Clenergy
Innovating renewable energy

SHA 603628

PV-ezRack® Product Catalogue

Solar Mounting Solutions

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

Contents

About Clenergy

Clenergy, listed on Shanghai Stock Exchange (stock code: SHA 603628), is a high-tech Sino-Australian company that specializes in solar product manufacturing, and clean energy service and investment combined with the smart energy solution.

Clenergy has grown from being a boutique solar solutions provider into a passionate, globally renowned renewable energy company with nearly 500 employees around 3 continents.

Clenergy has set up branches and offices in Australia, Germany, Japan, Thailand, the Philippines, etc., with its footprint across the world to make our products and services more accessible to local customers.

Key Facts

Market Value

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

Industry Leader

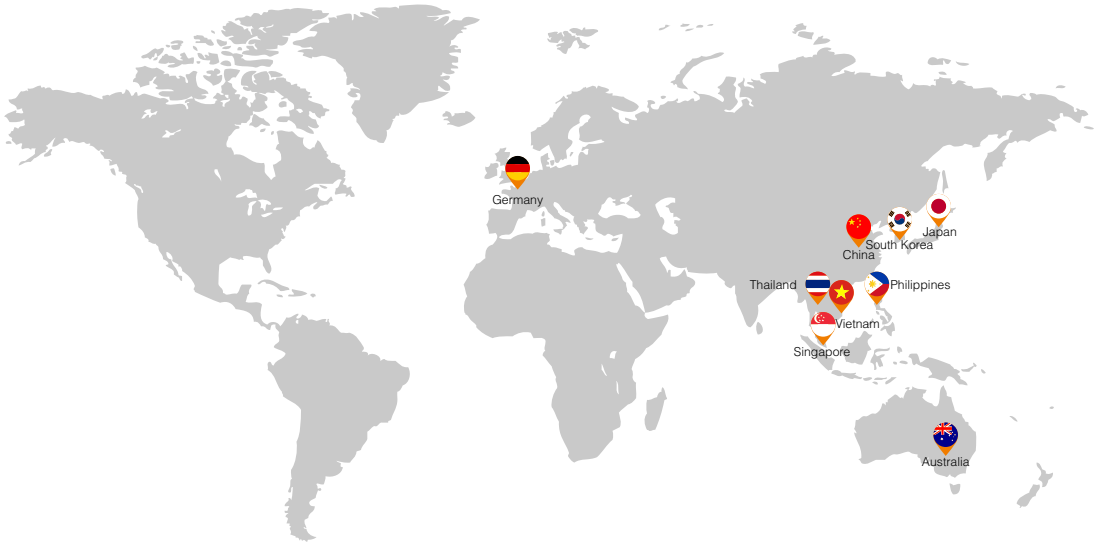
12GW of worldwide installations
Top 5 Solar Tracker Supplier in China
Largest share of the rooftop solar PV market in AU for 10 years
13 billion+ kWh green power generation capacity annually

Core Business

Global offering of solar products
Solar PV + Smart Energy Solution
610,000+ rooftop solar projects
10,000+ solar plants

Milestones

- **2007** - Clenergy was established as a Sino-Australian joint venture in Xiamen, China.
- **2008** - Clenergy Australia was established; Clenergy completed the development of its first PV-ezRack® series of mounting systems and patents were registered.
- **2009** - The PV-ezRack® series took a leading position in Australia's PV market.
- **2010** - New models of the PV-ezRack® series were released; SPH inverters were launched in Australia's PV market.
- **2011** - Strategic investments were brought in for public listing preparation; U.K. and U.S. branch offices were established.
- **2012** - Opening of Clenergy Tianjin factory.
- **2013** - Grand opening of Clenergy Technology Park in Xiamen; Establishment of Clenergy (Xiamen) Energy Engineering Co., Ltd.; Expansion into clean energy investment and EPC businesses; Establishment of Clenergy Japan.
- **2014** - Establishment of a joint venture - Clenergy (Xiamen) Energy Investment Co., Ltd. with Xiamen Hi-tech Innovation Center; Establishment of Malaysian office.
- **2015** - Establishment of Clenergy Thailand; Establishment of Clenergy Philippine office.
- **2016** - Passed the IPO audit - the first solar company with major business of solar racking approved on China A-share since 2012.
- **2017** - Clenergy (stock code: SHA 603628) stock was officially traded on Shanghai Stock Exchange on Jan 12, 2017. Establishment of Clenergy Global Projects GmbH.
- **2018** - Doubled the sales volume and shipped 1.7GW of solar products.
- **2019** - Ranked No.4 in Top 20 Chinese Solar Mounting System Companies.
- **2020** - Annual shipments reached 2GW in 2020; Bagged 293MW order in Shihezi, Xinjiang, making it the largest solar tracker project within China in 2020.



PV-ezRack® SolarRoof™

Robust Solution for PV Installation on Pitched Roofs

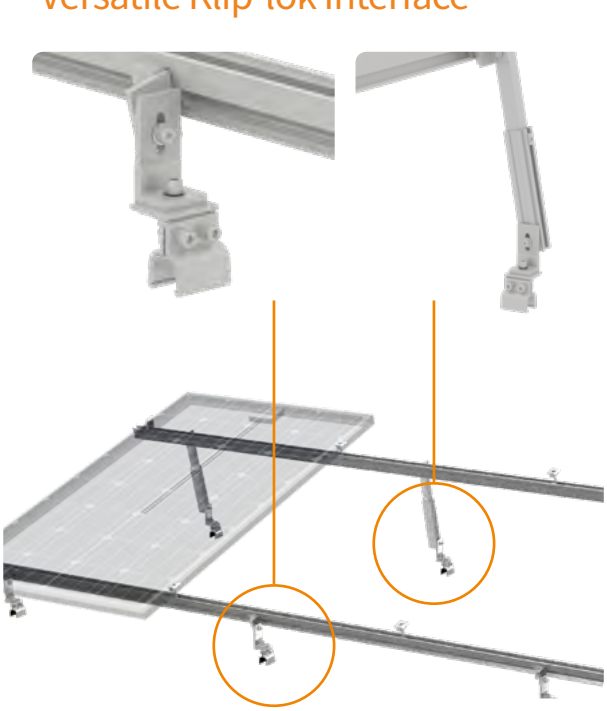
PV-ezRack® SolarRoof™ is a universal solution designed for PV-module installation on tin roof. Thanks to our Interfaces, Rails and Clamps with unique sectional property, PV-ezRack® SolarRoof™ System could offer robust structure and long lifecycle. Available with penetrative and non-penetrative solution on a large variety of roof types.

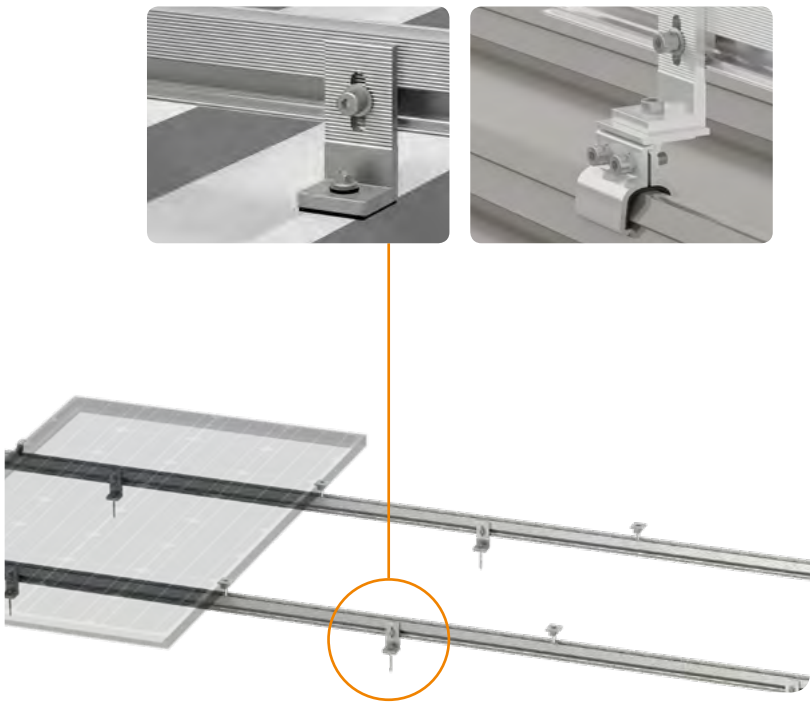
Technical Details

Module Orientation	Landscape or Portrait
Module Type	Framed I Frameless
Wind Load	Customized
Roof Type	Tin Roof
Tilt Angle	0°/10~15°/15~30°/30~60°
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Standard	ASCE 7-10 I AS NZS1170.2-2011 I EN1991 I JISC8955-2017

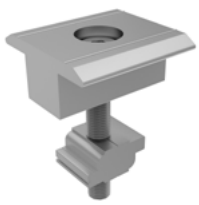
Main Benefits

- Quick and Easy Installation
- Versatile Klip-lok Interface





ER-EC-ST
End Clamp



ER-IC-ST
Inter Clamp

ER-R-ECO
ECO Rail

ER-SP-ECO
Splice for ECO Rail

I-05/6.3/85/C
Tin Interface with Carbon Steel Sheet Metal Screw 6.3x85 (metal purlin)

ER-I-32/45/M8
Klip-lok Interface 406 with U-opening

.....
more than 30 types of Klip-lok Interfaces

TL-10/15/L/PS, TL-15/30/L/PS
Adjustable Tilt Legs with L-feet

PV-ezRack® SolarTripod Light

Pre-assembled Residential and Commercial Flat Roof Mounting System

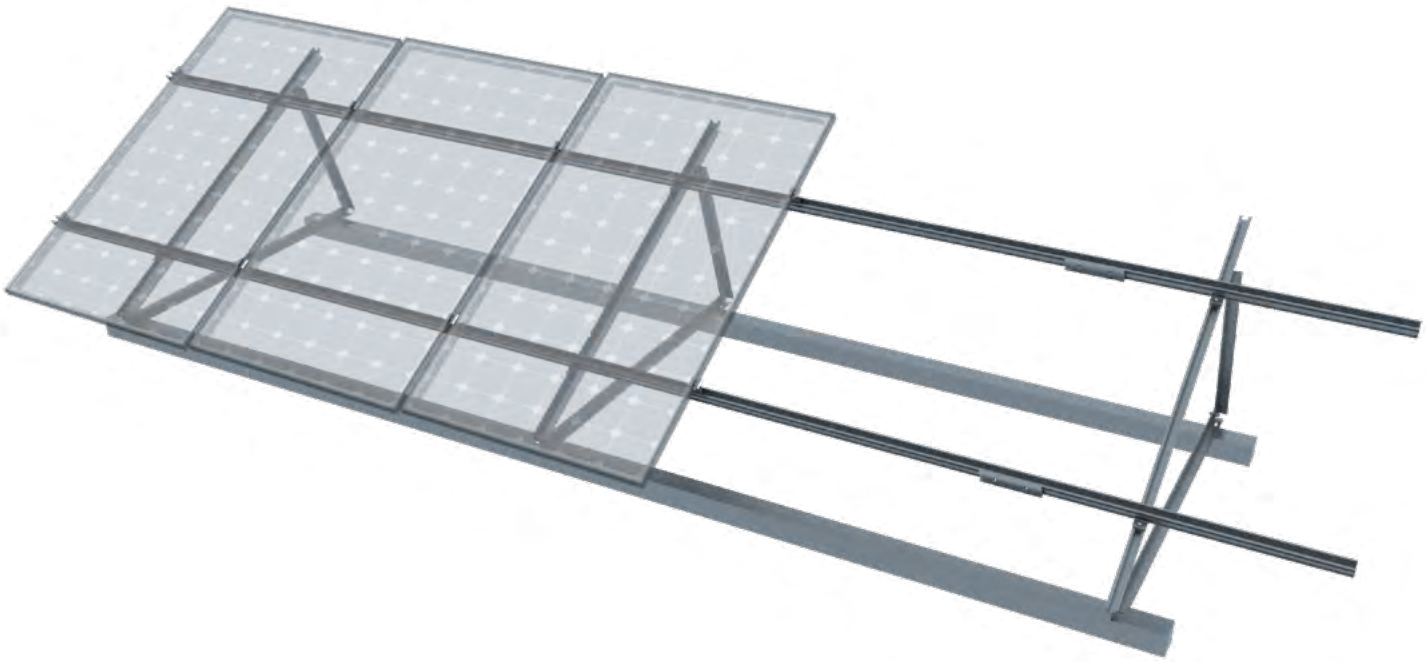
The PV-ezRack® SolarTripod Light with pre-assembled Supports, including pre-installed Rail Clamps, is an economical mounting system, which is suitable for residential and commercial flat roofs. It has the fastest installation speed in its class. This system is manufactured from structural grade aluminium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

Technical Details

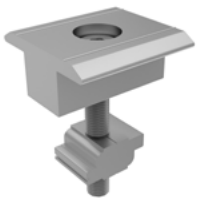
Module Orientation	Portrait or Landscape
Module Type	Framed I Frameless
Wind Load	Customized
Roof Type	Tin Roof or Flat Roof
Tilt Angle	10°~30°
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Standard	ASCE 7-10 I AS NZS1170.2-2011 I EN1991 I JISC8955-2017

Main Benefits

- Fast and Easy Installation
- Cost Reduction
- Grounding/Earthing Function
- Universal Application



ER-EC-ST
End Clamp



ER-IC-ST
Inter Clamp

ER-R-ECO
ECO Rail

ER-SP-ECO
Splice for ECO Rail

RC-ECO/G
Rail Clamp

ER-S-TRIL/S
Single Support
(Pre-assembled)

PV-ezRack® Ascent

Low Ballast Tilt Mounting System for PV Installation on Flat Roofs

The PV-ezRack® Ascent is a low ballast, south/north facing solution without rails for PV installation on flat roofs. With the special design and a tilt angle of 10° and 15°, PV-ezRack® Ascent will be suitable for PV module up to 2180x1100mm, height from 30mm to 46mm.

Main Benefits

Ballast Optimized
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.

Efficiency
With the click connections between Legs and Bases, no tools are used during the Legs and Bases assembly. 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 length up to 2180mm, widths up to 1100mm, PV-ezRack® Ascent offers flexible solutions and suitable for all framed PV panels with height from 30 to 46mm. Power optimizer, micro invertor can be easily accommodated.

Technical Details

Application	Flat roof
Setting Angle	10°/15°
Module Orientation	South/North: Landscape
Module Size	Width: 990-1100 mm Length: 1640-2180 mm Height: 30-46 mm
Snow Load	Customized
Wind Load	Customized
Material	Main Components: AL6005-T5 Wind Deflector: AL5052-H32 Fasteners: SUS 304
Certification	TUV
Standard	Eurocode 0-9 I AS NZS1170.2-2011 I JISC8955 I ASCE 7-10

FL-AC/10 FL-AC/15
Front Leg 10°/15°

RL-AC/10
Rear Leg 10°

Click in installation, manufactured from aluminum to offer excellent corrosion resistance.

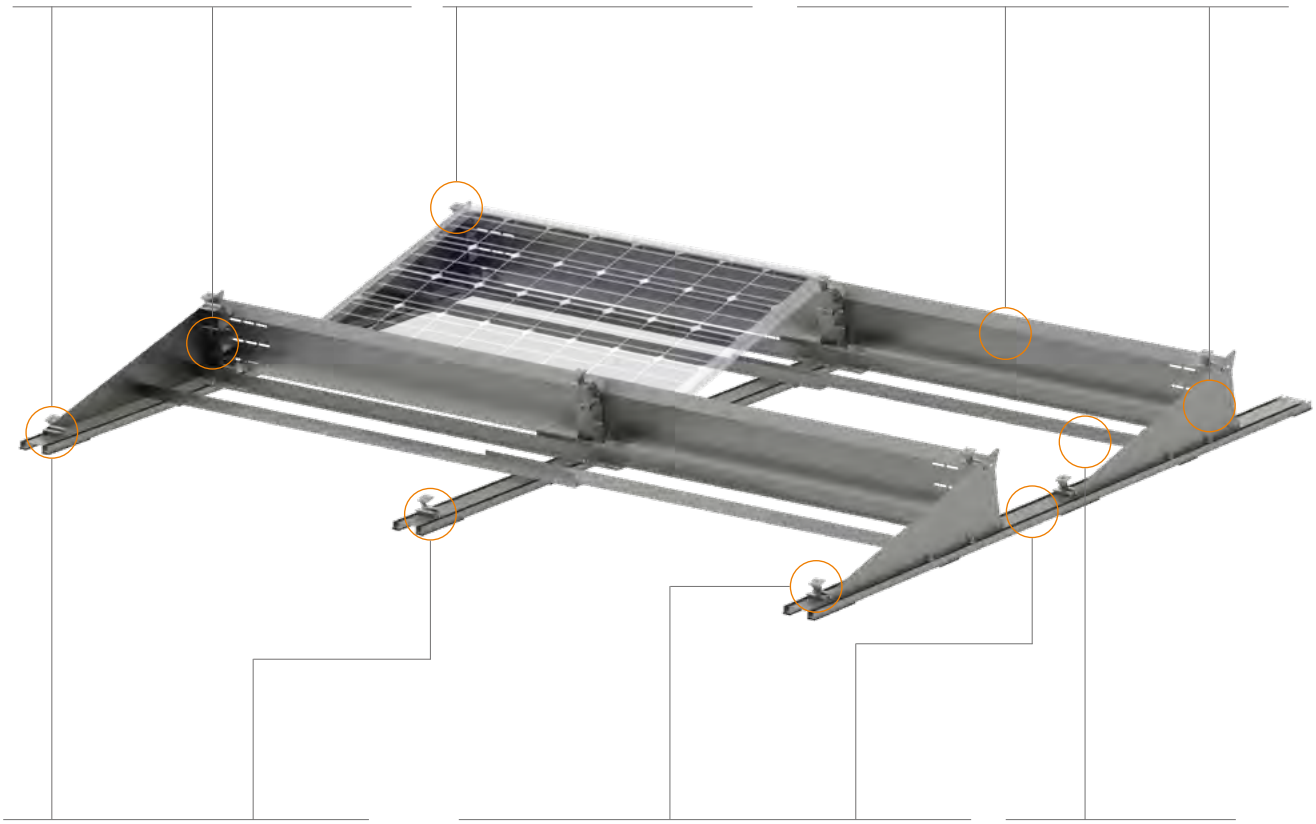
RLE-AC
Rear Leg Extension

Rear Leg Extension can be easily attached with Rear Leg 10° with a single screw, to achieve 15°.

WD-AC
Wind Deflector

SWD-AC
Side Wind Deflector

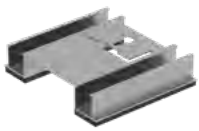
The wind deflector is fixed to the legs, normally installed on the end or side of array for deflecting wind and guaranteeing system stability.



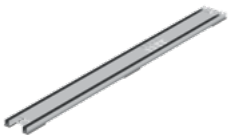
EC-M
End Clamp

IC-M
Inter Clamp

The PV-ezRack® Inter and End clamps offer a simple, easy to use and robust fixing of the PV panels.



SEB-AC/120
Start and End Base L120



MB-AC/SN
Main Base, South-north

With pre-fitted rubber pad. The Base is not attached to the roof surface to allow for water drainage.

ER-AA-50/XXXX/50
Angle AL

With a simple and robust design, this component efficiently fixes the ballast to the mounting structure.

PV-ezRack® Ascent Wings

Low Ballast Tilt Mounting System for PV Installation on Flat Roofs

The Clenergy PV-ezRack® Ascent Wings is a low ballast and rail-less system which provides optimal surface utilization and yield for structurally challenging roof with limited ballast options. The PV modules will be installed in landscape and can maximize energy production with multiple geometry options. Also with the special design and a tilt angle of 10° and 15°, our new PV-ezRack® Ascent Wings will be suitable for PV module up to 2180x1100mm, height from 30mm to 46mm.

Main Benefits

Ballast Optimized
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.

Efficiency
With the click connections between Legs and Bases, no tools are used during the Legs and Bases assembly. 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 length up to 2180mm, widths up to 1100mm, PV-ezRack® Ascent Wings offers flexible solutions and suitable for all framed PV panels with height from 30 to 46mm. Power optimizer, micro invertor can be easily accommodated.

Technical Details

Application	Flat roof
Setting Angle	10°/15°
Module Orientation	East/West: Landscape
Module Size	Width: 990-1100 mm Length: 1640-2180 mm Height: 30-46 mm
Snow Load	Customized
Wind Load	Customized
Material	Main Components: AL6005-T5 Wind Deflector: AL5052-H32 Fasteners: SUS 304
Certification	TUV
Standard	Eurocode 0-9 I AS NZS1170.2-2011 I JISC8955 I ASCE 7-10

FL-AC/10 FL-AC/15
Front Leg 10°/15°

RL-AC/10
Rear Leg 10°

Click in installation, manufactured from aluminum offer excellent corrosion resistance.

RLE-AC
Rear Leg Extension

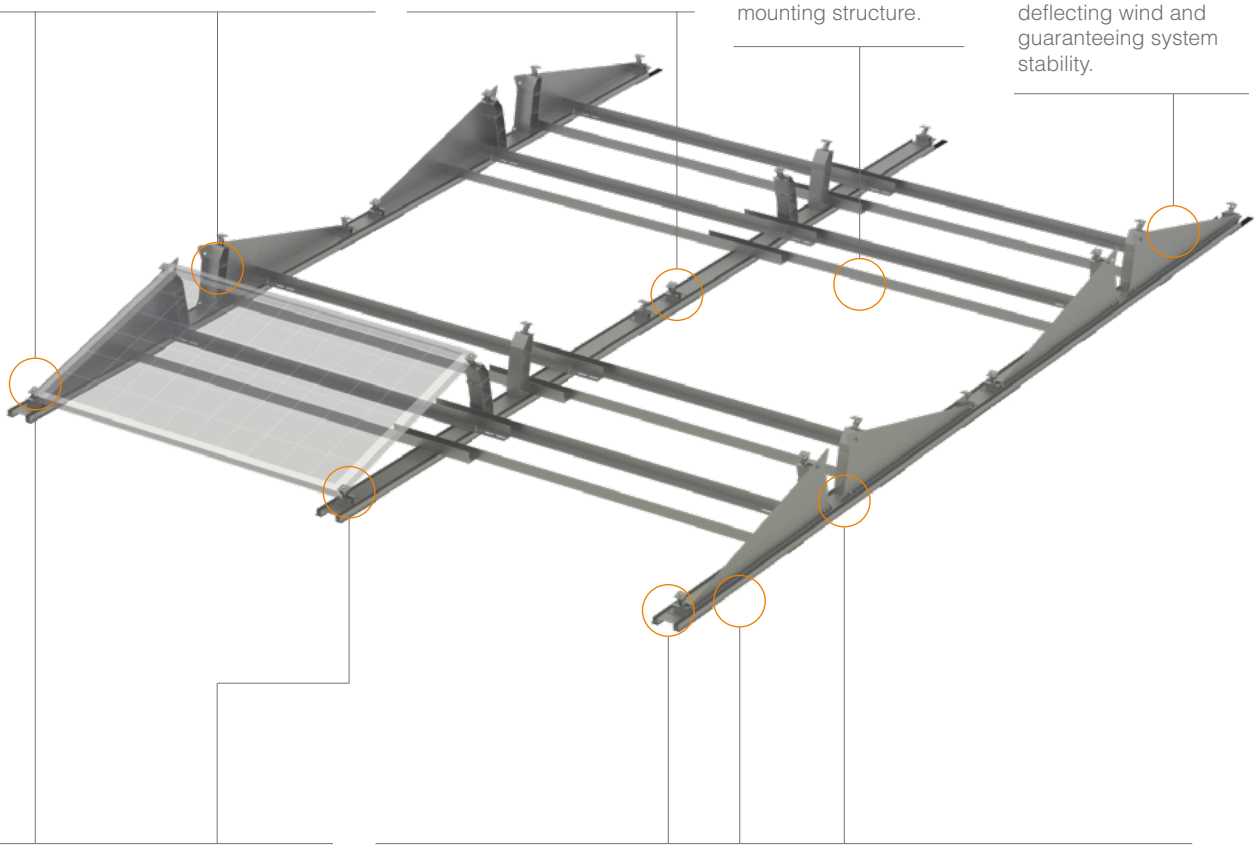
Rear Leg Extension can be easily attached with Rear Leg 10° with a single screw, to achieve 15°.

ER-AA-50/XXXX/50
Angle AL

With a simple and robust design, this component efficiently fixes the ballast to the mounting structure.

SWD-AC
Side Wind Deflector

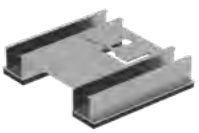
The wind deflector is fixed to the legs, normally installed on the side of array for deflecting wind and guaranteeing system stability.



EC-M
End Clamp

IC-M
Inter Clamp

The PV-ezRack® Inter and End clamps offer a simple, easy to use and robust fixing of the PV panels.



SEB-AC/120
Start and End Base L120

MB-AC/EW
Main Base, East- west

CB-AC/EW
Connection Base, East- west

With pre-fitted rubber pad. The Base is not attached to the roof surface to allow for water drainage.

PV-ezRack® ezShade Pergola

100% Waterproof PV Mounting System for Residential Projects

Manufactured from high quality structural grade and aluminium, PV-ezRack® ezShade Pergola is the perfect mounting solution for Residential concrete roofs. With the exquisite structure design, the waterproof function is available without using a large number of EPDM rubbers. All installations are carried out under the PV panels, which effectively improves installation efficiency while ensuring safety.

Main Benefits

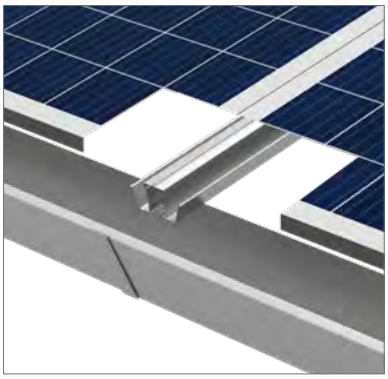
Safety
High safety performance and easy installation due to innovative clamp which can help fasten PV panels from bottom, avoiding the danger of cracking and preventing workers from falling.

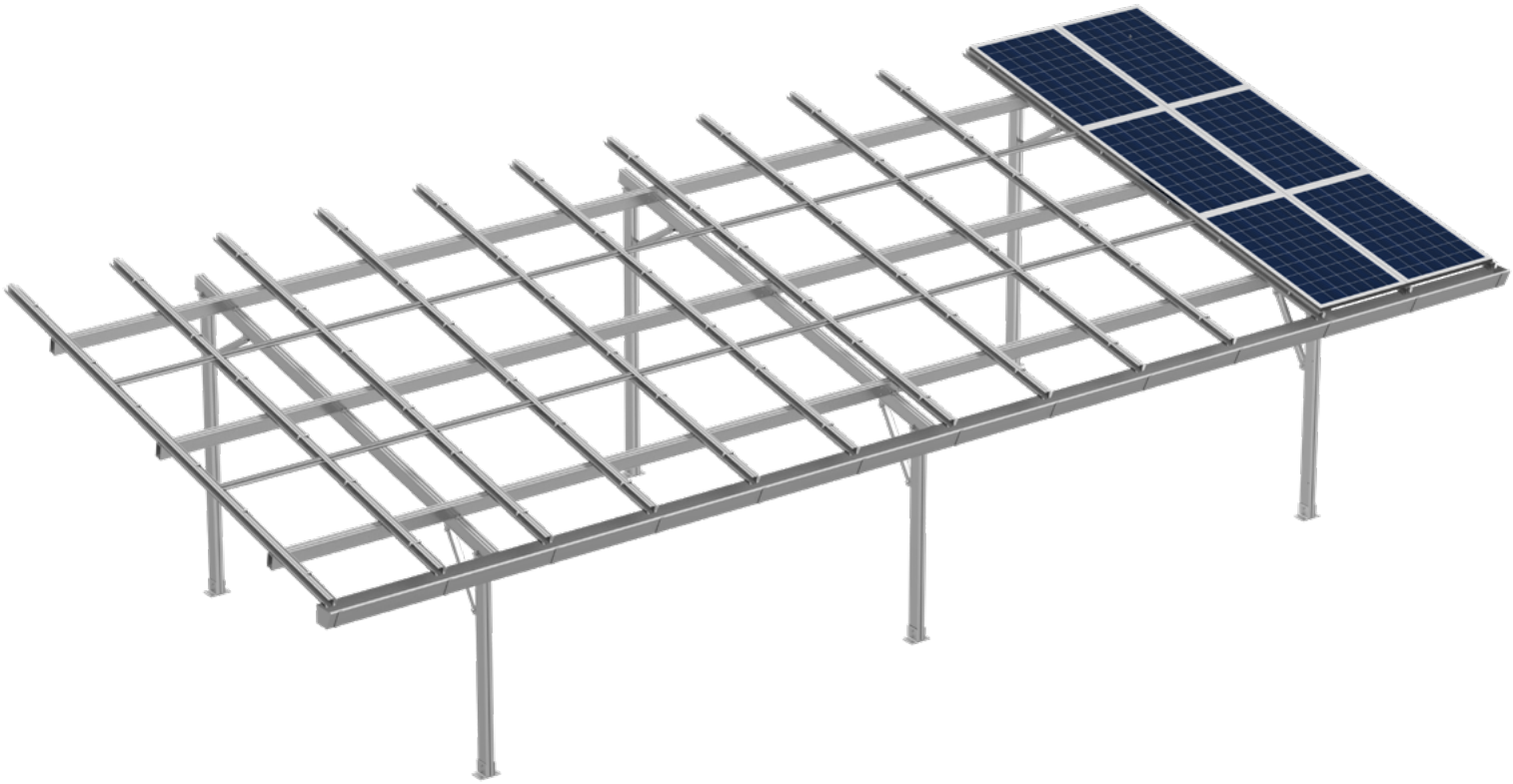
Waterproof
With the special water guide rails and Gutters install under the gap of PV modules, the system can have reliable waterproof function. Water will flow along the gap into the Gutters and water guide rails, finally into the ground.

Excellent Corrosion Resistance
Manufactured from high quality aluminum and stainless steel with excellent corrosion resistance, PV-ezRack® ezShade Pergola offers a reliable and durable solution.

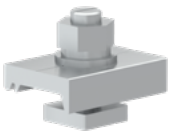
Technical Details

Module Orientation	Landscape or Portrait
Module Type	Framed
Wind Load	Customized
Tilt Angle	0-60°
Foundation	Concrete and Chemical Anchor
Wind Load	0.6KN/m^2 or customized
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Standard	GB50009-2012 I GB 50797-2012 I GB50352-2019 I AS/NZS 1170 I JIS C 8955

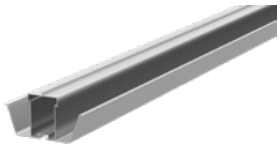




MC-SDP
Module Clamp



AC-SDP
Arcuated Clamp



R-SDP/70
Rail 70

GU-SDP
Gutter

RT-T-120
Rectangular Tube

BA-SDP/130
T Base 130

TJ-SDP/130
T Joint L130

G-SDP/120
Girder

PV-ezRack® SolarTerrace I

Galvanized Steel Ground Mounting Solution for Large Scale Projects

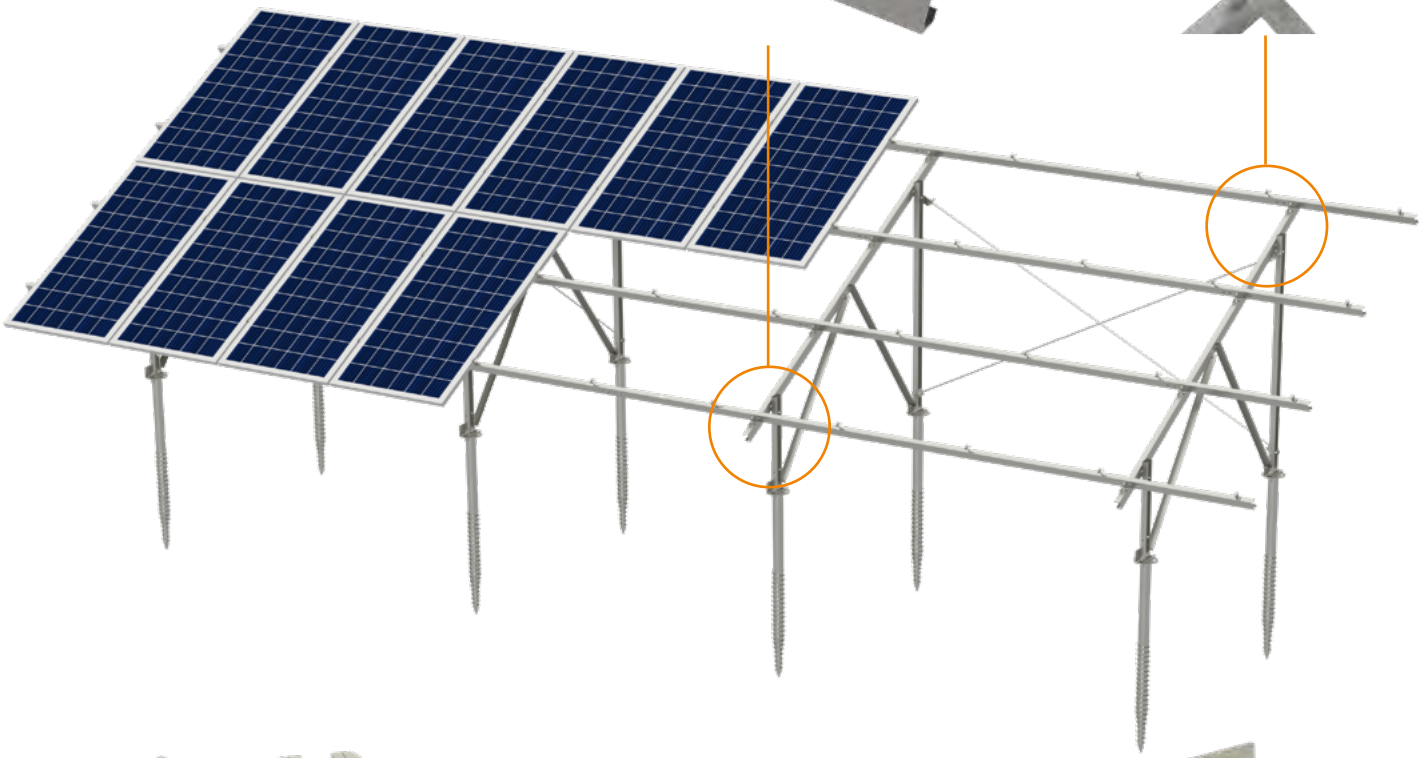
PV-ezRack® SolarTerrace I is an economic ground-mounting system suitable for commercial and utility scale PV installations. Manufactured from traditional hot dip galvanized steel with an average coating thickness of 65 microns (ASTM A123 standard), this system ensures a robust, reliable and economic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

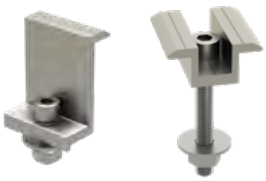
Technical Details

Module Orientation	Landscape or Portrait
Wind Load	Customized
Tilt Angle	Customized
Foundation	Ramming/Ground Screw/Concrete
Material	Main Structure: Galvanized Steel Fasteners: HDGS
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10

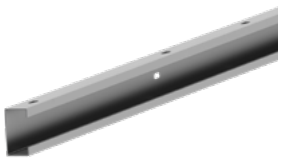
Main Benefits

- Price Advantage
- Three Foundation Solutions Available



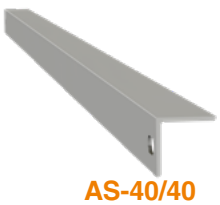


ER-EC-N & ER-IC-N
End Clamp, nut series & Inter Clamp, nut series



ER-R-C80/40
C Steel 80*40

ER-SP-C40/80
Splice for C Steel 80*40



AS-40/40
Angle Steel 40*40

CO-TR/63/60
Tie Rod Connector

B-100/63/200
L Base 100*63

AB-C60/100-2B
Angle Bracket for C-Steel

ER-TR
Tie Rod

GS-76/3.5/16-F1
Ground Screw

PV-ezRack® SolarTerrace MAC

Magnesium Aluminum Zinc Coating Steel Ground Mounting Solution

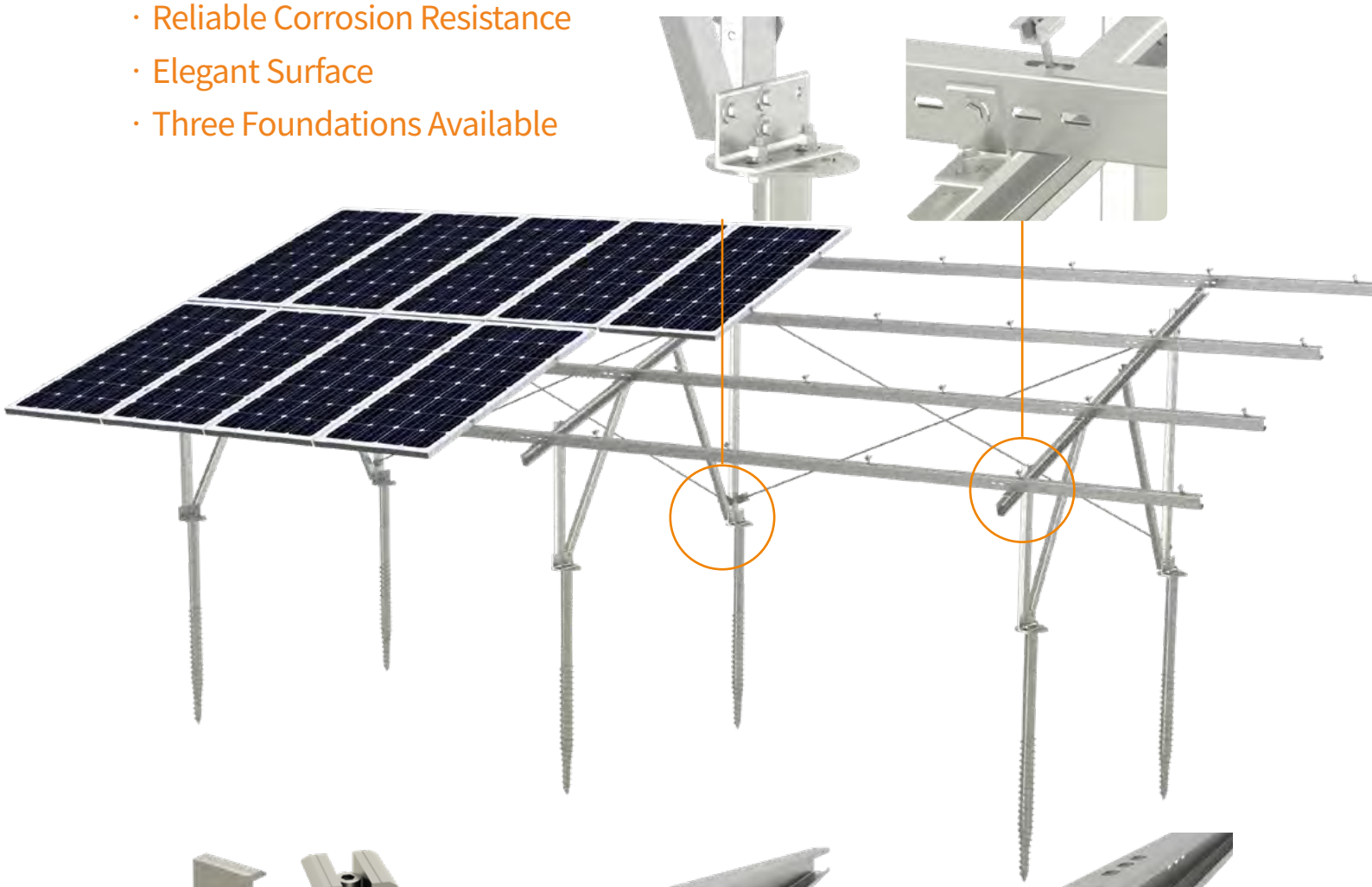
PV-ezRack® SolarTerrace MAC is an economic ground-mounting system suitable for commercial and utility scale PV installations. This system is manufactured from the latest magnesium aluminum zinc coating steel with reliable corrosion resistance and elegant surface.

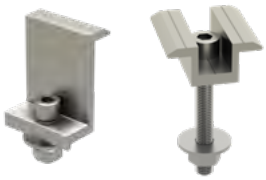
Technical Details

Module Orientation	Portrait or Landscape
Wind Load	Customized
Tilt Angle	Customized
Foundation	Ramming/Ground Screw/Concrete
Material	Main Structure: Magnesium Aluminium Alloy Coating Steel Fasteners: HDGS
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10

Main Benefits

- Reliable Corrosion Resistance
- Elegant Surface
- Three Foundations Available





ER-EC-N & ER-IC-N
End Clamp with nuts & Inter Clamp with nuts

R-C80/40-P
Rail & Girder

R-C60/40-P
Support

ER-TR-P
Tie Rod

GS-76/3.5/16-F1
Ground Screw

PV-ezRack® SolarTerrace Eco

Highly Pre-assembled Aluminum Ground Mounting System

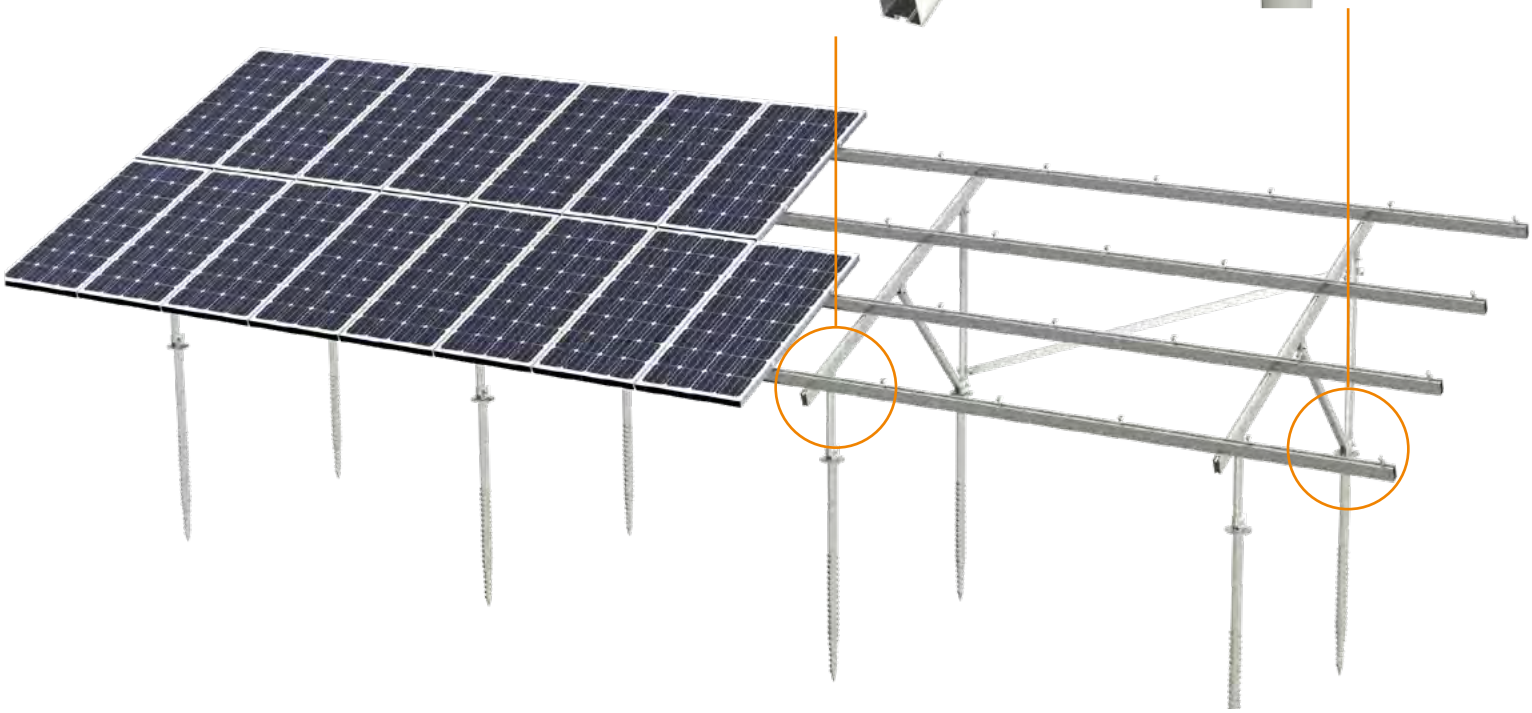
PV-ezRack® SolarTerrace Eco (ST Eco) is a highly pre-assembled ground mounting system, suitable for commercial installation and utility installation. Innovative M-module channel Rails are very convenient and helpful to improve the installation precision. Using high quality engineered components, ST Eco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

Technical Details

Module Orientation	Landscape or Portrait
Wind Load	Customized
Tilt Angle	Customized
Foundation	Ground Screw I Concrete
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10

Main Benefits

- Excellent Corrosion Resistance
- Easy and Fast Installation
- Versatility



ICII-M & EC-M/OM

Inter Clamp II, with M-module
& End Clamp, with M-module

ER-RCII-W

Rail Clamp II

BR-STEco/EW

Adjustable East-west Bracket

ER-R-TM

TM Rail

S-Eco/N

N-shaped Support (pre-assembled)

S-Eco/W

W-shaped Support (pre-assembled)

PV-ezRack® ezShade 2.0

Solar Parking Solution for Commercial and Residential Projects

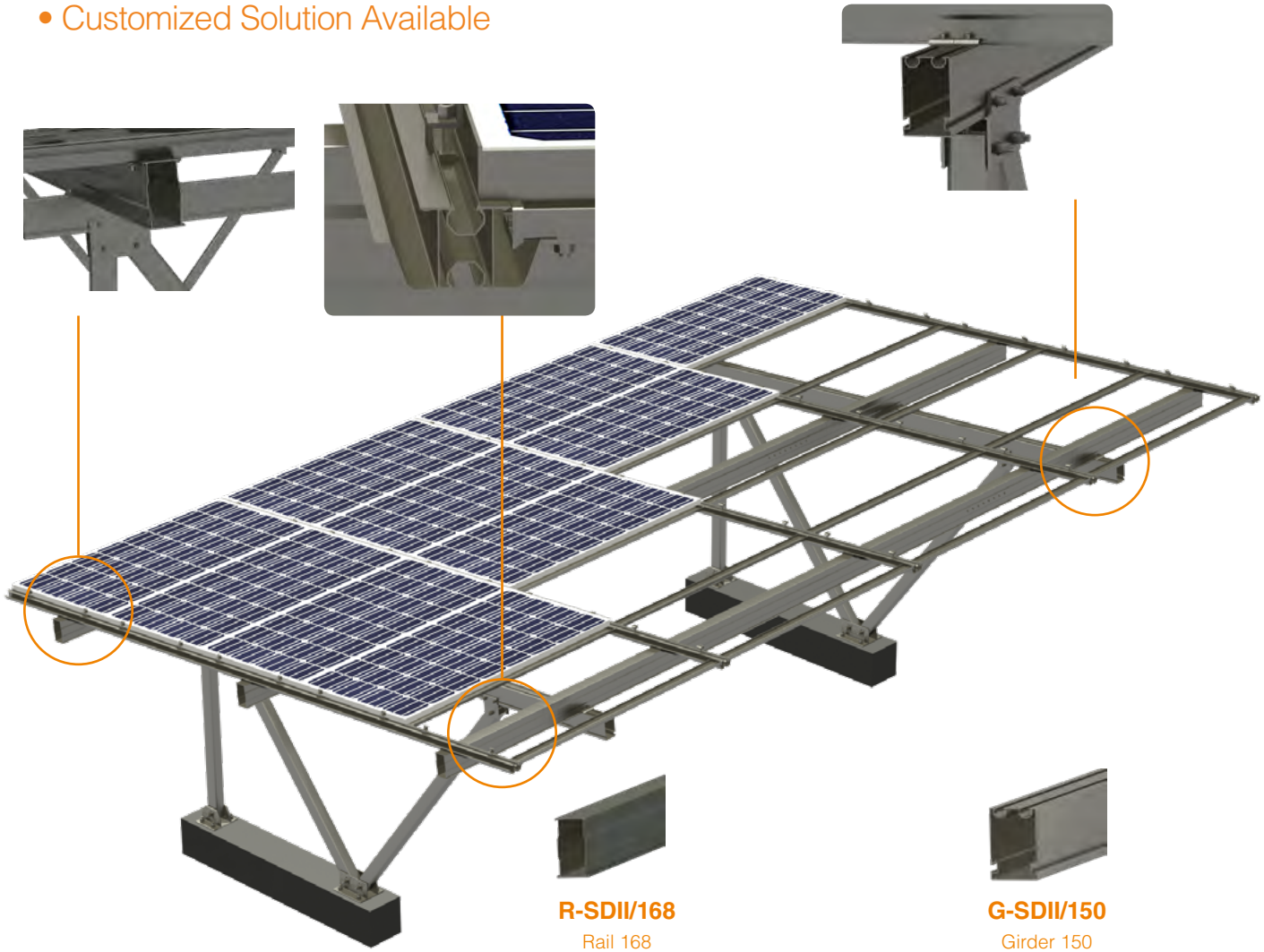
PV-ezRack® ezShade 2.0 is a solar parking solution providing solar panels support as well as car sheltering for residential and commercial projects. The high quality aluminum components and stainless steel fasteners ensure a robust and reliable system. With the exquisite structure design, the waterproof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

Technical Details

Module Orientation	Landscape or Portrait
Wind Load	Customized
Tilt Angle	5 ° or 10 °
Foundation	Concrete
Material	Main Structure: AL6005-T5 Fasteners: SUS 304
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10

Main Benefits

- Easy Installation
- Waterproof
- Excellent Corrosion Resistance
- Customized Solution Available

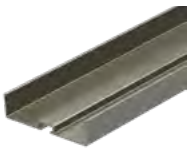


R-SDII/168
Rail 168

G-SDII/150
Girder 150

EC-W & ICII-W
End Clamp & Inter Clamp II

HJ-SDII/158/130
H Joint 130



GU-SDII/22
Gutter 22

BA-SDII/200
Corrugated T-Base 200

ER-R-T150
T-Rail, 150

R-SDII/60
Rail 60

PV-ezRack® SolarFloating Pro

Water-based Floating System for PV Installations

PV-ezRack® SolarFloating Pro is a water-based floating system supporting solar panels, suitable for numerous applications like lakes, ponds, pollution treatment plants, etc.

Thanks to the special design, the system features great cooling performance and can reduce the water surface shielding rate by 40% and increase the energy output by 3%. The combination of high-quality Zn-Mg-Al coating steel supports and HDPE floaters ensures a robust and durable solution.

Main Benefits

Maximum Energy Output
The area underneath the PV module is open without interfering with the reflected light in the rear, which maximizes energy efficiency.

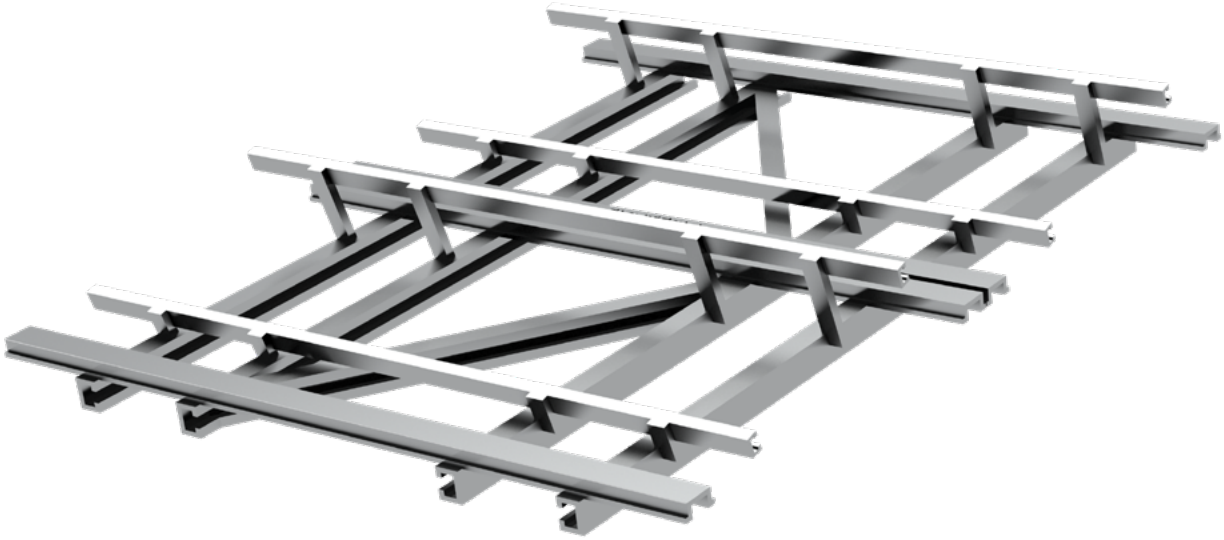
Excellent Compatibility
The system is compatible with both framed and frameless PV modules, and the tilt angle can be adjusted, providing the optimum solution for different regions.

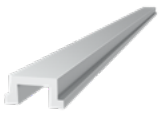
Excellent Wind Resistance
With the special design of a netlike supporting base, the system is stable and robust. Furthermore, the wind can easily spread from the top of the system.

Easy Maintenance
Thanks to the simple design using C-steel and U-steel, it is easy to transport and maintenance.

Technical Details

Module Orientation	Landscape and Portrait
Wind Load	Customized
Tilt Angle	Customized
Material	Support: Zn-Mg-Al Coating Steel Floater: HDPE Fasteners: HDGS or SUS304
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10





ER-R-U
U-Steel

ER-R-C
C-Steel

ER-SFP-F
HDPE Floater

PV-ezRack® SolarFloating II

Water-based Floating System for PV Installations

PV-ezRack® SolarFloating II is a water-based floating system supporting solar panels suitable for numerous applications like lakes, ponds, pollution treatment plants, etc. Thanks to the patented structure design, the system can help to maximize energy output and has good performance against strong winds such as typhoons. The combination of high quality aluminum supports and HDPE floaters ensures the robust and durable solution.

Technical Details

Module Orientation	Landscape
Wind Load	Customized
Tilt Angle	10 °~20 °
Material	Support: AL6005-T5 Floater: HDPE
Standard	AS NZS1170.2-2011 I EN1991 I JISC8955-2017 I ASCE 7-10

Main Benefits

- Maximum Energy Output
- Good Compatibility
- Excellent Wind Resistance
- Easy Maintenance

ER-EC-FL/N
End Clamp

R-SFII/LS
Rail

S-SFII/S
Support, Single

B-SFII/U
U-Shaped Base

TU-SFII/60/60
Two-groove AL-Tube

ER-AA
Angle AL

PV-ezRack® PostMount Pivot 1.0

Ground Mounting Solution for Large Scale Projects

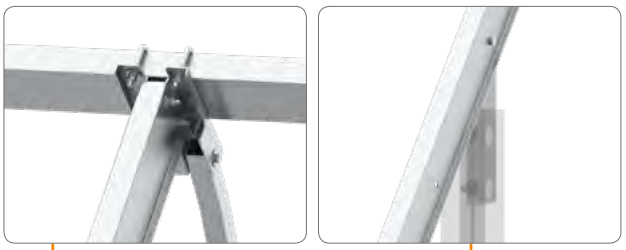
PV-ezRack® PostMount Pivot 1.0 is a ground mounting system suitable for large-scale utility and commercial installations. It adapts manual or electric tool adjustment, which is developed to cater to customer requirements. Thanks to the system with no need of motors and electric control systems, PV-ezRack® PostMount Pivot 1.0 reduces the risk of operation and maintenance as compared to the tracking system. Furthermore, with a wide tilt range of 0~60° achieved with the change of season, the system generates more energy than fixed-tilt systems.

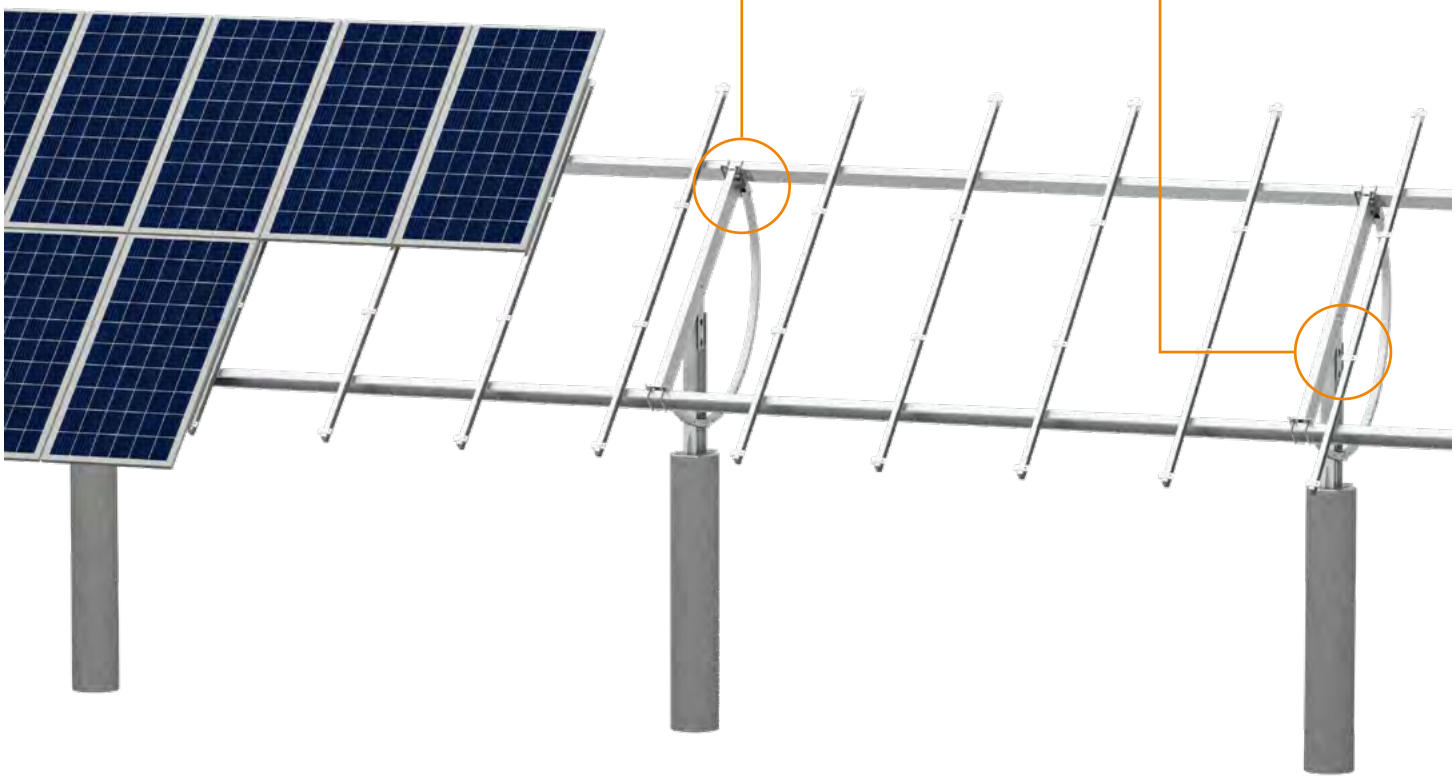
Technical Details

Module Orientation	Portrait/Landscape
Foundation	PHC Pile/Concrete Base/Steel Pile
Tilt Angle	0°-60°
Adjustable Accuracy	±2°
Corrosive Resistance	Below C5 or Customized
Wind Load	0.6KN/m^2 or Customized
Snow Load	0.5KN/m^2 or Customized
Material	Hot-dip Galvanized Steel or Zn-Mg-Al Coating Steel
Standard	GB 50797
Adjustable Tool	Hand-wheel or Electric tools

Main Benefits

- Easy Adjustment
- Excellent Corrosion Resistance
- Maximum Energy Output
- Excellent Compatibility





R-C140/70
Beam for Steel

DFG21OT11774-05
Bracket

R-C70/40
Purlin for C Steel

R-OM140/70/ Girder

DFG21OT11774-06
Bracket for Arc Beam

DFG21OT11774-02
H Post

DFG21OT11774-01
Post Head for H Post

DFG21OT11774-03
Arc Beam Support

DFG21OT11774-04
Bracket for PV module

EzTracker D Series

Horizontal Single-Axis Tracker with a Distributed System & 2 x Portrait or 1 x Portrait Layout

EzTracker D series Horizontal single-axis tracking system has the characteristics of high system stability, strong terrain adaptability, and easy maintenance. The system adopts the "astronomical algorithm + closed-loop control" method to realize the system automatically tracks the position of the sun and improves the overall power generation of the solar farm. Compared with the fixed-tilt rack, the power generation can be increased by up to 20%. And it can be increased by 25-30% with the combination of Bifacial PV Module.

TUV Certification

RWDI Wind Tunnel Test

WACKER Wind Tunnel Test

Main Benefits

Irregular Site Adaptability

With distributed actuation architecture, EzTracker D series can be flexibly used for hills and irregular terrains. While linked row systems need to pay attention to both north-south and east-west slopes, EzTracker D series offer complete freedom in east-west slope tolerance, and offer slope tolerance up to 10% to 20% to North-South direction, reducing the leveling work, and shortening the construction time.

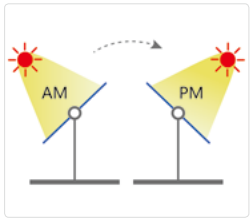
Multiple Configurations Available

EzTracker D series have a variety of optional configurations, allowing for choosing the best combination for each project. The power supply mode can be AC Grid Power Supply or DC Self-Power Supply; Communication mode can be cable RS485 communication or wireless Zigbee communication. Drive mode can be Slew drive or linear drive.

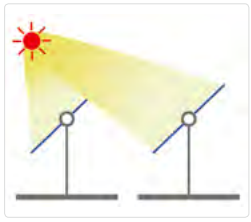
Easy Maintenance

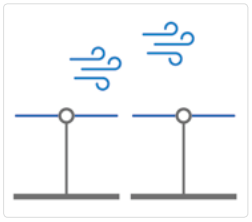
Clenergy designs EzTracker D series for easy maintenance in line with the principle of customer-orientation, with lubrication-free bearing, daily tracking calibration, a mobile app for commissioning, etc.

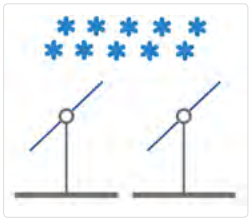
Work Mode

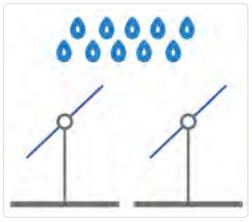


Standard Tracking Mode


BackTracking Mode


Wind Protection Mode


Snow & Hail Protection Mode


Rain Cleaning Mode

D1P Technical Details

PV-Modules

PV-Modules supported	Fully compatible with 180-210 silicon wafers' PV-Module-600W+

Structure

Type	Horizontal single-axis tracker
Maximum capacity per row	≤49kWp (Estimated with 545W PV-Modules)
PV-Modules quantity per row	90 PCS (1x90)
Tracking range	±60°(120°)
Tracking accuracy	≤2°
Structural materials	HDG Steel, Al-Mg-Zn Coating Steel
Foundation	Steel pile, PHC pile, Concrete foundation
Quantity of foundation/MW	Normally about 250 PCS/MW (Estimated with 545W PV-Modules)

Electrical

Motor type	24V DC Motor
Motor quantity	1 motor per row
Drive method	Slew drive
Solar tracking method	Astronomical algorithm + closed-loop control
Control system	MCU
Data feed	Modbus over RS485
Signal transmission	Wire or wireless (Zigbee)
Backtracking	Yes
Manual operation	Yes
Power supply	Self-powered or grid-powered
Commission	By mobile phone App
1000V System or 1500V System	Both available

Protection Function

Night stow mode	Yes
Overheat prevention	Yes
Overload prevention	Yes
Troubleshooting available	Yes (Driving abnormally > Self-diagnostics)

Environment

Wind load	Customisable according to local condition
Operating temperature	-30℃ to +60℃

Civil and Installation

Slope tolerance	North-south 10%~20%, East-west no limits
Special tools	Not required

Other

System design standard	GBT29320-2012, IEC 62817
Load design standard	GB 50009, ASCE 7-05, ASCE 7-10 (According to project)

Application Range

Mountainous Area

Desert Area

Agriculture+PV Project

Fishery+PV Project

D2P Technical Details

PV-Modules

PV-Modules supported	Fully compatible with 180-210 silicon wafers' PV-Module-600W+

Structure

Type	Horizontal single-axis tracker
Maximum capacity per row	≤65kWp (Estimated with 545W PV-Modules)
PV-Modules quantity per row	2x45 (Extendable to 2X60)
Tracking range	±60°(120°)
Tracking accuracy	≤2°
Structural materials	HDG steel, Al-Mg-Zn coating steel
Foundation	Steel pile, PHC pile, Concrete foundation
Quantity of foundation/MW	Normally about 170 PCS/MW (Estimated with 545W PV-Modules)

Electrical

Motor type	24V DC Motor
Motor quantity	2 motors per row
Drive method	Slew drive
Solar tracking method	Astronomical algorithm + closed-loop control
Control system	MCU
Data feed	Modbus over RS485
Signal transmission	Wire or wireless (Zigbee)
Backtracking	Yes
Manual operation	Yes
Power supply	Self-powered or grid-powered
Commission	By mobile phone App
1000V System or 1500V System	Both available

Protection Function

Night stow mode	Yes
Overheat prevention	Yes
Overload prevention	Yes
Troubleshooting available	Yes (Driving abnormally > Self-diagnostics)

Environment

Wind load	Customisable according to local condition
Operating temperature	-30℃ to +60℃

Civil and Installation

Slope tolerance	North-south 10%, East-west no limits
Special tools	Not required

Other

System design standard	GBT29320-2012, IEC 62817
Load design standard	GB 50009, ASCE 7-05, ASCE 7-10 (According to project)

Test

Wind Tunnel Test

Mechanical Accelerated Test

EzTracker D2P Pro

Newest Generation 2 x Portrait Smart Solar Tracking System

EzTracker D2P Pro is characterized by high system stability throughout the life cycle, maximizing the energy output for solar plants. Thanks to the patented multi-drive design, the system can still maintain excellent aeroelastic stability in extreme weather without dampers. Furthermore, EzTracker D2P Pro can be flexibly used for sites with challenging soils, high winds, and irregular terrains. This system delivers a perfect solution for "Agriculture+PV" and "Fishery+PV" projects.

Higher Power Density

With flexible 2P module configuration, EzTracker D2P Pro requires only nine posts to support up to 120 modules with 4×1,500V-strings.

Lower Construction Costs

Thanks to the innovative multi-drive design, no complicated transmission mechanism is required during installation and debugging. EzTracker D2P Pro also requires fewer parts, fasteners, and foundations for one single solar tracker per megawatt, which allows for significant savings of labor costs and shorter construction time even on challenging sites.

Higher Generation Performance

EzTracker D2P Pro is compatible with monofacial or bifacial PV modules up to 600W+. And it is integrated with the advanced AI control and energy yield enhancement platform.

Better Quality & Reliability

Quality and reliability are taken into account for the design and testing of every component and system across our supply chain and manufacturing operations. Optimized based on dynamic wind analyses, EzTracker ensures uptime and long-term durability.

Features and Benefits

Industry-leading

Multi-drive system for maximum aeroelastic stability

Bifacial-suited

Maximum energy output, with power generation increased up to **30%**

Advanced Smart Control

Energy yield enhancement platform

Flexible Adaptability

Up to **20%** N-S slope tolerance, with flexible layout for irregular terrains

PV-Modules

PV-Modules supported	Fully compatible with 180-210 silicon wafers' PV-Module- 600W+

Structure

Type	Horizontal single-axis, independent row
Maximum capacity per row	≤65kWp (Estimated with 545W PV-Modules)
PV-Module quantity per row	Up to 120 modules, depending on module string length
Bifacial features	Available with optimized central torque tube gap
PV-Module configuration	2 in portrait 4 x 1,500 strings per standard tracker
PV-Module attachment	Self-grounding and electrical tool-actuated
Tracking range	±60°(120°)
Tracking accuracy	≤2°
Ground coverage ratio (GCR)	30% to 50%
Structural materials	HDG steel
Foundation	Steel pile/PHC pile/Concrete foundation
Quantity of foundation/MW	Normally about 135 PCS/MW (Standard W8 section foundation posts)

Electrical

Motor type	24V DC motor
Drive method	Patented multi-drive
Solar tracking method	Astronomical algorithm + closed-loop control integrated AI control tracking algorithm
Signal transmission	Wire (RS485) or wireless (Zigbee)
Backtracking	Yes
Power supply	Option1: Array powered, integrated backup battery Option2: AC powered, customer-provided AC circuit

Protection function

Night stow mode	Yes
Wind protection	Intelligent wind stowing with self-locking Multi-drive system for maximum array stability in all wind conditions

Environment

Wind load	Customisable according to local condition
Operating temperature	Array powered: -20°C to 60°C AC powered: -30°C to 60°C

Civil and Installation

Slope tolerance	North-south up to 20%, East-west with no limits
Special tools	Not required

Other

Onsite training & commissioning	Yes
Codes and standards	UL 3703 I UL 2703 I IEC 62817
Warranty	10 years for main structure 5 years for drive and control components

China **100MW** SolarRoof

China **36MW** SolarRoof

Australia **1.2MW** SolarRoof

Philippines **4.77MW** SolarRoof

UK **3.8MW** Trapezoidal

Thailand **3.3MW** SolarRoof

Vietnam **138MW**
SolarTerrace I

Vietnam **100MW**
SolarTerrace I

Vietnam **80MW**
SolarTerrace Eco

Cambodia **39MW**
SolarTerrace Eco

Japan **52MW**
SolarTerrace V

Japan **51MW**
SolarTerrace II-A

Philippines **60MW**
SolarTerrace I

Philippines **20MW**
SolarTerrace I

US **38.7MW**
SolarTerrace II-A

South Korea **9MW**
SolarTerrace Eco

Thailand **8MW**
SolarTerrace I

Thailand **8MW**
SolarTerrace I

China **60MW** SolarTerrace I

China **52MW** SolarTerrace I

China **50MW** Customized Solution

China **293MW** EzTracker

China **55MW** EzTracker

Vietnam **50MW** EzTracker

Clenergy
Innovating renewable energy

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 EMEA
Esplanade 41, 20354 Hamburg, Germany
Tel: +49 (0) 40 3562 389 00
E-mail: sales.emea@clenergy.com

Clenergy Japan
Nittochi Yamashita Building 5th Floor
23 Yamashita-cho, 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 8407240
E-mail: sales_ph@clenergy.com
www.clenergy.ph

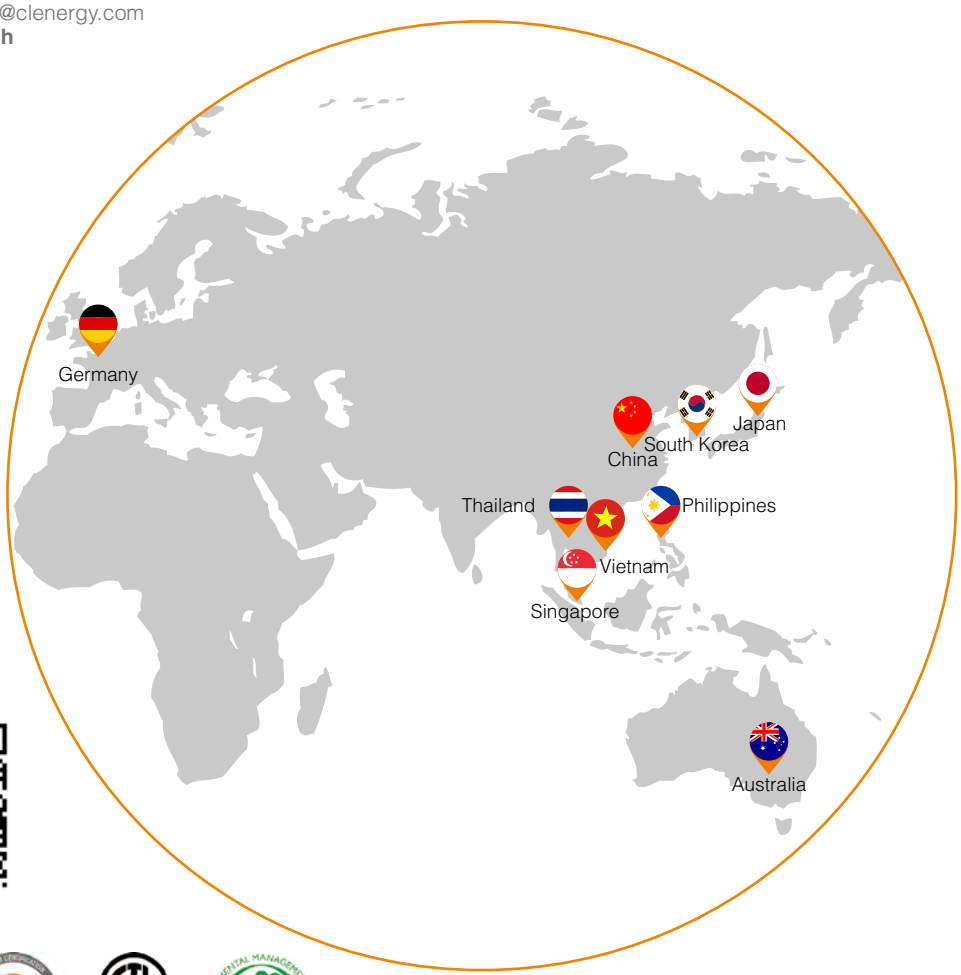
Clenergy Thailand
9/2, 5th Floor, Vorasin Building, Soi Yasoob 2, Viphavadee-Rungsit Road, Chomphon Sub-district, Chatuchak District, Bangkok 10900
Tel: +66 (0) 2 277 5201, +66 (0) 6 3228-0200
E-mail: sales_th@clenergy.com, support_th@clenergy.com
www.clenergythailand.com

Clenergy Singapore
24 Raffles Place #28-01 Clifford Centre Singapore 048621
Tel: +65 9873 8286
E-mail: vincent.chan@clenergy.com

Clenergy Malaysia
Tel: +86 18750231005
E-mail: sales_em@clenergy.com

Clenergy Vietnam
Tel: +65 9873 8286
E-mail: sales_vietnam@clenergy.com

Clenergy Korea
Tel: +65 9873 8286
E-mail: sales.kr@clenergy.com



More Products