PV-ezRACK®

Product Catalogue

Solar Mounting Solutions

Last Updated - Aug. 2023

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

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

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

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

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

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

List of contents

Key Facts

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

Industry Leader
20GW of worldwide installations
Top 5 Solar Tracker Supplier in China
Largest share of AU rooftop solar PV market for 14 years
13 billion+ kWh green power generation capacity annually

Core Business
Global offering of solar products
Solar PV + Smart Energy Solution
730,000+ rooftop solar projects
12,000+ solar plants

Milestones

2021-Current
New Heights

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

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

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

Clenergy rebrands to reflect our new vision and mission.

Clenergy Xinjiang Subsidiary established. 2GW PV power generation demonstration base and 5GW ezTracker equipment manufacturing plant planned in Urumqi.
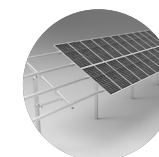
2016-2020
Public Listing

IPO application approved by the CSRC in 2016.

Successfully listed in the Shanghai Stock Exchange in 2017.

Doubled the sales volume in 2018, reaching 1.7GW.

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

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

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

2011-2015
Global Expansion - Diversified Development

Added a Tianjin manufacturing base.

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

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

2009-2010
Turning Pointing

Successfully developed the "PVezRack®" series.

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

2007-2008
Startup - Foundation

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

SolarRoof™ Pro

The Clenergy PVezRack® SolarRoof™ Pro is a roof-mounting solution suitable for most types of residential and commercial pitched roofs. Using our innovative rail, Z module and roof hooks pre-assembled with our unique Cross connection clamp, SolarRoof™ Pro is one of the most versatile rooftop solution in the world, delivering a very fast, safe and cost-effective solution to installers.

Main Benefits

Simple and Fast Installation
Using our innovative Z-module technology to easily attach the Solar PV modules and our unequalled pre-assembled Cross connection clamp for effortless coupling of the rail to our roof hooks.

Versatile Application
A straightforward system designed for portrait and landscape orientation, SolarRoof™ Pro is suitable for most residential and commercial roof applications.

Compatibility
A universal roof mounting system, SolarRoof™ Pro is suitable for most roofs and compatible with most of the framed Solar PV modules on the market.

Uncompromising Quality
SolarRoof™ Pro only uses high grade anodised aluminum and stainless steel components to international standards. Strict quality control over materials and finished products ensures optimum strength and long life for your installations.

Technical Details

Module Orientation	Landscape or Portrait
Module Type	Framed
Snow Load	Customised
Wind Load	Customised
Roof Type	Tin and Tile Roof
Material	Main Components: AL6005-T5 Roof Hooks: AL6005-T5 and SUS304 Fasteners: SUS 304
Certification	CE, MCS
Standard	Eurcode 0-9 | AS NZS 1170.2 | JISC 8955-2017 | ASCE 7-10
Warranty	12 years

< Tile Roof >
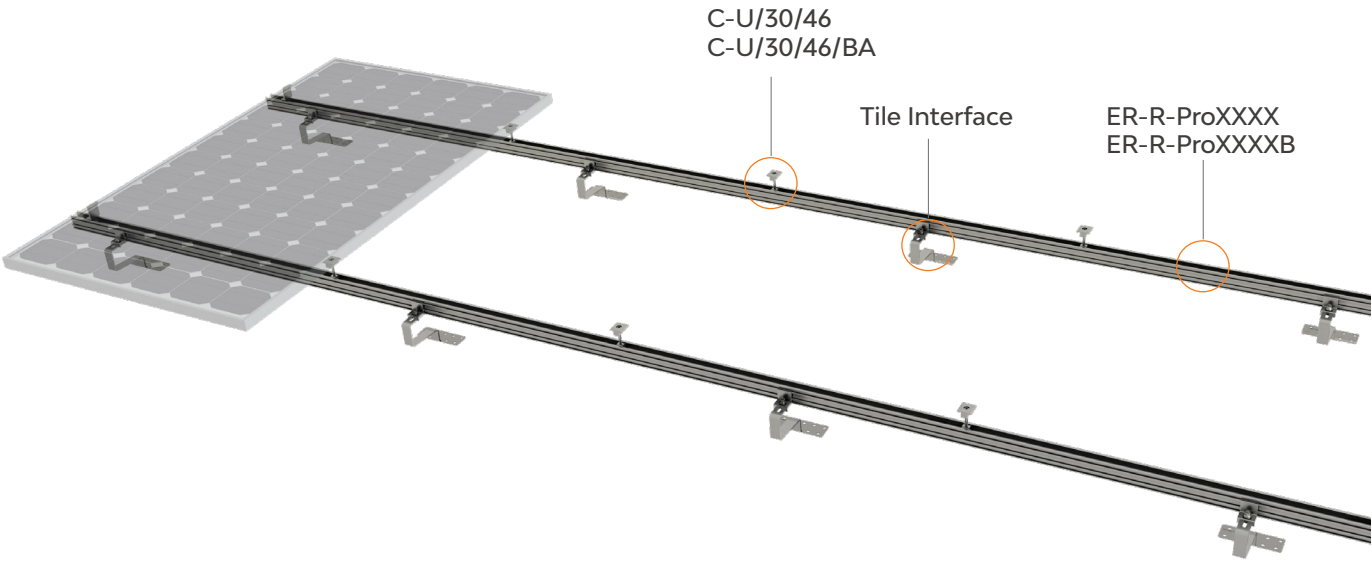
C-U/30/46
C-U/30/46/BA

Tile Interface

ER-R-ProXXXX
ER-R-ProXXXXB

< Tin Roof >

ER-S-U/120

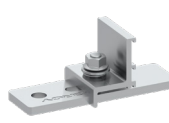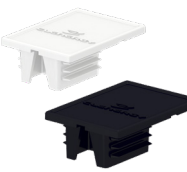|	C-U/30/46 C-U/30/46/BA Akashi Clamp	– Akashi Clamp – Module for Akashi Clamp – Hexagon socket button head screw M8*55 – Washer 8 – Spring for Akashi Clamp
	ER-CC-Pro Cross connection clamp	– Cross connection clamp – Z Module – Hexagon socket head cap screw M8*25 – Washer 8

	ER-R-ProXXXX **ER-R-ProXXXXB** Pro Rail	– Pro Rail
	ER-SP-ST **ER-SP-ST/BA** Splice for Standard Rail	– Splice for Standard Rail – Hexagon socket head cap screw M8*12
	ER-I-PRO/01 Tile Interface for light to medium	– Main Part of Roof Hook Pro H132 – Buildex 14-11 x 70 Hex Head Zips screw – Hexagon nut with flange M8 – Cup head square neck bolts M8*30 – ezClip Spring – ezClip 30 – Conical spring Washer M8.5*20
	ER-I-PRO/01A Tile Interface for Adjustable for light to medium snow load	– Upper Part of Roof Hook Pro H117V – Lower Part of Roof Pro H117V – Buildex 14-11 x 70 Hex Head Zips screw – Hexagon nut with flange M8 – Cup head square neck bolts M8*25 – Cup head square neck bolts M8*30 – ezClip Spring – ezClip 30 – Conical spring Washer M8.5*20
	ER-I-PRO/01/A/LS Tile Interface, adjustable for light to medium snow load, landscape	– Lower Part of Roof Pro H117VL – Upper Part of Roof Hook Pro H117VL – Buildex 14-11 x 70 Hex Head Zips screw – Hexagon nut with flange M8 – Cup head square neck bolts M8*25 – Cup head square neck bolts M8*30 – ezClip Spring – ezClip 30 – Conical spring Washer M8.5*20
	ER-I-PRO/01DA Two way Adjustable Roof Hook 40-60mm, with PRO-Rail Clamp	– Upper Part of Roof Hook Pro H117V – Middle Part of Two way Adjustable Roof Hook 40-60mm – Lower Part of Two way Adjustable Roof Hook 40-60mm – Buildex 14-11 x 70 Hex Head Zips screw – ezClip 30 – Conical spring Washer M8.5*20 – ezClip Spring – Hexagon nut with flange M8 – Cup head square neck bolts M8*25 – Cup head square neck bolts M8*30

	ER-I-PRO/02 Flat Tile Interface	– Main Part of Roof Hook Pro Plain Tile H125 – Buildex 14-11 x 70 Hex Head Zips screw – Plain washer large 8*24 – Hexagon nut with flange M8 – ezClip Spring – Conical spring Washer M8.5*20 – Cup head square neck bolts M8*30 – ezClip 30
	ER-I-PRO/02A/LS Plain Tile Roof Hook, landscape	– Upper Part of Roof Hook Pro H117VL – Lower Part of Wawasan Roof Hook Pro PlainTile H107V, version 2.0 – Buildex 14-11 x 70 Hex Head Zips screw – Cup head square neck bolts M8*25 – Hexagon nut with flange M8 – Conical spring Washer M8.5*20 – ezClip Spring – ezClip 30 – Cup head square neck bolts M8*30
	ER-I-PRO/04 Slate/Prefa Interface	– Main Part of Roof Hook Pro Slate/Prefa H75 – Buildex 14-11 x 70 Hex Head Zips screw – Hexagon nut with flange M8 – Cup head square neck bolts M8*30 – ezClip Spring – ezClip 30 – Conical spring Washer M8.5*20
	ER-I-PRO/07 Flat Tile Interface for Tegalit roof	– Main Part of Roof Hook Pro Flat Tile H132 – Buildex 14-11 x 70 Hex Head Zips screw – ezClip 30 – Conical spring Washer M8.5*20 – Hexagon nut with flange M8 – Cup head square neck bolts M8*30 – ezClip Spring
	ER-S-U/120 U Support	– U Support – Rubber Pad for U Support
	ER-R-MC/380 Mycro Rail	– Mycro 380mm – Rubber Pad for U Support

ER-HB-10/200A Hanger Bolt M10*200mm	– Hanger Bolt for wood purlin, M10*200 – Waterproof Gasket for Hanger bolt M10*200 – Hexagon nut with flange M10(coating)	
ER-MP-HB Mounting Kit for Hanger Bolt	– Mounting Plate T6*116, for M10 hanger bolt – Hexagon nut with flange M8 – ezClip 35 – ezClip Spring – Conical spring Washer M8.5*20 – Cup head square neck bolts M8*30	
ER-I-33 Brooklyn Klip-lok Clamp with Z-Module Channel	– Main Hook of Brooklyn Klip-lok Clamp with Z-Module Channel – Side Hook of Brooklyn Klip-lok Clamp with Z-Module Channel – Hexagon socket head cap screw M8*70 – Plain washer 8 – Washer 8 – Hex Nut GB/T 6170-M8-8-tZn	
ER-CAP-PRO/G **ER-CAP-PRO/B** Cap for Pro Rail	– Cap for Pro Rail	

SolarTripod

Tilted flat roof frame designed for commercial installations

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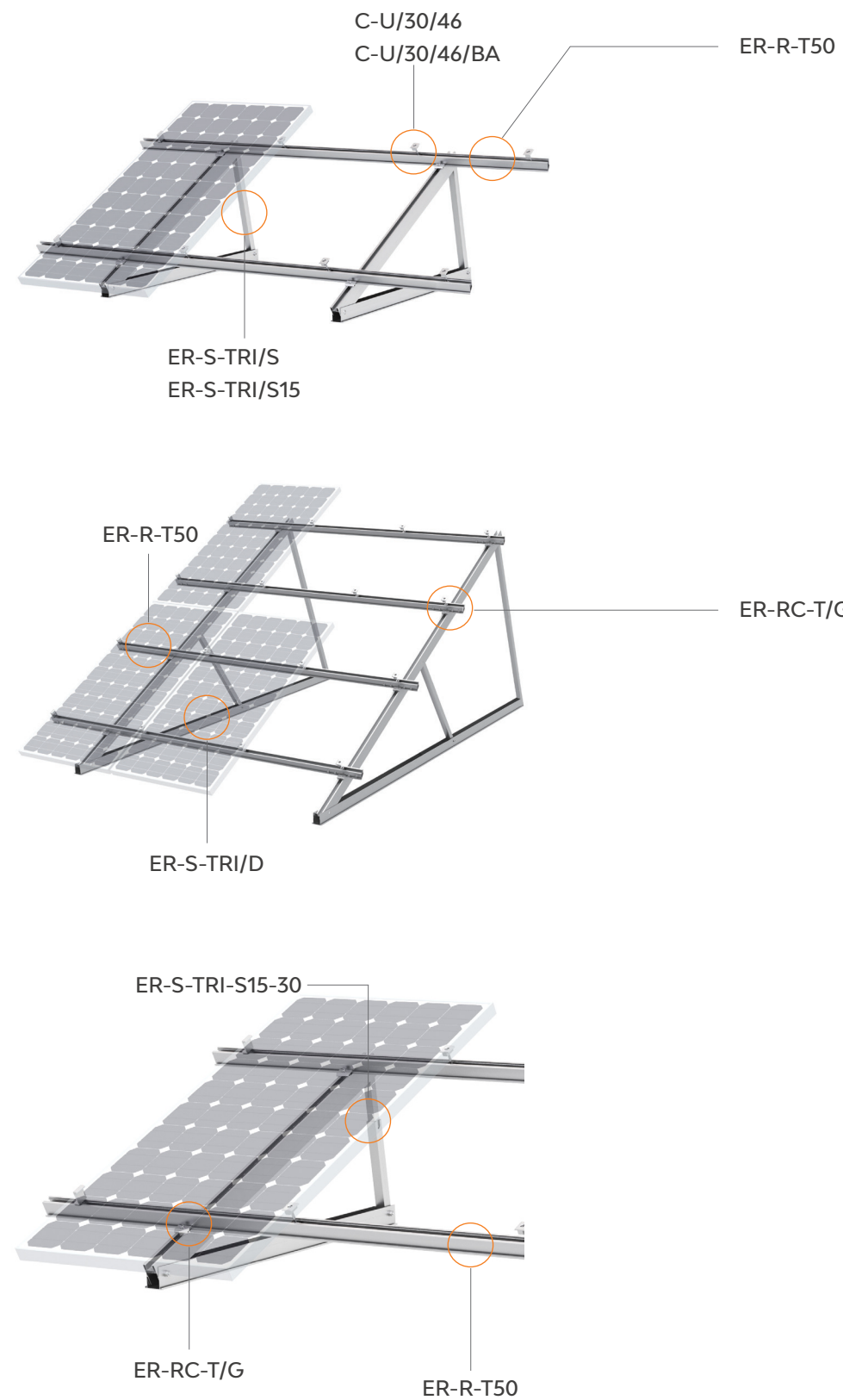
Main Benefits

Quick Installation
Completely pre-assembled, the SolarTripod supports simply need to be unfolded and secured to the roof structure for installation. For most installations 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.

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.

C-U/30/46
C-U/30/46/BA   ER-R-T50

ER-S-TRI/S
ER-S-TRI/S15

ER-R-T50

ER-RC-T/G

ER-S-TRI/D

ER-S-TRI-S15-30

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

Components

ER-S-TRI/S30-AU
Solar Tripod, Single Support

– Hexagon socket head cap screw M10 x 65
– Plain washer 10
– Washer 10
– Hexagon nut M10
– Tripod U Bracket
– Tripod, Al-Tube 35.5 x 35.5 x 689
– Base Support70 x 1350
– Upper Support 75 x 1250
– Bushing Ø18.5 x 35.5

ER-S-TRI30-D3000
Solar Tripod, Double Support

– Hexagon socket head cap screw M10 x 65
– Hexagon nut M10
– Plain washer 10
– Washer 10
– Tripod U Bracket
– Base Support 70 x 3000
– Upper Support 75 x 3000
– Tripod, Al-Tube 35.5 x 35.5 x 801
– Tripod, Al-Tube 35.5 x 35.5 x 1562
– Bushing Ø18.5 x 35.5

ER-S-TRI/S15-30
Adjustable Tripod

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

ER-R-T50
T-Rail 50

– With standard lengths:
  2560mm
  3405mm
  4200mm

ER-SP-T50
Splice for T-Rail 50

– Splice with standard length of 300mm
– Self-Tapping Screw ST6.3 x 22

ER-RC-T/G Rail Clamp for T-Rail with grounding/earthing pins	– Rail Clamp with pins 50 x 30 x 11.8mm – Hex Socket Head Bolt M8 x 30mm – Spring Washer M8 – Z-Module
C-U/30/46 **C-U/30/46/BA** Akashi Clamp	– Akashi Clamp – Module for Akashi Clamp – Hexagon socket button head screw M8*55 – Washer 8 – Spring for Akashi Clamp

Ascent/Ascent Wings

Low ballast tilt mounting system for PV Installation on flat roofs

The PVezRack® Ascent is a low ballast, South/North, East-West facing solution without rails for PV installation on flat roofs. With the special design and a tilt angle of 10° or 15°, Ascent is suitable for PV module width up to 1134mm, height from 28mm to 46mm.

Main Benefits

Ballast Optimised
Ballast reduction through aerodynamic optimized construction. Also tested in boundary layer wind tunnel by the independent wind tunnel test agency, to achieve optimum ventilation for maximum energy output.
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Easy and Quick Installation
With the click connections between Legs and Bases, no tools are used during the Legs and Bases assembly, significantly reduce installation labor. The storage space is greatly reduced due to the innovative Rear Leg Extension, thereby saving the cost of warehouse management.

Compatibility
Available with a module widths up to 1134mm, PVezRack® Ascent offers flexible solutions and suitable for all framed PV panels with height from 28 to 46mm. Power optimizer, micro invertor can be easily accommodated.

Ascent

FL-AC/10
FL-AC/15

RL-AC/10
RLE-AC

EC-M28-46/L50

IC-M28-46/L50

WD-AC/M

MB-AC/SN

SEB-AC/120

Ascent Wings

MB-AC/EW

CB-AC/EW
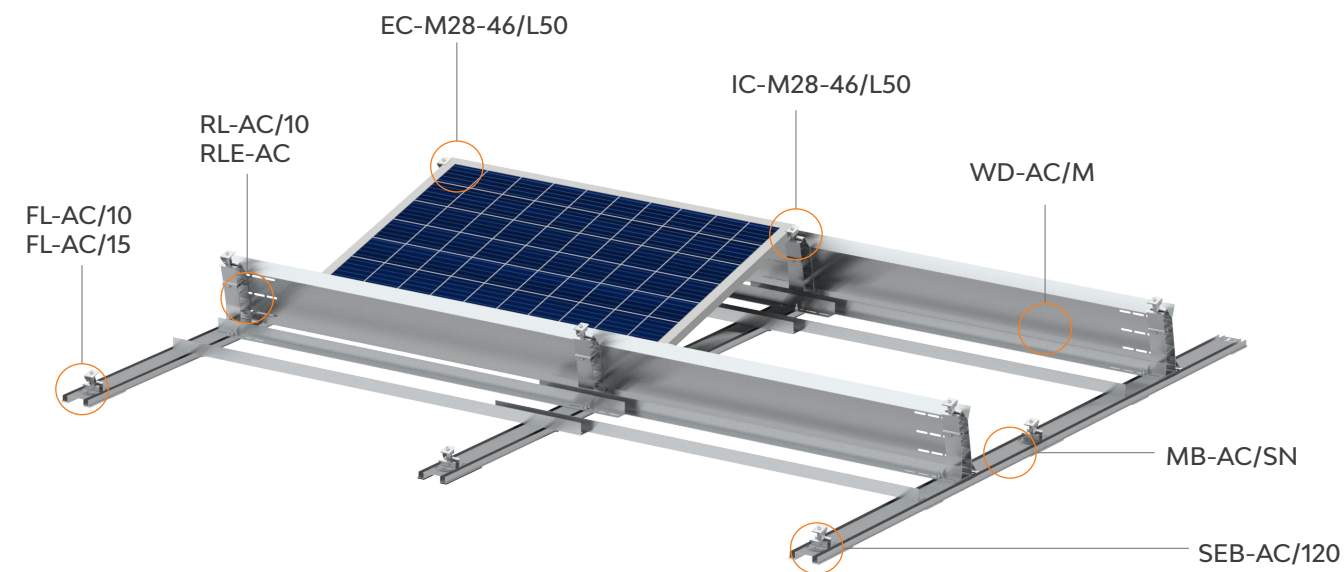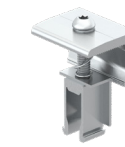
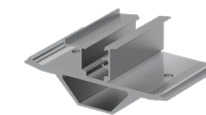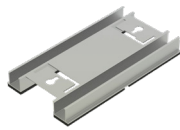|	**EC-M28-46/L50** End Clamp 28-46mm, with M module	– Universal Clamp, Length 50mm, Anodised – M Module 16.5*30.7mm – Corrugated L-anchor Plate 3 – Button Head Torx Screws M8*35 – Lock washer 8 – Spring for Universal Clamp
	IC-M28-46/L50 Inter Clamp 28-46mm, with M module	– UniversalClamp, Length 50mm, Anodised – M Module 16.5*30.7mm – Button Head Torx Screws M8*35 – Lock washer 8 – Spring for Universal Clamp
	FL-AC/10 Front Leg 10°	– Front Leg 10°
	FL-AC/15 Front Leg 15°	– Front Leg 15°
	RL-AC/10 Rear Leg 10°	– Rear Leg 10°
	RLE-AC Rear Leg Extension	– Rear Leg Extension – Grounding Lug Bolt II
	SEB-AC/120 Start and End Base L120	– Start and End Base L120 – Rubber Pad, 120*30*5mm
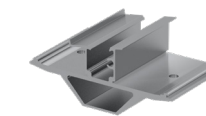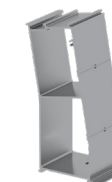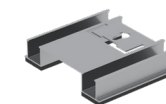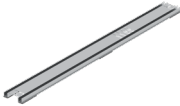
	MB-AC/SN Main Base L, South/north	– Main Base L1500/L1800, South/north – Rubber Pad, 120*30*5mm
	MB-AC/EW Main Base L, East- west	– Main Base L2200, East- west – Rubber Pad, 120*30*5mm
	CB-AC/EW Connection Base, East- west	– Connection Base L250, East- west – Rubber Pad, 120*30*5mm
	WD-AC/M Wind Deflector	– Wind Deflector 10°/15°, L1920/L2230,MAC Steel – Flange Facing Self-Tapping Screw (washer) ST6.3*32
	BB-AC-XXXXM Ballast Bar , MAC Steel	– Ballast Bar-50.8*50.8*1920/2230, with 50mm slot hole – Hexagon nut with flange M8 – T-head bolt M8*25
	LS-AC10/XL **LS-AC15/XL** Leg Support 10°, 15° for XL Panel	– Upper Part of Front Leg Support 10° and 15° – Lower Part of Front Leg Support 10° and 15° – Lower Part of Rear Leg Support 10° and 15° – Upper Part of Rear Leg Support 10° and 15° – AC Fix Block 1 – AC Fix Block 2 – Universal Clamp for M Module 17*32.7mm – Rubber Pad 35*45 – Lock washer 8 – Spring for Universal Clamp – Hexagon socket button head screw M8*35 – Hexagon socket button head screw M8*20 – Washer 8 – Plain washer 8 – Cup head square neck bolts M8*20 – Hexagon nut with flange M8

SolarTerrace Eco

Clenergy PVezRack® SolarTerrace Eco (ST Eco) is a highly pre-assembled ground mounting system, suitable for commercial PV installation and utility-scale PV installation. Innovative W module channel rails are very convenient and helpful to improve the installation accuracy. Using high quality components, ST Eco is more suitable for areas with higher salinity, and significantly saves labor time and cost, especially delivering large scale projects.

Main Benefits

Excellent Corrosion Resistance
Anodised aluminum and SUS304 stainless steel parts make the system suitable for even the toughest corrosive environments, such as coastal areas.

Easy and Fast Installation
The support legs of ST Eco are completely pre-assembled, they only need to be opened up and secured to the foundation. They even have the pre-installed positioning rail clamps, so you don't need measure and mark rail positions anymore. The combination of these features saves valuable time and cost in assembly and logistics.

Versatility
With modular design, such as A-shaped support, N-shaped support, W-shaped support, TM-Rail and TW rail, ST Eco can be compatible with different regions where the wind and snow load vary.

Technical Details

Module Orientation	Landscape or Portrait
Wind Load	Up to 70m/s (ASCE 7-10)
Tilt Angle	0-60° (Customised)
Foundation	Ground Screw | Concrete
Material	Main Structure: AL6005-T5 / Fasteners: SUS 304
Standard	AS NZS 1170.2 | Eurocode 0-9 | JISC 8955 | ASCE 7-10
Warranty	12 years

ICII-W

ER-R-TW

ER-AA-50

EC-W

S-STEco

GS-XX

ER-RCII/W
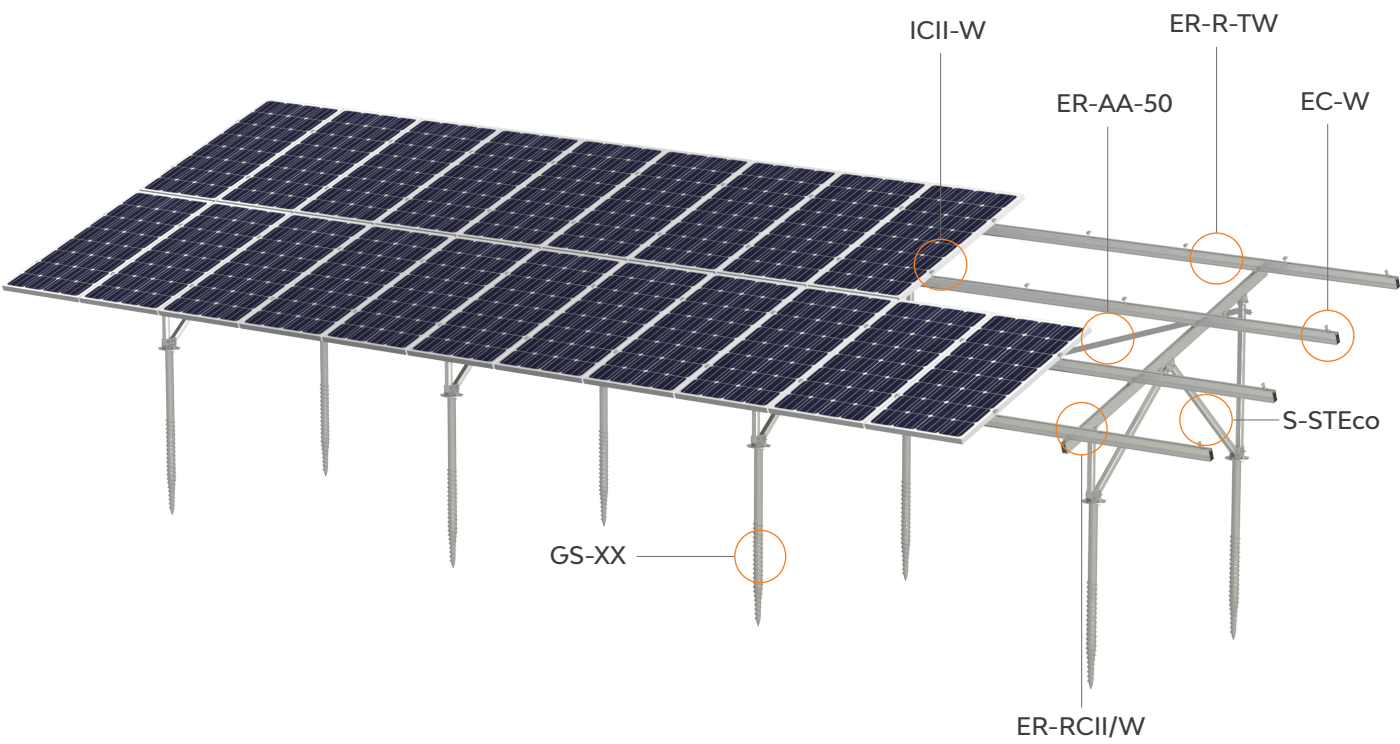
Components

S-STEco
Support

- Rectangular Tube 55*50*XXXX
- Rectangular Tube 55*50*XXXX
- Rectangular Tube 55*50*XXXX
- Rectangular Tube 55*50*XXXX
- Slot U-Shape Joint 80
- Slot U-Shape Joint 130
- Corrugated L-anchor Plate II 135
- Two-Groove Square Girder 80*XXXX
- Rail Clamp
- W Module (Aluminum)
- T-head bolt M8*20, Square head
- Plain washer 8
- Washer 8
- Nut M8
- T-head bolt M8*25, Square head
- Hexagon Nut with Flange M8
- Hexagonal bolt M12*100
- Hexagonal bolt M12*85
- Hexagon nut M12
- Washer 12
- Plain washer 12
- Corrugated shim (T6)
- Bushing Φ18.5*41.5

ER-R-TW
TW-Rail

- TW-Rail

GS-XX
Ground Screw

- Ground Screw

ER-RCII/W
Rail Clamp II

- Rail Clamp II
- W Module
- Hexagon socket head cap screw M8*25
- Washer 8

EC-W
End Clamp

- Omega End Clamp 50mm
- W Module
- Hexagon socket head cap screw M8*25
- Washer 8

ICII-W
Inter Clamp II

- Inter Clamp II
- W Module
- Hexagon socket head cap screw M8*60
- Washer 8
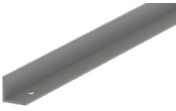
ER-AA-50
Angle AL-50.8*50.8*XXXX

- Angle AL-50.8*50.8*XXXX

ezShade 2.0

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

Main Benefits

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

Waterproof
With the new structural design, the PVezRack® ezShade 2.0 is totally waterproof after real testing in rainy day.

Excellent Corrosion Resistance
Manufactured from high quality Anodised aluminum and stainless steel with excellent corrosion resistance, PVezRack® ezShade 2.0 offers reliable and durable solution.

Customised Solution Available
PVezRack® ezShade 2.0 is suitable for projects of small parking and large-scale parking lots, which is developed to caters for customer requirements. We can offer N-Shape or W-Shape supports. Both silver Anodised and black Anodised products are available.
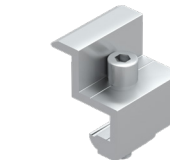
Technical Details

Module Orientation	Landscape or Portrait
Wind Load	Up to 60m/s (ASCE 7-10)
Tilt Angle	5 ° or 10 °
Foundation	Concrete
Material	Main Structure: AL6005-T5 / Fasteners: SUS 304
Standard	AS NZS 1170.2	Eurocode 0-9	JISC 8955	ASCE 7-10
Warranty	12 years

G-SDII/150
R-SDII/60
R-SDII/168
ER-EC-W
RT-100/90
BA-SDII/XXX
GU-SDII/22
ER-ICII-W
HJ-SDII/158
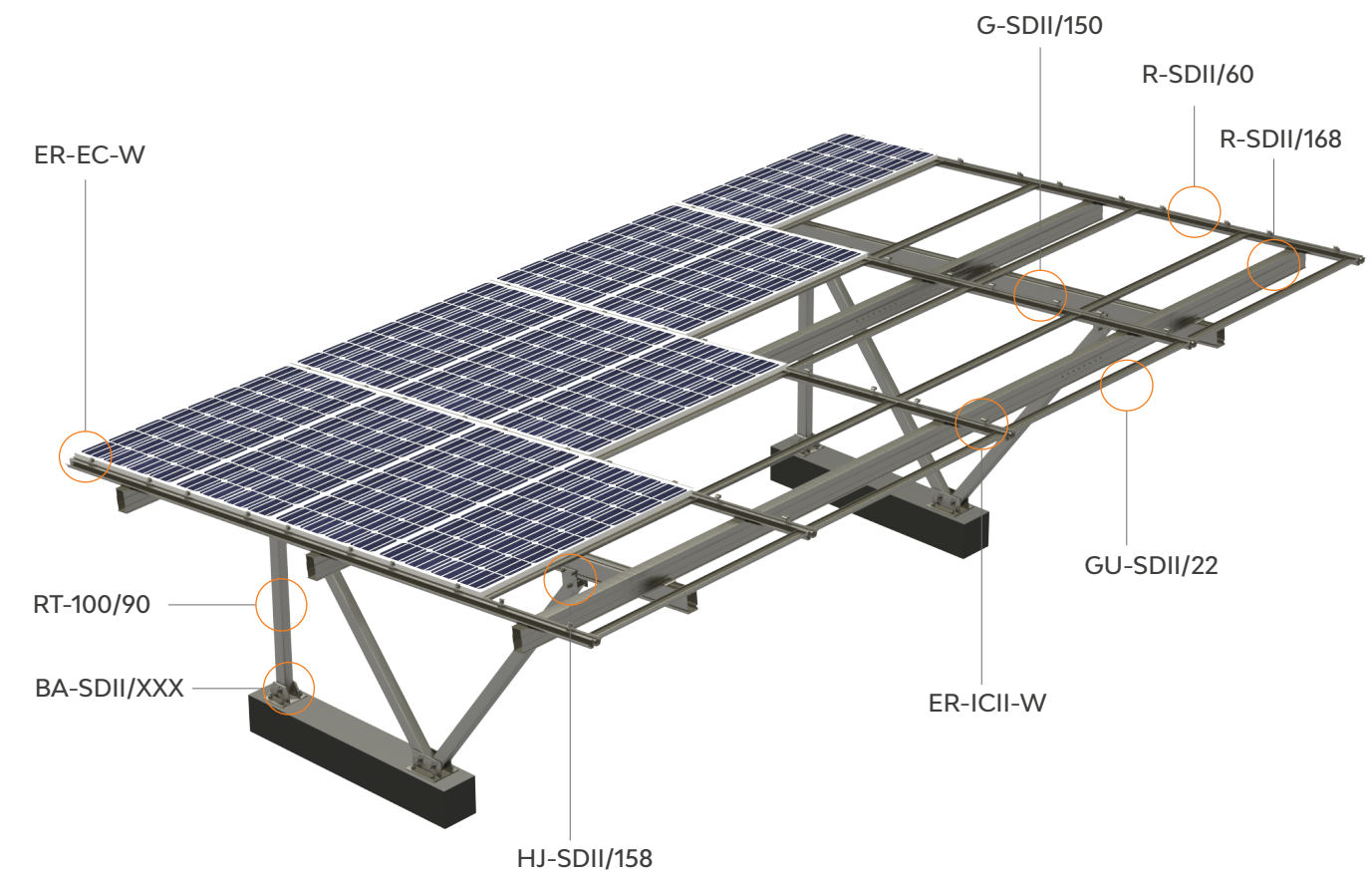
Components

	G-SDII/150 Girder 150	- Girder 150*XXXX
	R-SDII/168 Rail 168	- Rail 168*XXXX
	R-SDII/168 Rail 60	- Rail 60*XXXX

	GU-SDII/22 Gutter 22	- Gutter 22*XXXX
	RT-100/90 Rectangular Tube 100*90	- Rectangular Tube 100*90*XXXX
	HJ-SDII/158 H Joint	- H Joint 158*XXXX - Hexagonal bolt M16*130 - Plain washer 16 - Washer 16 - Hexagon nut M16 - Hexagonal bolt M12*35 - Plain washer 12 - Washer 12 - Hexagon nut M12 - Bushing Φ23*77.5
	BA-SDII/XXX Corrugated T-Base	- Corrugated T-Base - Hexagonal bolt M16*150 - Plain washer 16 - Washer 16 - Hexagon nut M16 - Trapezoidal Shim 50*40*6 - Bushing Φ23*77.5
	ER-ICII-W Inter Clamp II	- Inter Clamp II - W Module - Hexagon socket head cap screw M8*45 - Washer 8
	ER-EC-W End Clamp II	- Omega End Clamp 35mm - W Module - Hexagon socket head cap screw M8*40 - Washer 8

Merch Store

Merch Store

PV-ezRACK®

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