Bolt A2-70 M8x60mm (5/16" x 2-23/64")
– 57mm (2-1/4") with Hex Socket Head
  Bolt A2-70 M8x70mm (5/16" x 2-3/4")
– Z-Module
– Lock Washer 8.4mm (21/64")

ER-EC-ST

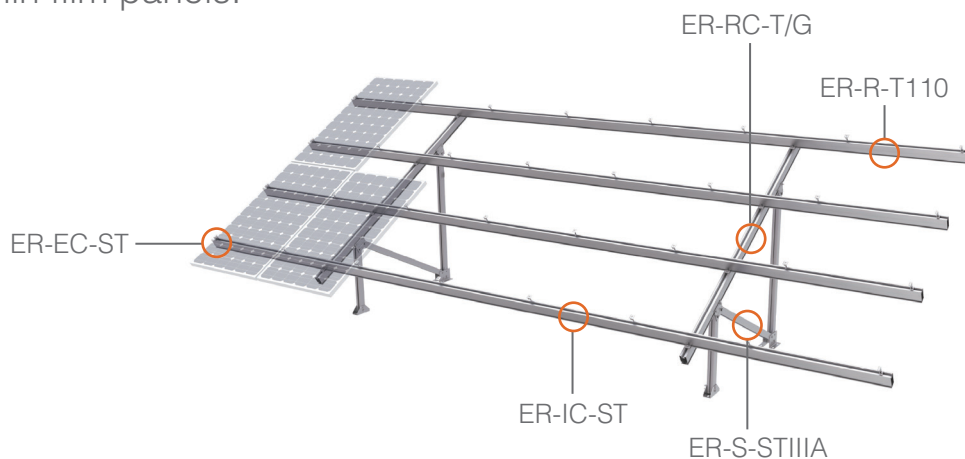### End Clamp, Standard

– End Module Clamp
  28mm (1-7/64")
  30mm (1-3/16")
  32mm (1-17/64")
  35mm (1-3/8")
  38mm (1-1/2")
  40mm (1-37/64")
  42mm (1-21/32")
  46mm (1-13/16")
  48mm (1-57/64")
  50mm (1-31/32")
  57mm (2-1/4")
– Z-Module
– Hex Socket Head Bolt A2-70
  M8 x 28 (5/16"x 1-1/10")
– Lock Washer 8.4mm (21/64")

ER-R-T110

T-Rail 110

– 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-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

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

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 preassembled,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-STIIIA

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
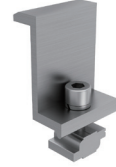– Front Leg
– S-Beam Joint
– Tri Groove Beam

ER-IC-ST

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head Bolt A2-70 M8x45mm (5/16" x 1-49/64")
– 40mm (1-37/64") with Hex Socket Head Bolt A2-70 M8x50mm (5/16" x 1-31/32")
– 46mm (1-13/16") with Hex Socket Head Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head Bolt A2-70 M8x60mm (5/16" x 2-23/64")
– 57mm (2-1/4") with Hex Socket Head Bolt A2-70 M8x70mm (5/16" x 2-3/4")
– Z-Module
– Lock Washer 8.4mm (21/64")

ER-EC-ST

End Clamp, Standard

– End Module Clamp
  28mm (1-7/64")
  30mm (1-3/16")
  32mm (1-17/64")
  35mm (1-3/8")
  38mm (1-1/2")
  40mm (1-37/64")
  42mm (1-21/32")
  46mm (1-13/16")
  48mm (1-57/64")
  50mm (1-31/32")
  57mm (2-1/4")
– Z-Module
– Hex Socket Head Bolt A2-70 M8 x 28 (5/16"x 1-1/10")
– Lock Washer 8.4mm (21/64")

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-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")
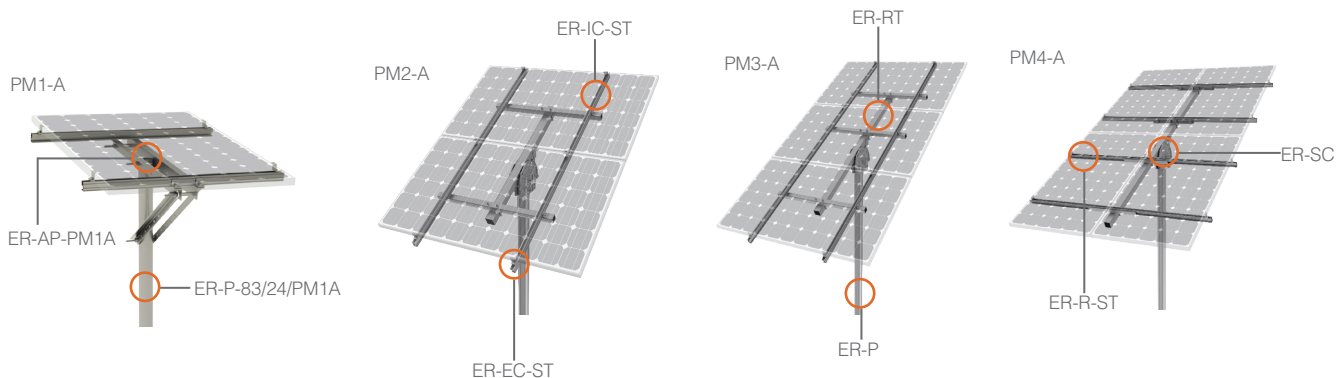– Spring Washer M8 (5/16")
– Z-Module

ER-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")

PV-ezRack PostMount 1-A, 2-A, 3-A and 4-A

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

PV-ezRack PostMount-A delivers flexible and durable designs to mount from one to four panels 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 PV-ezRack 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 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 0° 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 is fixed into a concrete foundation.

Quick and easy installation
Innovative and internationally patented, the Z-Module technology is used in almost all PV-ezRack 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.

10 Year Warranty*

Commercial

Residential

Available accessories
Grounding/earthing
Cable clips
Rail and Girder cap

PV-ezRack PostMount 1-A, 2-A, 3-A and 4-A

ER-P-102/2600

Pipe Diameter φ102*2600(PM3,4-A Pole)

– Pipe Diameteφ102*2600

ER-R-ECO

ECO Rail

– Aluminium profile of ECO Rail

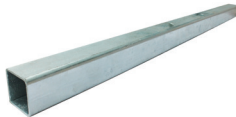### ER-RT-70/394

Adjustable Tube 70*50*394

– Adjustable Tube70*50*394
– Hexagonal bolt M14*120
– Hexagon nut M14
– Plain washer 14
– Washer 14

ER-RT

Rectangular Tube

– Rectangular Tube

ER-IC-ST

Inter Clamp, Standard

– Inter Clamp
  28-57mm
– Hexagon socket head cap screw
  M8*50
– Washer 8
– Z module

ER-EC-ST

End Clamp, Standard

– End Clamp
  28-57mm
– Hexagon socket head cap screw
  M8*28
– Washer 8
– Z module

ER-AB-75/45/550

Angle Bracket 75*45*550

– Postmount4-A Angel Bracket
  75*45*550
– U bolt for Tube110
– Plain washer 10
– Washer 10
– Hexagon nut M10
– Hexagon socket head cap screw
  M8*28
– Plain washer 8
– Washer 8
– Hexagon nut M8
– Cross connnection clamp

ER-SC-PM3/PM4

Steel Cap Assembly

– Steel Cap of PM3-A, PM4-A
– Square washer for PM3-A, PM4-A
– Hexagonal bolt M14*150
– Hexagonal bolt M14*110
– Plain washer 14
– Washer 14
– Hexagon nut M14
– U washer T1.0 (for PM-A system)
– U washer T2.0 (for PM-A system)

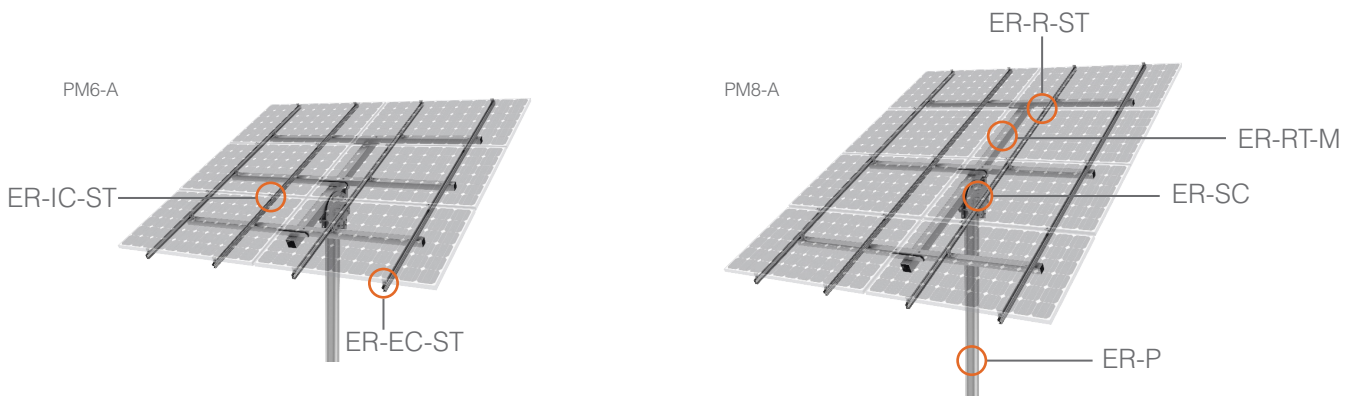### ER-AP-PM1A

PV-ezRack PM1-A, Accessory Package

– Aluminum Profile Of ECO-rail 1100,
  L1100mm
– Angle Steel 63*40*1010*T4mm
– Angle Steel 40*40*682*T4mm, Right
  Supporting Rod
– Angle Steel 40*40*682*T4mm, Left
  Supporting Rod
– Sleeve Ø20*83*T3mm
– Cross Connection Clamp of ECO-rail,
  L40mm
– Cup Head Square Neck Bolts M8*25
– Hexagon Nut With Flange M8
– Hexagonal Bolt S M12*120
– Plain Washer 12mm
– Washer 12mm
– Hexagon Nut M12
– End Clamp 40mm
– Hexagon Socket Head Cap Screw
  M8*28
– Washer 8
– Z module, L20mm

PV-ezRack
PostMount 6-A and 8-A

Robust pole mount system with adjustable angle for six and eight panels

PV-ezRack PostMount-A delivers flexible and durable designs to mount six or eight panels per post. It is 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 PV-ezRack 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.

PM6-A

ER-IC-ST

ER-EC-ST

PM8-A

ER-R-ST

ER-RT-M

ER-SC

ER-P

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 0° 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 is fixed in to a concrete foundation.

Quick and easy installation
Innovative and internationally patented, the Z-Module technology is used in almost all PV-ezRack 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.

10 Year Warranty*

Commercial

Residential

Available accessories
Grounding/earthing
Cable clips
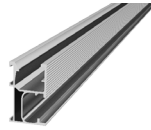Rail and Girder cap

PV-ezRack PostMount 6-A and 8-A

ER-P-152/3000

Pipe 152*3000(PM6,8-A Pole)

– Pipe Diameteφ152*3000

ER-R-ECO

ECO Rail

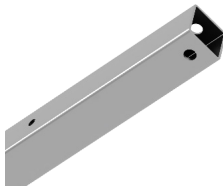– Aluminium profile of ECO Rail

ER-RT-100/576

Adjustable Tube 100*50*576

– Adjustable Tube 100*50*576
– Hexagonal bolt M20*160
– Hexagon nut M20
– Plain washer 20
– Washer 20

ER-RT

Rectangular Tube

– Rectangular Tube

ER-P-152/1500-F

Pipe φ152*1500 with Flange Base(PM6,8-A Pole)

– Pipe Diameter φ152*1500 with Flange Base

ER-SC-PM6/PM8

Steel Cap Assembly

– Steel Cap of PM6-A, PM8-A
– Square washer for PM6-A, PM8-A
– Hexagonal bolt M20*210
– Hexagonal bolt M20*160
– Plain washer 20
– Washer 20
– Hexagon nut M20

ER-IC-ST

Inter Clamp, Standard

– Inter Clamp
  28-57mm
– Hexagon socket head cap screw
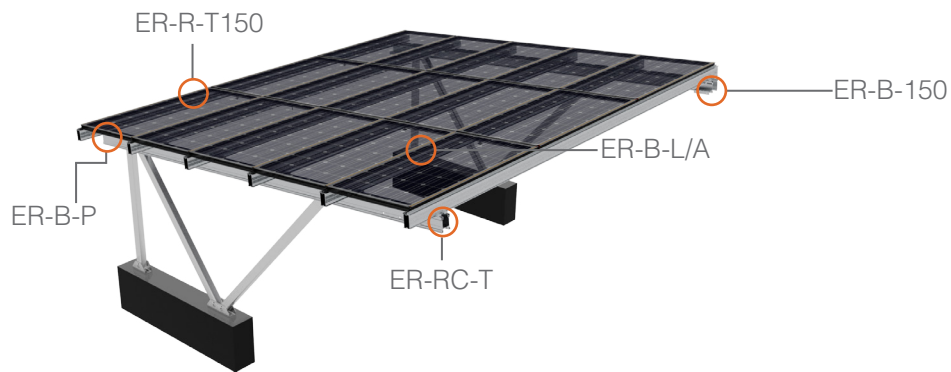 M8*50
– Washer 8
– Z module

ER-EC-ST

End Clamp, Standard

– End Clamp
  28-57mm
– Hexagon socket head cap screw
  M8*28
– Washer 8
– Z module

PV-ezRack Carport I / II

The Universal Ground Mounted Solution

Clenergy PV-ezRack Carport I & II is an economical ground mounted system for landscape module installations that provides shelter for parking. It is designed for high wind speed and snow loads. The combination of Clenergy's patented aluminium base rail, Z-module technology and rail splicing saves you the trouble of on-site cutting for fast installation. The anodised aluminium components combined with this specific structural design result in an optimal balance between aesthetics and cost effectiveness.

ER-R-T150
ER-B-150
ER-B-L/A
ER-B-P
ER-RC-T

Main Benefits

Customized Solution
We offer customized solution for PV-ezRack Carport I & II with optional one-car span or two-car span.

Durability
The whole anodised aluminium structure gives the system a decent look and anti-corrosive quality as well. It is a good choice for even the toughest environment, such as sites near the coastline.

Waterproof
In some markets this product is available with the waterproof option (Carport II) for a premium. The non-waterproof version (Carport I) is the more economical option.

Maximized Compatibility
Designed as a flexible solution, PV-ezRack Carport I & II is compatible with most framed and frameless solar modules.
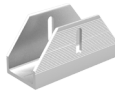
10 Year Warranty*

Utility

Commercial

Available accessories
Cable clips
Rail and Girder cap

PV-ezRack Carport I / II

U-AP/TR/250

Trapezoidal U-anchor Plate 250

-Trapezoidal U-anchor Plate 250
-Hexagonal bolt M16*150
-Plain washer 16
-Washer 16
-Hexagon nut M16
-Trapezoidal Shim 50*40*6
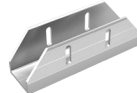
U-AP/TR/380

Trapezoidal U-anchor Plate 380

- Trapezoidal U-anchor Plate 380
- Hexagonal bolt M16*150
- Plain washer 16
- Washer 16
- Hexagon nut M16
- Trapezoidal Shim 50*40*6

RT-100/90/L

Rectangular Tube

-Rectangular Tube 100*90*Lmm

ER-B-150

Main Support Beam

Two main support beams combined with splices work as a girder to provide high strength support for T-rail 150. Efficient design ensures effective use of material and ease of installation.
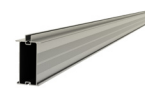
ER-SP-B150

Splice for Main Support Beam

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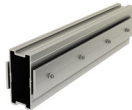- Plain washer 8
- Washer 8
- Hexagon nut M8

ER-R-T150

T-Rail, 150

The rail profile has been specifically developed to achieve larger spans reducing the number of legs to be installed.

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-L/A

Waterproof Bar-Landscape

Used for mounting the modules in Landscape orientation, it also offers a waterproof function with rubber sealing in Carport II.

ER-B-T6/65

T bolt kit

- T-head bolt M6*65
- WasherΦ6.5
- Hexagon nut M6

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 Φ6.7
- Bushing Φ12*36.5

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-CC-B/L
(Carport II)

Cross Connection for Waterproof Bar -Landscape

- Cross Connection for Waterproof Bar52*42*42

ER-CAP-B/P
(Carport II)

End Cap for Portrait Waterproof Bar

- End Cap for Portrait Waterproof Bar 32*12*15
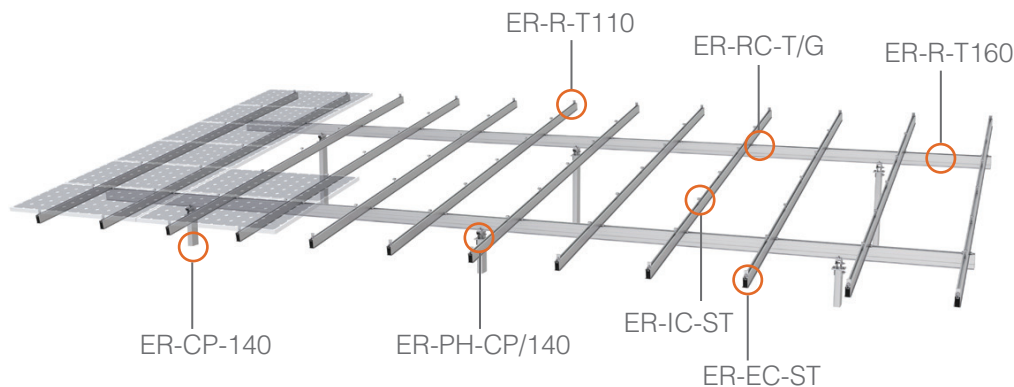
ER-CAP-B/LTop
(Carport II)

Cover for Landscape Waterproof Bar

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

PV-ezRack SolarTerrace V

Utility scale ground mount frame with time saving smart design

PV-ezRack SolarTerrace V is developed for utility scale PV-deployments with panels in landscape orientation. The system offers a wide range of adjustability, easy deployment and enables the implementation of large arrays. STV is a simple and robust structure so it can be installed even with untrained labour forces. All these features result in fast, easy and cost efficient installation. Main aluminium components have a standard 10μm anodisation.

ER-R-T110   ER-RC-T/G   ER-R-T160

ER-CP-140   ER-PH-CP/140   ER-IC-ST   ER-EC-ST

Main Benefits

Post-head adjustability
The smart design of the Post head provides adjustments in all directions to balance out inaccuracies which often occur through the nature of the ramming process. These generous adjustments allow easier and quicker installation.

Easy deployment
The connection between the main beams (Clipped T-rail 160) and the Post head is using special, spring supported rail clamps which easily slide and clip on to the bottom of the rail eliminating the often used and time consuming nut and bolt connection.

Utility optimised large arrays
STV is designed for utility scale applications and therefore offers large arrays, huge horizontal spans combined with up to 6 landscape panels (72 cells) in one row. Furthermore the design allows the panel rows to be pre-assembled to the rails off-site in controlled environment. All this saves valuable installation time on-site and increases efficiency during installation.

Simplicity
Sometimes bill of materials can be confusing and complicated. Not with Clenergy, on a basic BOM for STV you will only find 8 components. Keeping it simple and transparent helps all parties to understand and work with the product better.

10 Year Warranty*

Commercial

Residential

Available accessories
**Grounding/earthing
Cable clips
Rail caps
Inverter/joint box bracket
Rail and Girder cap**

PV-ezRack SolarTerrace V

ER-R-T160

Clipped T-Rail 160

– Clipped T-Rail 92 x 160mm
  (3-5/8" x 6-19/64")
– Length up to 6100mm (20' 5/32")

ER-SP-T160

Splice for Clipped T-Rail 160

– Splice for Clipped T-Rail 160
– Flange Face Self-Tapping Screw
  (wiht washer) ST6.3x22mm
  (1/4" x 55/64")

ER-CP-140

C-Post 140

– C-Post 70 x 140mm (2-3/4" x 5-33/64")

ER-PH-CP/140

Post Head for C post 140

– Mounting Base for Clipped T-160 Rail
– Rail clamp for Clipped T-160 Rail
– Snap-head bolt M8 x 40
  (5/16" x 1-37/64")
– Hexagon nut with flange M8 (5/16")
– Washer M8.5 x 20 (21/34" x 25/32")
– ezClip Spring
– Corragated shim
– Washer 12mm (15/32")
– Plain washer 12mm (15/32")
– Hexagon nut M12 (15/32")
– Bushing Ø18.5 x 35.5mm
  (47/64" x 1-25/64")
– Upper T-Head
– Hexagonal bolt M12 x 25
  (15/32" x 63/64")
– Lower T-Head
– Hexagonal bolt M12 x 110
  (15/32" x 4-21/64")

ER-PH-CP/140/EW

Post Head for C post 140/EW

– Mounting Base for Clipped T-160 Rail
– Rail clamp for Clipped T-160 Rail
– Snap-head bolt M8 x 40
  (5/16" x 1-37/64")
– Hexagon nut with flange M8 (5/16")
– Washer M8.5 x 20 (21/34" x 25/32")
– ezClip Spring
– Corragated shim
– Washer 12mm (15/32")
– Plain washer 12mm (15/32")
– Hexagon nut M12 (15/32")
– Bushing Ø18.5 x 35.5mm
  (47/64" x 1-25/64")
– Upper T-Head
– Hexagonal bolt M12 x 25
  (15/32" x 63/64")
– Lower T-Head
– Hexagonal bolt M12 x 110
  (15/32" x 4-21/64")

ER-CP-140A

C-Post 140A

– C-Post 70 x 140mm (2-3/4" x 5-33/64")

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-IC-ST

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 M8x40mm (5/16" x 1-37/64")
– 35mm (1-3/8") with Hex Socket Head
  Bolt A2-70 M8x45mm (5/16" x 1-37/65")
– 40mm (1-37/64") with Hex Socket Head
  Bolt A2-70 M8x50mm (5/16" x 2-10/64")
– 46mm (1-13/16") with Hex Socket Head
  Bolt A2-70 M8x55mm (5/16" x 2-11/64")
– 50mm (1-31/32") with Hex Socket Head
  Bolt A2-70 M8x60mm (5/16" x 2-5/3")
– 57mm (2-1/4") with Hex Socket Head
  Bolt A2-70 M8x70mm (5/16" x 2-3/4")
– Z-Module
– Lock Washer 8.4mm (21/64")

ER-EC-ST

End Clamp, Standard

– End Module Clamp
  28mm (1-7/64")
  30mm (1-3/16")
  32mm (1-17/64")
  35mm (1-3/8")
  38mm (1-1/2")
  40mm (1-37/64")
  42mm (1-21/32")
  46mm (1-13/16")
  48mm (1-57/64")
  50mm (1-31/32")
  57mm (2-1/4")
– Z-Module
– Hex Socket Head Bolt A2-70
  M8 x 28 (5/16"x 1-1/10")
– Lock Washer 8.4mm (21/64")

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

Accessories

Accessories - Earthing / Grounding components

EZ-GL-ST

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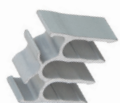– Grounding Lug Bolt
  M6 x14mm (3/16" x 35/64")

EZ-GC-ST

Grounding Clamp (standard)

Accessories - Cable clips and trays

EZ-CC-R/ST/6

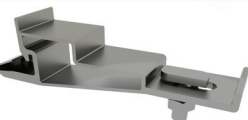**Cale Clip for ST- and PRO-Rail
- hold up to 6 cables**

EZ-CC-PV/2

**Universal Cable Clip for PV Panels for
holding 2 cables**

EZ-CC-PV/4

**Universal Cable Clip for PV Panels for
holding 4 cables**

EZ-C-CD/T

Clamp for Cable Duct on T-Rail
– Clamp for Cable Duct on T-rail
– T-head bolt M8 x 25mm (5/16" x 63/64")
– Plain washer 8mm (5/16")
– Washer 8mm (5/16")
– Hexagon nut M8 (5/16")
– Set screw M8 x 12mm (5/16" x 15/32")

EZ-CD-102

Cable Duct 102

EZ-CO-CD/102

Cover for Cable Duct 102

Accessories - Rail caps

EZ-CAP-ST

Cap for Standard Rail

EZ-CAP-B

Cap for B-Shape Rail

ER-CAP-G/PA

Cap for Square Girder

EZ-CAP-T50

Cap for T-Rail 50

ER-CAP-T110

Cap for T-Rail 110

**CAP-ECO/PA
CAP-ECO/PA/BA**

Cap for ECO Rail

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
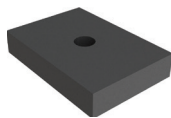 (2-23/64" x 2-23/64" x2' 1-13/64")

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

Accessories - Rubber pads

EZ-RB-65/45/12

EPDM rubber pad
– EPDM rubber pad
  65 x 45 x 12mm
  (2-9/16" x 1-49/64" x 15/32")

EZ-RB-ST

Rubber Pad
– 50 x 25 x 2.2mm
  (1-31/32" x 63/64" x 3/32")

EZ-RB-60/20000/2

EPDM strip
– EPDM strip
  60 x 20000 x 2mm
  (2-9/23" x 64' 7-13/32" x 5/64")

Accessories - Other

EZ-AD-C110

SolarRoof Adapter for Corrugated Iron Roof

– AL Adapter 110mm x 124mm
  (4-21/64" x 4-7/8")
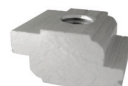– EPDM rubber pad
– Z-Module and bolt

EZ-Z-STBW

Z-Module assembly with bolt and washer

– Z-Module
– M8 x 25mm (5/16" x 63/64") A2 70
– Washer 8.4mm (21/64") DIN 9021 A2
– Lock Washer 8mm (5/16") A2

EZ-Z-ST

Z-Module

EZ-RE-200

Roof Hook Extender
– 200mm Roof Hook Extender
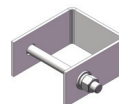– Hex Socket Head Bolt
– Hex Nut

ER-R-MT/2560

MT-rail
– With a standard length of
  2560mm (8' 4-25/32")

EZ-AD-GSS76/CP140

Adapter between Ground screw S76 and C-Post 140
– U-Profile Bracket
– Arc Fixed Block
– Hexagonal bolt M12 x 120mm
  (15/32" x 5-1/64")
– Washer 12mm (15/32")
– Plain washer 12mm (15/32")
– Hexagon nut M12 (15/32")

ER-DM-MT8

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

CM-01

Click Module without Bolt
– Main Click Module
– Side Click Module
– Spring for Click Module

CM-01/B

Click Module with Bolt
- Main Click Module
- Side Click Module
- Spring for Click Module
- Washer 8
- Lock WasherM8*18
- socket head cap screw M8*25

IBII-SR240/100
IBII-SR240/100/B

SolarRoof Isolator Bracket II, 240*100mm with Z-Module and bolt assembly
– SolarRoof Isolator Bracket II,240*100mm
– Z Moudle
– Plain washer 8
– Washer 8
- Hexagon socket head cap screw M8*25

CRC-R/ECO-ZBW

Cross Connector Clamp of ECO-Rail with Z-module
– Hexagon socket head cap screw M8*25
– Washer 8
– Cross Connector Clamp of ECO-Rail
– Z Module

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

CRC-R/ECO

Cross Connector Clamp of ECO-Rail
– Cross Connector Clamp of ECO-Rail

Accessories

Accessories - Ground screw

ER-GS-76

- F4, Ø76*1800mm (for Japan)
- F6, Ø76*1600mm
- F6, Ø76*1900mm

GS-76/3/4/F9

Ground Screw, with Three Nut Fixation and Continuous Small Blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm
- Ø76*3.0*1200mm
- Ø76*3.0*1400mm
- Ø76*3.0*1600mm
- Hexagonal bolt M16*30(Hot dip galvanizing)

GS-76/3.5/4/F0

Ground Screw, with Quadrate Flange and Continuous Small blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm

GS-76/3.5/4/F1

Ground Screw, with Circular Flange and Continuous Small blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm

GS-76/3.5/4/F8

Ground Screw, with Three Nut Fixation and Double screw blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm- Hexagonal bolt M16*30(Hot dip galvanizing)

GS-76/3.5/4/F6

Ground Screw, with Quadrate Flange and Double Screw Blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm

GS-76/3.5/4/F7

Ground Screw, with Circular Flange and Double screw blade

- Ø76*3.5*1300mm
- Ø76*3.5*1600mm
- Ø76*3.5*1900mm
- Ø76*4.0*1300mm
- Ø76*4.0*1600mm
- Ø76*4.0*1900mm

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
- Hex nut M16

AP-GS /76/2STS/3STS

Accessory Package for Ø76 Ground Screw (with 2PCS/3PCS Self-Tapping Screw)

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

Worldwide network

Clenergy Australia
1/10 Duerdin Street, Clayton VIC 3168 Australia
Tel: +61 3 9239 8088   Fax: +61 3 9239 8024
E-mail: sales@clenergy.com.au   www.clenergy.com.au

Clenergy China
999-1009 Min'an Rd, Huoju Hi-tech Ind. Dev. Zone
Xiang'an District 361101, Xiamen, Fujian, China
Tel: +86 592 311 0088   Fax: +86 592 599 5028
E-mail: sales@clenergy.com.cn   www.clenergy.com.cn

Clenergy Europe
Esplanade 41, 20354 Hamburg, Germany
Tel: +49 40 3562 389–00
E-mail: sales_de@clenergy.com

Clenergy Japan
SOHO STATION 401, 24-8 Yamashita-cho, Naka-ku
Yokohama, 231-0023 Japan
Tel: +81 45 228 8226 Fax: +81 45 228 8316
E-mail: sales@clenergy.co.jp   www.clenergy.jp

Clenergy Philippines
145 Yakal St., San Antonio village, Makati City, Philippines
Tel: +63 977 8407282 +63 977 8407240
E-mail: sales_ph@clenergy.com www.clenergy.ph

Clenergy Thailand
9/2, 5th Floor, Vorasin Building, Soi Yasoob 2, Viphavadee-Rungsit Road,
Chomphon Sub-district, Chatuchak District, Bangkok 10900
Tel: +66 63 228 0200, +66 81 969 5152
E-mail: sales_th@clenergy.com,support_th@clenergy.com

10 Year Warranty*