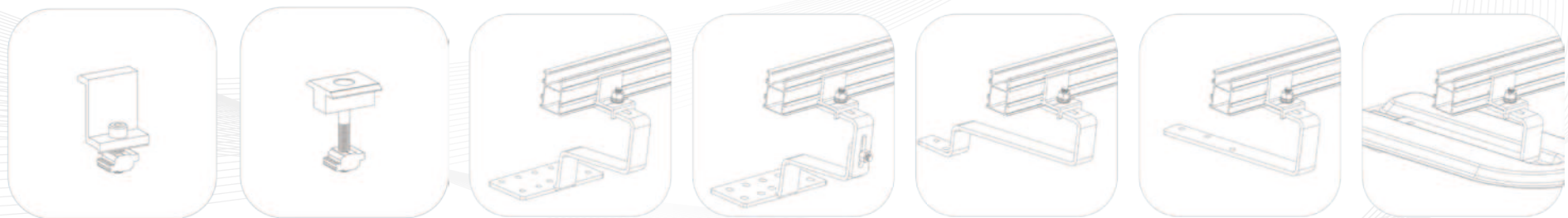


■ **PV-ezRack SolarRoof Pro Catalogue**



Clenergy Profile

Clenergy is a technology company which designs, manufactures and distributes a range of renewable energy products for the Solar Photovoltaic market. Our solutions address the needs of residential, corporate and utility scale customers.

We are a multinational organization, headquartered in Xiamen in China with offices in Australia, Germany, the United Kingdom and the United States. Clenergy employs over 200 people. We conduct research and development globally with facilities in the United Kingdom, China and Australia.

Our products and solutions are marketed and distributed through a worldwide network of strategic partners and distributors.

Clenergy products are installed in over 17 countries.

Clenergy is committed to the design and manufacture of products which meet the highest quality standards and is ISO9001 accredited.

Mission Statement

Our mission is to make renewable energy affordable and accessible.

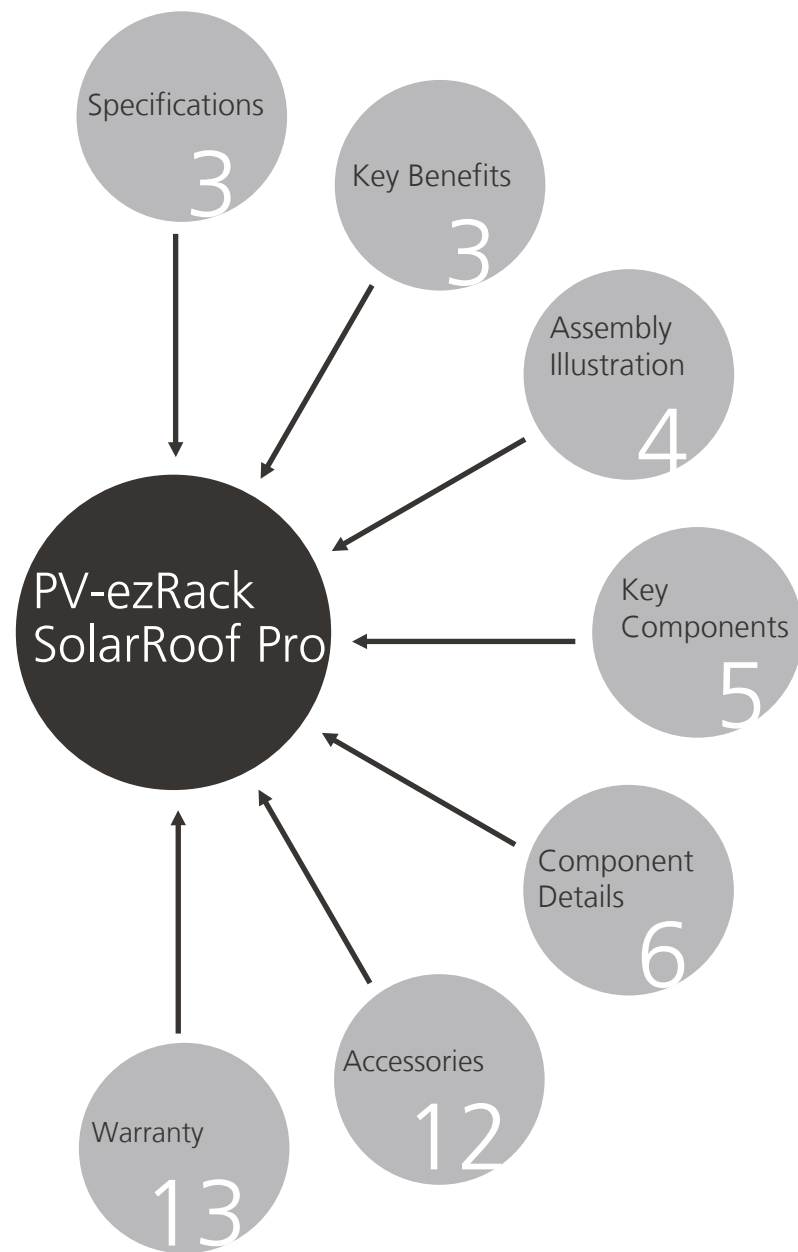
Clenergy Products

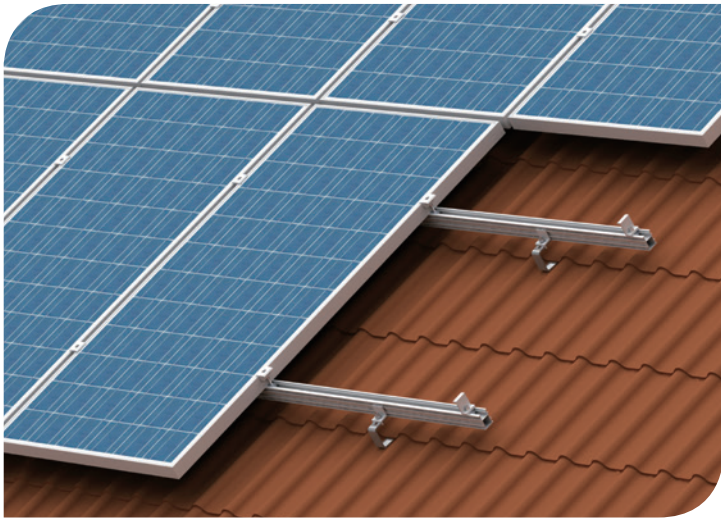
Clenergy's innovative, award winning products are designed to exacting quality standards which meet or exceed all relevant international standards. With our concentration on simplicity and quality, our products are easy to install and maintenance free, saving time, giving piece of mind and offering great value.

The Clenergy Product Range includes

- **PV-ezRack SolarRoof Pro**
(Pitched on-roof mounting system)
- **PV-ezRack SolarTripod**
(Mechanically fixed flat roof mounting system)
- **PV-ezRack BIPV Roof**
(Pitched in-roof mounting system)
- **PV-ezRack SolarMatrix Pro**
(Ballasted flat roof mounting system)
- **PV-ezRack SolarTerrace II**
(Ground mounting system for larger projects)
- **PV-ezRack SolarTerrace III**
(Ground mounting system for smaller projects)
- **SolarPowerHouse Inverters**

Table of Content





Specifications

Function	Pitched roofs
Roof Covering	Tiles or slates
Roof Pitch	15° to 60°
Max. Building Height	20m
Module Type	Suitable for all PV Modules from 28mm to 57mm deep
Module Orientation	Landscape or portrait
Standards	DIN 1055
Material	Anodized aluminium
Warranty	10 years



Key Benefits

Easy and Fast Installation

Pre-assembled roof hooks with our innovative ezclip attached allow the rail to simply snap into place. Our ingenious z-modules which as part of our module clamps make mounting the PV Module very fast and effortless. Using PV-ezRack SolarRoof Pro make installations a breeze and offer the most advantageous and cost-effective solution.

Versatile Application

With a full range of roof hooks, PV-ezRack SolarRoof Pro is suitable for almost all pitched roofs, including tiled, slated or even corrugated sheet roofs sometimes used on out buildings. PV modules are easily mounted in portrait or landscape orientation.

Great Compatibility

Designed as a universal PV mounting system, SolarRoof Pro is compatible with most PV modules on the market from 28mm to 57mm deep.

Outstanding performance

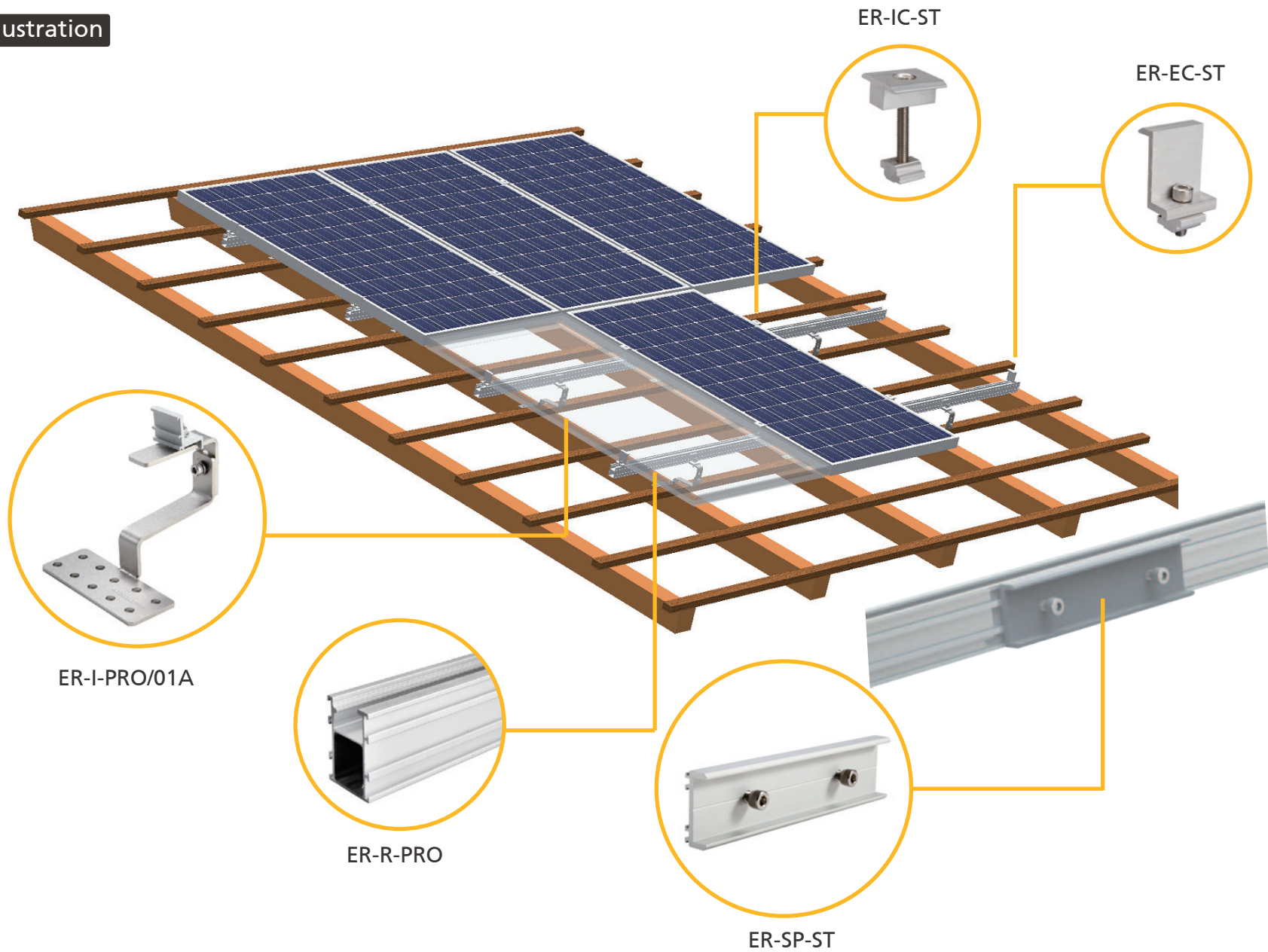
All our high quality components are anodized aluminium, aluminium or stainless steel to prevent corrosion and ensure long term effectiveness. Clenergy provides a **10-year product warranty**.

PV-ezRack SolarRoof Pro

The New Universal Roof Mounting System

Clenergy's PV-ezRack SolarRoof Pro is a roof-mounting solution suitable for most types of pitched residential slate or tiled roofs. Using our innovative PV-ezRack Rail, Z-modules and roof hooks, PV-ezRack SolarRoof Pro is one of the most versatile rooftop solutions in the world, delivering a safe and cost-effective solution to installers.

Assembly Illustration

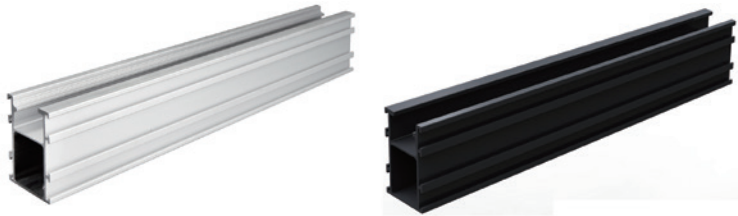


Key Components



☛ PV-ezRack SolarRoof Pro Roof Hooks

PV-ezRack SolarRoof Pro offers a variety of new hooks for different roof claddings. All roof hooks are supplied as a kit including coach screw and our ezClip allowing the rail to snap into place.



☛ PV-ezRack SolarRoof Pro Rail

The new and innovative PV-ezRack SolarRoof Pro rail is designed to increase spans and lower weight. SolarRoof Pro rail is anodized as standard and available in silver or black.



☛ PV-ezRack End Clamp & Inter Clamp, Standard

The PV-ezRack End and Inter Clamps reduce the installation time by using our unique Z-Module technology. We provide natural silver and black anodized clamps.

Component Details

Tile Roof Interfaces



ER-I-PRO/01

*PV-ezRack SolarRoof Pro,
Tile Interface for light to medium snow load*

- Roof Hook (Height: 132mm/5.2")
- Sharp-point Wood Screw
M8x80(5/16" x 3 1/4")
- PV-ezClip 30(1.2")



ER-I-PRO/03

*PV-ezRack SolarRoof Pro,
Tile Interface for heavy snow loads*

- Roof Hook (Height: 145mm/5.7")
- Sharp-point Wood Screw
M10x100(1/2" x 4")
- PV-ezClip 35(1.4")



ER-I-PRO/01A

*PV-ezRack SolarRoof Pro, Tile Interface
Adjustable for light to medium snow load*

- Roof Hook (Height: 117-147mm
/4.6"-5.8", adjustable)
- Sharp-Point Wood Screw
M8x80 (5/16" x 3 1/4")
- Hex Nut M8 (5/16")
- Hexagon Socket Bolt
M8x25(5/16" x 1")
- Washer M8.4 (5/16" x 1")
- Flat Washer M8.4(5/16")
- PV-ezClip 30(1.2")



ER-I-PRO/03A

*PV-ezRack SolarRoof Pro,
Tile Interface Adjustable for heavy snow loads*

- Roof Hook (Height: 120-150mm
/4.7"-5.9", adjustable)
- Sharp-point Wood Screw
M8x80(5/16" x 3 1/4")
- Hex Nut M8(5/16")
- Hexagon Socket Bolt
M8x25(5/16" x 1")
- Washer M8.4(5/16" x 1")
- Flat Washer M8.4(5/16")
- PV-ezClip 35(1.4")

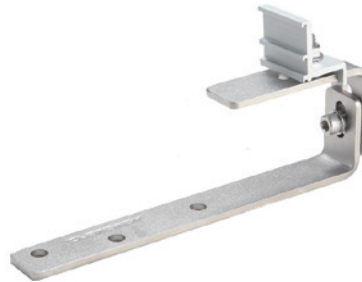
Slate Tile Interfaces



ER-I-PRO/04

*PV-ezRack SolarRoof Pro,
Slate/Prefa Interface*

- Slate Roof Hook (Height: 75mm/3.0")
- Sharp-point Wood Screw
M8x80(⁵/₁₆" x 3¹/₄")
- PV-ezClip 30(1.2")



ER-I-PRO/04A

*PV-ezRack SolarRoof Pro,
Slate/Prefa Interface Adjustable*

- Slate Roof Hook (Height: 60-90mm/
2.4"-3.5", adjustable)
- Sharp-point Wood Screw
M8x80(⁵/₁₆" x 3¹/₄")
- Hex Nut M8(⁵/₁₆")
- Hex Socket Head Bolt
M8x25(⁵/₁₆" x 1")
- Washer M8.4(⁵/₁₆" x 1")
- Flat Washer M8.4(⁵/₁₆")
- PV-ezClip 30(1.2")

Plain Tile Roof Interfaces



 **ER-I-PRO/02**

PV-ezRack SolarRoof Pro, Plain Tile Interface

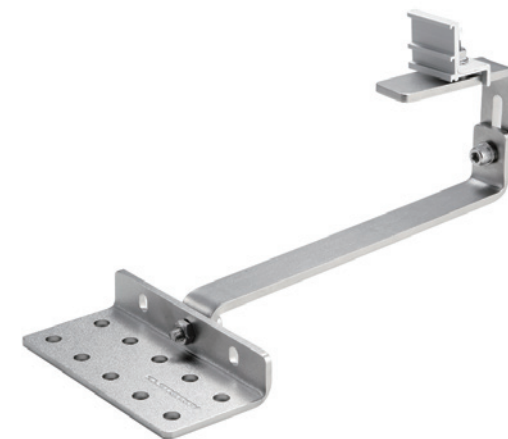
- Plain Tile Roof Hook (Height: 125mm/4.9")
- Sharp-point Wood Screw M10×100(1/2"×4")
- PV-ezClip 30(1.2")



 **ER-I-PRO/07**

*PV-ezRack SolarRoof Pro,
Plain Tile Interface for Tegalit roof*

- Plain Tile Roof Hook (Height: 132mm/5.2")
- Sharp-point Wood Screw M10×100(1/2"×4")
- PV-ezClip 30(1.2")



 **ER-I-PRO/02A**

*PV-ezRack SolarRoof Pro,
Plain Tile Interface Adjustable, universal*

- Plain Tile Roof Hook (Height: 107-137mm/4.2"-5.4", adjustable)
- Sharp-point Wood Screw M8×80(5/16"×3 1/4")
- Hex Nut M8(5/16")
- Hex Socket Head Bolt M8×25(5/16"×1")
- Washer M8.4(5/16")
- Flat Washer M8.4(5/16")
- PV-ezClip 30(1.2")

Plain Tile Roof Interfaces



ER-I-PRO/02-T

*PV-ezRack SolarRoof Pro,
Tray roof hook plain tile H125-32*

- Tray of Roof Hook Plain Tile
- Roof Hook Plain Tile H125-32
- Sharp-Point wood screw M10×100(1/2" x4")
- Sharp-Point wood screw M8×80(5/16"×3 1/4")
- PV-ezClip 30(1.2")
- Flange Nut M8(5/16")
- Washer M8.5×20(5/16"×0.8")
- Round Head Square Neck Bolt M8×30(5/16"×1.2")
- PV-ezClip Spring

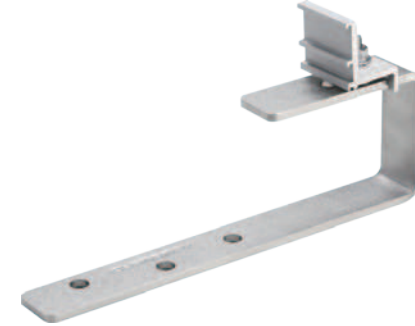


ER-I-PRO/02A-T

*PV-ezRack SolarRoof Pro,
Tray Roof hook plain tile Universal H110, Adjustable*

- Tray of Roof Hook Plain Tile
- Upper Part of Roof hook plain tile universal H110
- Lower Part of Roof Hook Plain Tile Universal H107V
- Sharp-Point wood screw M8×80(5/16"×3 1/4")
- Hex Nut M8(5/16")
- Hexagon Socket bolt M8×25(5/16"×1")
- Washer M8.4(5/16")
- Flat washer M8.4(5/16")
- PV-ezClip 30(1.2")
- Flange Nut M8(5/16")
- Washer M8.5×20(5/16"×0.8")
- Round Head Square Neck Bolt M8×30(5/16"×1.2")
- PV-ezClip Spring

Bitumen Interface



ER-I-PRO/08

*PV-ezRack SolarRoof Pro,
Bitumen Shingle Roof Interface*

- Bitumen Roof Interface
(Height: 75mm/3.0")
- Sharp-point Wood Screw
M8×80(5/16"×3 1/4")
- PV-ezClip 40(1.6")

Hanger Bolt



ER-HB

*PV-ezRack Hanger Bolt M10×200 set
PV-ezRack Hanger Bolt M12×300 set
PV-ezRack Hanger Bolt M12×350 set
PV-ezRack Hanger Bolt M12×400 set*

Rail and Rail Splice



ER-R-PRO

PV-ezRack SolarRoof Pro Rail
We provide silver and black anodised rails.

- With a Standard Length of
2560mm (100'')
3405mm (134'')
4200mm (165'')
6100mm (240'')



ER-SP-ST

*PV-ezRack Splice for
Standard and Pro Rail*

- Splice with a Standard Length
of 200mm (7.8'')
- Hex Socket Head Bolt
M8x12 ($\frac{5}{16}$ '' x $\frac{1}{2}$ '')

Clamps



 **ER-IC-ST**

*PV-ezRack Inter Clamp Standard
Natural silver and black anodised.*

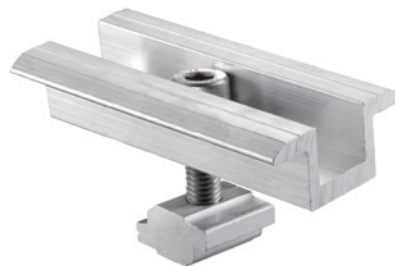
- Middle Module Clamp
- Hexagon Socket Head Bolt
M8x40 ($\frac{5}{16}'' \times 1\frac{3}{5}''$)
M8x45 ($\frac{5}{16}'' \times 1\frac{4}{5}''$)
M8x50 ($\frac{5}{16}'' \times 2''$)
M8x55 ($\frac{5}{16}'' \times 2''$)
M8x60 ($\frac{5}{16}'' \times 2\frac{2}{5}''$)
M8x70 ($\frac{5}{16}'' \times 2\frac{4}{5}''$)
- Z-module



 **ER-EC-ST**

*PV-ezRack End Clamp Standard
Natural silver and black anodised.*

- End Module Clamp
28mm (1.1"), 30mm (1.2"),
35mm (1.4"), 38mm (1.5"),
40mm (1.6"), 42mm (1.7"),
45mm (1.8"), 46mm (1.8"),
48mm (1.9"), 50mm (2.0"),
57mm (2.2")
- Hexagon Socket Head Bolt
M8x28 ($\frac{5}{16}'' \times 1\frac{1}{10}''$)
- Z-module



 **ER-IC-HL**

*PV-ezRack Inter Clamp, High Load
Natural silver and black anodised.*

- High Load Inter Clamp Inter
Module Clamp
- Hexagon Socket Head Bolt
M8x40 ($\frac{5}{16}'' \times 1\frac{3}{5}''$)
M8x45 ($\frac{5}{16}'' \times 1\frac{4}{5}''$)
M8x50 ($\frac{5}{16}'' \times 2''$)
M8x55 ($\frac{5}{16}'' \times 2''$)
M8x60 ($\frac{5}{16}'' \times 2\frac{2}{5}''$)
M8x70 ($\frac{5}{16}'' \times 2\frac{4}{5}''$)
- Z-module



 **ER-EC-HL**

*PV-ezRack End Clamp, High Load
Natural silver and black anodised.*

- High Load End Clamp Inter
Module Clamp 28mm (1.1"),
30mm (1.2"), 35mm (1.4"),
40mm (1.6"), 42mm (1.7"),
45mm (1.8"), 46mm (1.8"),
48mm (1.9"), 50mm (2.0"),
57mm (2.2")
- Hexagon Socket Head Bolt
M8x28 ($\frac{5}{16}'' \times 1\frac{1}{10}''$)
- Z-module

Accessories



 ER-Z-ST Z-module



 ER-Z-STBW Z-module assembly with bolt and washer



 ER-WS-SP Sharp-point wood screw



 ER-CC-PRO PV-ezRack SolarRoof Pro, cross connection clamp

Warranty

CLENERGY WARRANTY TERMS AND CONDITIONS FOR ASSEMBLY SYSTEMS

1. SCOPE OF APPLICATION

1.1 This Warranty Terms and Conditions (hereinafter referred to as WTC) of Clenergy Europe Limited (hereinafter referred to as Clenergy) shall apply in addition to the General Terms and Conditions (hereinafter referred to as GTC) of Clenergy at all sales of assembly systems to its buyers. The German version of the WTC applies.

1.2 The services granted by this WTC shall only be regarded as a voluntary special service by Clenergy insofar as they exceed the minimal statutory requirements for warranty. **The WTC shall not create an independent cause of action for the buyer but only modify the statutory regulations (dependent Warranty).** An independent promise of guarantee exceeding the contents of these WTC shall not be granted.

2. START AND PERIOD OF WARRANTY

2.1 The warranty period is ten (10) years and begins with the passing of risk of loss or damage to buyer in accordance with the ICC Incoterms 2010.

3. EXERCISE OF WARRANTY RIGHTS

3.1 The warranty case shall be reported to Clenergy in writing; the kind and the extent of the alleged defect shall be described herein. The terms for inspection and objection according to GTC shall be observed. Noncompliance with the inspection and objection obligations shall make the warranty rights cease to exist.

4. SCOPE OF WARRANTY

4.1 Clenergy warrants that the goods to be supplied conform to the specifications stated in the contract and are free of essential deficits. However, this shall not be considered as an independent guarantee declaration, but as an agreement regarding condition of the goods.

4.2 Upon Clenergy's choice the remedy of defects shall be made either by repair or by new delivery. Clenergy shall be entitled to engage a Third Party to arrange removal of defects.

4.3 In the case of culpably unjustified warranty demand the buyer shall refund the caused damage to Clenergy.

5. PROPER USE AND EXEMPTION FROM WARRANTY

5.1 The warranty services described above can only be granted if the object of purchase is used, operated and assembled in a proper way. Therefore the defects of goods resulting not only from material or production defect will not be remedied by Clenergy. This can especially (but not limited to) apply in the following cases:

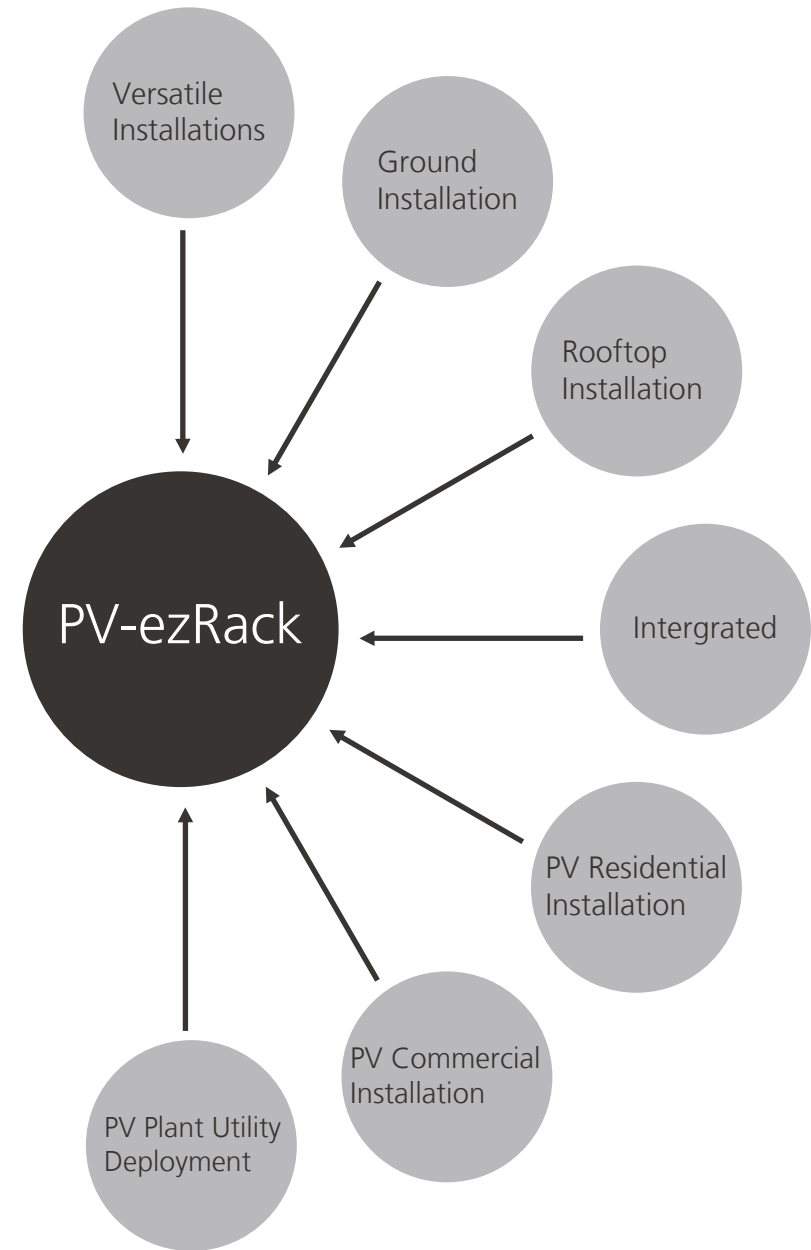
- The buyer or the installer omits to follow the assembly, operation or maintenance instructions which causes defect(s) of the goods;
- Replacement(s), repair(s) or modification(s) of the goods are not made by Clenergy, a Third Party engaged by Clenergy or without consent of Clenergy;
- Improper use of the goods or the use contrary to the way of use specified in contract/conventional way of use;
- Vandalism, destruction by external influences and/or by human beings and/or animals;
- Improper storage, transporting after passing of risk of loss or damage before the installation if that causes defect(s) of the purchased object;
- Damages of the building stock or its incompatibility with the goods causing the defects of the goods;
- Use of the purchased object on mobile units such as vehicles or ships;
- Acts of God, e.g. flooding, fire, explosions, rock fall, direct or indirect lightning stroke or other extreme weather situations such as hail, hurricanes, tornados, sandstorms or other circumstances out of Clenergy's influence.

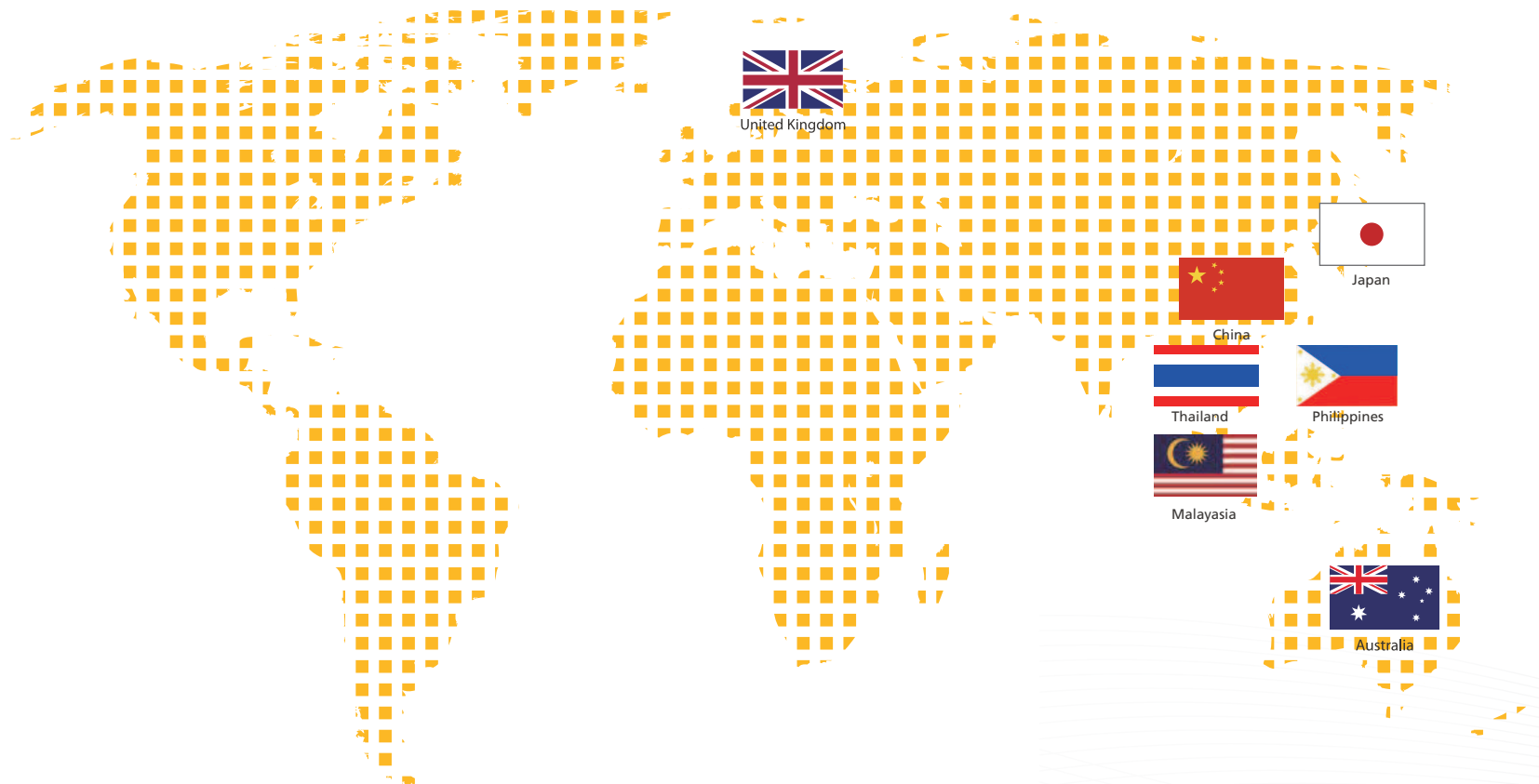
5.2 Furthermore the warranty is excluded if the defect arises because of the use contrary to standard use condition described as follows:

- Use of the goods only under sufficient statics, especially – installation on a carrying facility which is strong enough to carry the weight of the product and to stand possible weather-related charges such as water, wind, leaves or snow;
- Wind velocities exceeding the limit values specified in the product description.

5.3 The warranty services shall be excluded if and when the manufacturer label(s) and/or serial number(s) of the goods is/are changed, erased, detached or unreadable.

PV-ezRack Series





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