

# **Product Catalog**

Focus on various solar PV mounting systems



ISO 9001: 2015 quality management system certified

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Manufacturing facilities for both aluminum and steel products



Direct racking supply



Global service





Experienced team since 2010

Design standard: AS 1170.2:2011, JIS C 8955:2011, UL 1703/2703

#### **Disclaimer :**

We make every effort to ensure that all the information contained within our catalogue is complete and accurate. Due to continuous product optimization we reserve the right to make any changes or corrections to our products and this catalogue as well as individual product information at any time without prior notice. All previous catalogues and individual product information become invalid upon the release of the later publications.

## **ABOUT US POWERACK**

Xiamen Powerack Technology Co., Ltd. located in Xiamen City, Fujian Province, China.Our company is located in the special equipment technology, science and technology innovation technology guide and industrial upgrading promoter, mainly engaged in solar photovoltaic system, adhering to the "professional, focused, technology first" business philosophy and "innovation, excellence" spirit of enterprise. The company is mainly engaged in solar photovoltaic system. Focusing on solar photovoltaic mounting research and development, design, production, sales, installation and testing and other one-stop services. As a photovoltaic mounting manufacturer, we have a wide range of products, providing customers worldwide with solutions for ground-mounted photovoltaic mounting systems, rooftop photovoltaic mounting systems, and various types of photovoltaic mounting systems for residential, commercial, governmental, and power plant construction projects.

Our enterprise insists on quality excellence and provides customers with safe, applicable and reliable products through continuous improvement; insists on honesty and integrity, and meets the needs of ground mounting, roof mounting systems and various PV power plant construction customers to a greater extent in a reliable, convenient and effective way. powerack has a complete and scientific quality management system. Powerack's integrity, strength and product quality have been recognized by the industry.

Our company has more than 100 workers who are specialized in producing photovoltaic mounting for more than 10 years, with 24-hour production, which solves the problem of urgent delivery and strict quality for customers. We have a complete research and development process and high strict compliance with ISO9001 quality control system. Our products are designed in strict accordance with Australian AS/NZS1170.2, JIS C 8955, MCS012, TUV, UL2703, European Building Codes and other standards. Ensure that every code and regulation is in full compliance with all applicable local or national building codes.

Our customers are at the heart of our services. We enhance the value for our customers through constant innovation of stable and high quality solar products, which enhances customer satisfaction as well as strengthens trust. Powerack has a strong sense of social responsibility to share new energy products with our partners and develop new energy industries. Continuously transforming solar energy for the benefit of mankind and contributing to the manufacture of photovoltaic solar energy in the future.









### **Global Service & Proven Records**

Powerack clamps and solar roof mount has been installed worldwide, from South Africa, Tanzania, Kenya of Africa, Netherlands, Hungary, Belgium, Sweden, Norway, Poland,Ukraine, Romania of Europe, Oman, Qatar, Dubai or Middle East, Sri Lanka, India, Indonesia, Malaysia, Thailand, Philippines, Singapore, Japan,Korea,China of Asia,Australia and New Zealand, to Candda,USA,Mexico,Panama,Costa Rica,Guatemala,Honduras,Colombia, Argentina, Brazil, Uruguay or America. manufactured from Africa, Europe, Middle East, Asia, America, Australia and New Zealand.

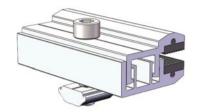


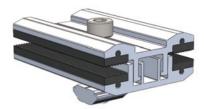






### **Rail & Accessories**







Item No.	POW-TEC	Item No.	POW-TIC	Item N	n No.	POW-RCB
Description	Thin Film Double-glazed Module End Clamp Kit	Description	Thin Film Double-glazed Module Inner Clamp Kit	Descr	scription	Standard Rail Clamp with T-E







Item No.	POW-EIC	Item No.	POW-AIC	Item N	No.	POW-RCN
Description	Universal Adjustable (30-40mm) Inner Clamp Kit (Include Spring & Earthing Clip)	Description	Universal Adjustable (30-40mm) Inner Clamp Kit	Descri	cription	Standard Rail Clamp with POW Nuts Kit







Item No.	POW-R29
Description	POW 29mm Rail

ltem No.	POW-AEC	Item No.	POW-FEC
Description	Universal Adjustable (30-35mm) End Clamp Kit	Description	General End Clamp Kit





 Item No.
 POW-RCC

 Description
 Standard Rail Clamp with the Carriage Bolt



 Item No.
 POW-R26

 Description
 POW 26mm Rail



 Item No.
 POW-R41-2

 Description
 POW 41mm Rail for Ballasted Mounting

### **Rail & Accessories**



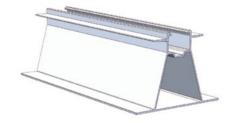




Item No.	POW-R42	Item No.	POW-R46	Item No.	POW-R62C
Description	POW 42mm Rail	Description	POW 46mm Rail	Description	POW 62mm C Rail







Item No.	POW-R52	Item No.	POW-R52L	ltem No.
Description	POW 52mm Rail	Description	POW 52mm L Rail	Description



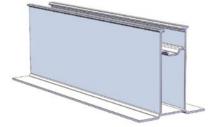




Item No.	POW-SFR-01		
Description	Splice for Rail Kit 01		

Item No.	POW-R62	Item No.	POW-R60
Description	POW 62mm Rail	Description	POW 60mm Rail





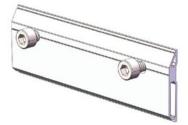
 Item No.
 POW-R61

 Description
 POW 60mm Rail



 Item No.
 POW-REC

 Description
 POW-R52 Rail & ERK-R52L Rail End Cover Cap



Item No.POW-SFR-02DescriptionSplice for Rail Kit 02

### **Rail & Accessories**

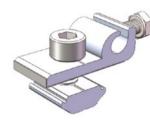






Item No.	POW-REL-A	Item No.	POW-REL-B	Iter	em No.	POW-TBK
Description	Standard Rail Earthing Plate Type A	Description	2.Standard Rail Earthing Plate Type B	Des	escription	T-Bolt Kit







Item No.	POW-ELG-03	Item No.	POW-ELG-02	It	ltem No.	POW-CCP-01
Description	Earthing Lug Kit 03	Description	Earthing Lug Kit 02	C	Description	Cable Clip for PV Panels for Holding 3 Cables









l	tem No.	POW-NBW	Item No.	POW-NUT
[	Description	POW Nuts Assembly with Bolt and Washer Kit	Description	POW Nuts





Item No.POW-CCP-02DescriptionCable Clip for PV Panels for Holding 2 Cables



Item No. Description POW-CCP-03 Cable Clip for PV Panels for Holding 3 Cablesa



 Item No.
 POW-CCP-05

 Description
 Cable Clip for PV Panels for Holding 4 Cables

### Metal Roof Attachment

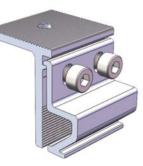


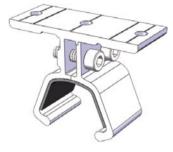




Item No.	POW-TRB-C01	Item No.	POW-TRB-C02	 Item No.	POW-TRB-C20
Description	Klip Lok 406 & 700 Interface	Description	Klip Lok 406 & 700 Interface	 Description	Lysaght Klip-lok 406 Interface







Item No.	POW-TRB-C05	Item No.	POW-TRB-C04	 Item No.	POW-TRB-C14
Description	Standing Seam Clamp	Description	Standing Seam Clamp	 Description	Metdek 855 Dimondek 630 Interface







Item No.	POW-TRB-C21
Description	Standing Seam Clamp

Item No.	POW-TRB-C06	Item No.	POW-TRB-C16	Description
Description	Standing Seam Clamp	Description	RiverClack Roofing Profile	

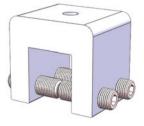




Item No. Description POW-TRB-C10 Stainless Steel Tin Interface Bracket



Item No. Description POW-TRB-C15 Metdek 500 Interface



Item No.POW-TRB-C19DescriptionStanding Seam Clamp

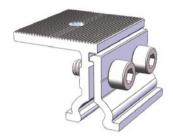
### Metal Roof Attachment



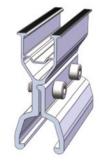




Item No.	POW-TRB-C23	Item No.	POW-TRB-C22	 Item No.	POW-TRB-C29
Description	Klip Lok 700 Interface	Description	Standing Seam Clamp	 Description	Lysaght Klip-lok 406 Interface

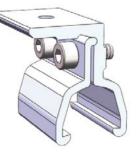






Item No.	POW-TRB-C31	Item No.	POW-TRB-C26	Item No.	POW-TRB-C38
Description	Clip Lock Interface	Description	WeatherClip II 700 Interface	Description	Lysaght Klip-lok 700 Interface







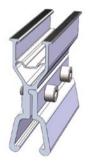
ltem No.	POW-TRB-D25
Description	Offset Hole L Feet for Corrugated or Trapezoidal Sheet Metal

Item No.	POW-TRB-C20	Item No.	POW-TRB-C39
Description	Lysaght Klip-lok 406 Interface	Description	Lysaght Klip-lok 700 Interface





Item No.	POW-TRB-C30
Description	WeatherClip II 700 Interface



 Item No.
 POW-TRB-C13

 Description
 Lysaght Klip-lok Interface



 Item No.
 POW-TRB-D01

 Description
 L Feet for Corrugated or Trapezoidal Sheet Metal

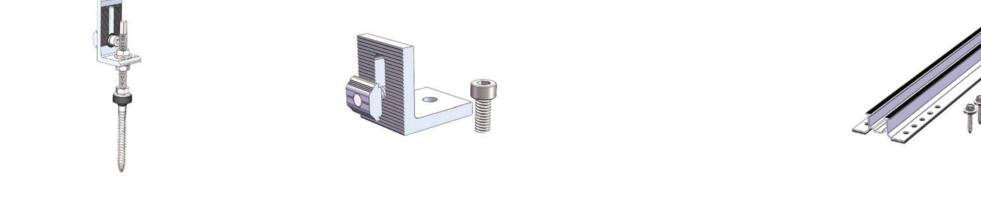
### **Metal Roof Attachment**







tem No. POW-TRB-D05	Item No. POV	W-TRB-D26	Item No.	POW-TRB-D08
An Hanger Bolt for Corrugated Fibre Cement, Corrugated or Trapezoidal Sheet Metal(M10×180, M10×200, M10×250, M10×300)	Description Hange	ger Bolt Offset Hole L Feet for Corrugated Fibre Cement, Corrugated rapezoidal Sheet Metal (M10×180, M10×200, M10×250, M10×300)	Description	8# Tin Roof Hook for Trapezo



Item No.	POW-TRB-D03	Item No.	POW-AIC	Item No.	POW-TRB-D10	
Description	Hanger Bolt L Feet for Corrugated Fibre Cement, Corrugated or Trapezoidal Sheet Metal(M10×180, M10×200, M10×250, M10×300)	Description	Slate Roof Hook	Description	26mm Mini Rail for Corrugated or Trapezoidal Sheet Metal	







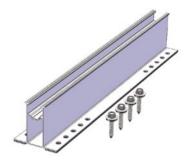


ltem No.	POW-TRB-D14
Description	46mm Mini Rail for Corrugated or Trapezoidal Sheet Metal





Item No.POW-TRB-D21Description21# Tin Roof Hook for Trapezoidal Sheet Metal



Item No. Description POW-TRB-D13 60mm Mini Rail for Corrugated or Trapezoidal Sheet Metal



 Item No.
 POW-TRB-D20

 Description
 65mm Mini Rail for Corrugated or Trapezoidal Sheet Metal

### **Tile Roof Attachment**

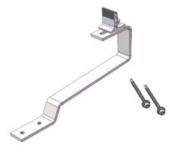






Item No.	POW-TRH-F03	Item No.	POW-TRH-F04	Item No.	POW-TRH-T01
Description	Flat Tile Roof Hook	Description	Flat Tile Roof Hook	Description	Tile Roof Hook

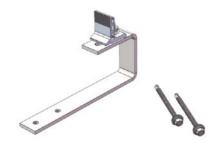






Item No.	POW-TRH-S02	Item No.	POW-TRH-F03	Item No.
cription	Slate Roof Hook	Description	Flat Tile Roof Hook	Description

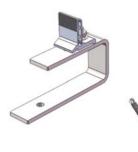






		Item No. POW-TRH-T05
Item No. POW-TRH-S01	Item No. POW-TRH-S02	Description Tile Roof Hook
Description Slate Roof Hook	Description Slate Roof Hook	





 Item No.
 POW-TRH-S03

 Description
 Slate Roof Hook



 Item No.
 POW-TRH-T03

 Description
 Tile Roof Hook



 Item No.
 POW-TRH-T04

 Description
 Tile Roof Hook for Holding 3 Cables

### **Tile Roof Attachment**







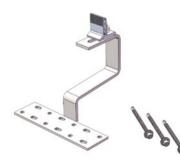
Item No.	POW-TRH-T06	Item No.	POW-TRH-T07	Item No.	POW-TRH-T16
Description	Tile Roof Hook	Description	Tile Roof Hook	Description	Tile Roof Hook

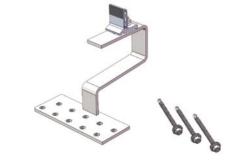






Item No.	POW-TRH-T09	Item No.	POW-TRH-T08	Item No.	POW-TRH-T14
Description	Tile Roof Hook	Description	Tile Roof Hook	Description	Tile Roof Hook







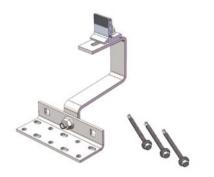


					Item No.	Ρ
Item No.	POW-TRH-T10	Item No.	POW-TRH-T11		Description	Til
Description	Tile Roof Hook	Description	Tile Roof Hook			





Item No.	POW-TRH-T15
Description	Tile Roof Hook



Item No.	POW-TRH-T13
Description	Tile Roof Hook



POW-TRH-T16 Item No. Description Tile Roof Hook

### **Tilt Mounting**



Powerack adjustable tilt system is used for metal roof concrete roof. Fixed or adjustable angles as 10-15 deg, 15-30 deg and 30-60 degree are for your option to maximize energy production.

All Products pre-assembled before shipment, to make the installation easy and quick. Unique

design of inner and outer tube with adjustable joints, makes structure stronger, different from the same type products on the market today, and widely compatible with standing seam clamp.

#### **Technical features:**

Product name	Adjustable tilt mounting system
Application	Flat concrete roof, metal roof
Inclination	10-15°, 15-30°, 30-60° or customized
Material	AL 6005-T5, SUS 304, EPDM
Finish	AL 6005-T5 Anodized
Module orientation	Landscape or Portrait



#### Assembly

Item No. | POW-AFL Description Adjustable Front Leg



Item No. | POW-FEC Description General End Clamp Kit



Item No. | POW-EIC Description Universal Adjustable (30-40mm) Inner Clamp Kit (Include Spring & Earthing Clip)

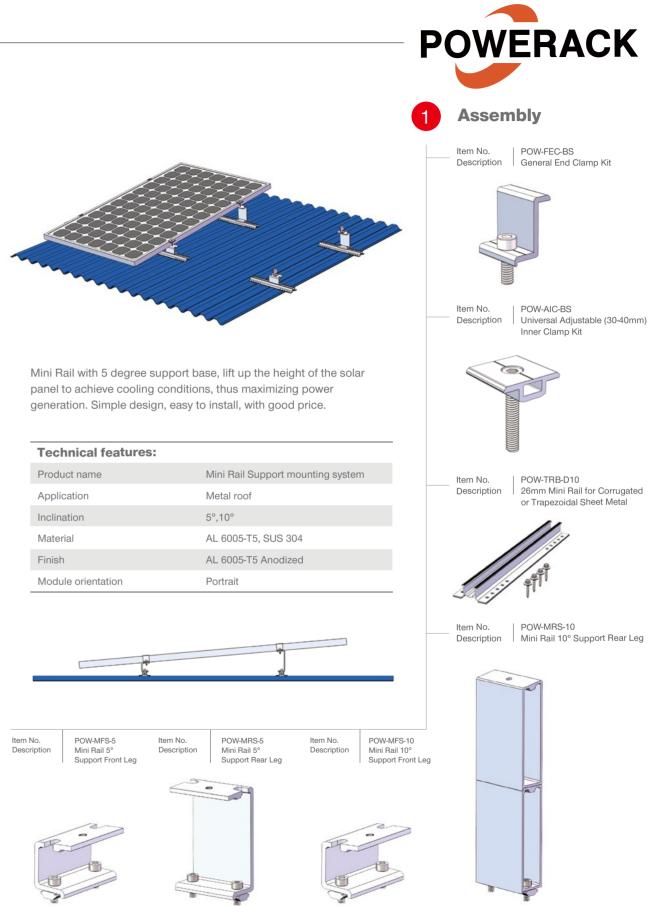


Item No.

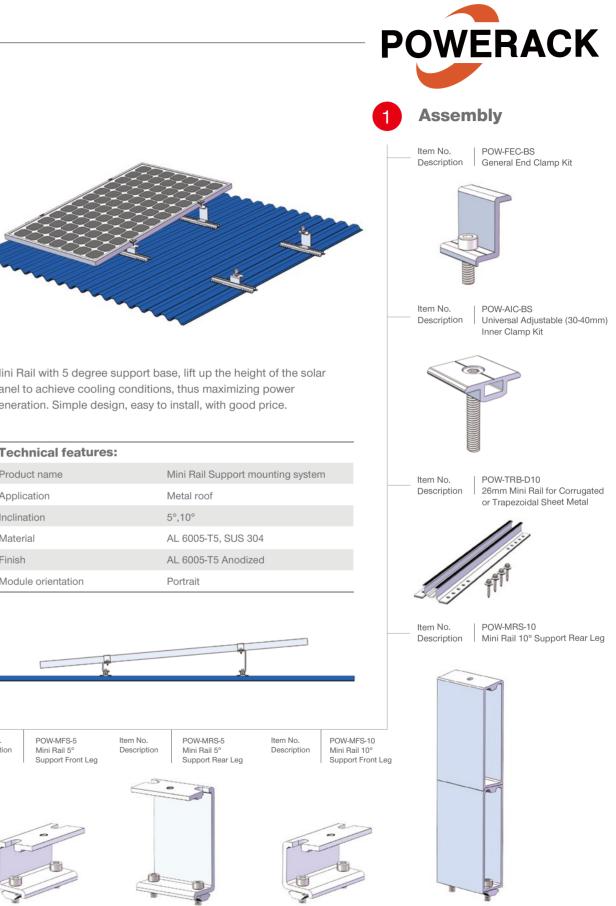
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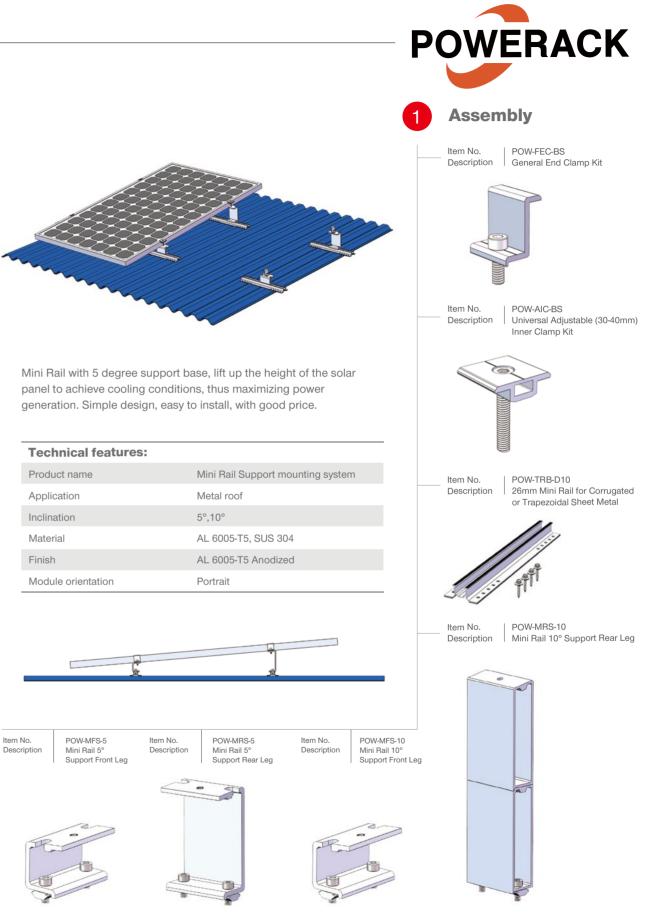
POW-ARL-1015 POW-ARL-1530 POW-ARL-3060 Description 10-15° Adjustable Rear Leg

15-30° Adjustable Rear Leg 30-60° Adjustable Rear Leg

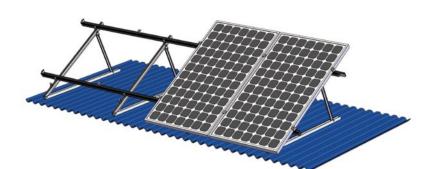


Technical features:	
Product name	Mini Rail Support mounting sy
Application	Metal roof
Inclination	5°,10°
Material	AL 6005-T5, SUS 304
Finish	AL 6005-T5 Anodized
Module orientation	Portrait





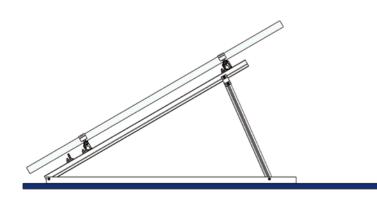
### **Tilt Mounting**



Powerack Tripod system is used for metal roof concrete roof, you can adjust angles as 10-15deg, 15-30deg and 30-60deg options to maximize energy production. All Products pre-assembled before shipment, to make the installation easy and quick for saving your labor cost and time. Customized angle allowed according to customers' need to meet special installation requirements.

#### Technical features:

Product name	Tripod mounting system
Application	Flat concrete roof, metal roof, open terrain
Inclination	Customized
Material	AL 6005-T5, SUS 304
Finish	AL 6005-T5 Anodized
Module orientation	Landscape or Portrait



#### Assembly

Item No. | POW-FTP Description | The Fixing Angle Tripod



Item No. | POW-ATP Description | The Adjustable Angle Tripod



Item No. | POW-R52 Description | POW 52mm Rail



Item No. POW-EIC Description Universal Adjustable (30-40mm) Inner Clamp Kit (Include Spring & Earthing Clip)



Item No. | POW-FEC Description | General End Clamp Kit



Powerack Tripod systems have fixed angle and adjustable angle design for options.



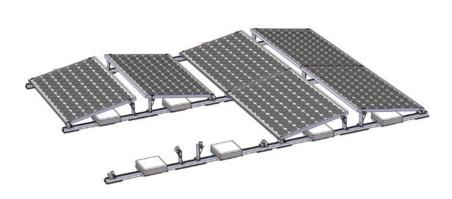
1.Fixed Angle Tripod system(POW-FTP-X): According to customers' need ,we customize different sizes and angles to make a fast, easy and lower cost installation, this is Suitable for installation at known building angle.



2.Adjustable Angel Tripod (POW-ATP-X): According to the site need to adjust the tripod angle for installation demand. It is suitable for multi-angle installation projects.



### **Ballasted-A**



#### 10 or 15 Degree dual tilt

- Maximal area utilized
- Maximal PV quantity installed
- Powerack E-W 10 or 15 is for solar installed on a flat roof, for maximized roof space utilized, and PV quantity installed.
- All parts are made of extruded aluminum, with stainless steel 304 fasteners
- EPDM foam tape is installed at the bottom of the system, separated the roof and system.
- EPDM foam tape provides better friction, and compensates for the height difference when the roof is uneven.

Technical features:	
Product name	E-W 10 or 15
Application	Flat roof
Tilt	10°or 15°
System Material	extruded aluminum profile 6005 T5
Fastener material	Stainelss steel 304
Finish	Anodized
Module orientation	Landscape









POW-FEC





POW-BPF15













#### 10 or 15 Degree tilt

- Better panel output
- The Powerack S Ballast is for solar PV to be fast and easily installed on a flat roof with 10 or 15 tilt degree inclination. All parts are made of extruded aluminum, with stainless steel 304 fasteners
- EPDM foam tape is installed at the bottom of the system, separated the roof and system.
- EPDM foam tape provides better friction and compensates for the height difference when the roof is uneven.

Technical features:	
Product name	S 10 or 15
Application	Flat roof
Tilt	10°or 15°
System Material	extruded aluminum profile 6005 T5
Fastener material	Stainelss steel 304
Finish	Anodized
Module orientation	Landscape







Assembly



POW-BST-02

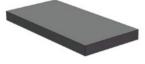


POW-SFR-04





POW-EFT-03



POW-BPW-10



POW-BPW-15





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### **Ballasted-B**



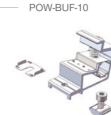
Powerack East & West Ballasted-B Systems suitable for concrete flat roof and trapezoidal sheet metal roof. Unlike the traditional solar panel fixing method, whose fixing point at the end of the long side of the panel, this series help solar panels to be fixed anywhere on the long side. Therefore, solar panels could withstand greater wind and snow pressure. There is no need to use expansion bolts or chemical bolts on the roof, no damage to roof. The system connects all the panels with the rails into a whole. East-west facing panels have a great effect on resisting wind loads. A combination of high quality aluminium components make a robust, reliable system and quick and easy installation.

#### **Technical features:**

Product name	Ballasted-B Series
Application	Concrete flat roof and trapezoidal sheet metal roof
Tilt	10°or 15°
System Material	Extruded aluminum profile 6005 T5, EPDM
Fastener material	Stainless steel 304
Finish	Anodized
Module orientation	Landscape



### Assembly







POW-R41-02



POW-BST-02



POW-SFR-04



POW-EFT-03



#### **Product Feature:**

Solar panels could withstand greater wind and snow pressure. Maximal area utilized.

Maximal PV quantity installed.

Maximized roof space utilized, and PV quantity installed. Better panel output.

Solar PV to be fast and easily installed on a flat roof with 10 tilt degree inclination.

All parts are made of extruded aluminum, with stainless steel 304 fasteners. EPDM foam tape is installed at the bottom of the system, separated the roof and system.

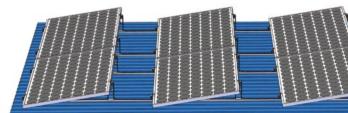
EPDM foam tape provides better friction and compensates for the height difference when the roof is uneven.



East & West 10° for concrete flat roof



South or North 10° for concrete flat roof



South or North 10° for trapezoidal sheet metal roof





#### Assembly

POW-BUF-15





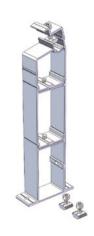








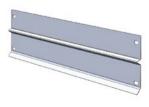
POW-BUR-15



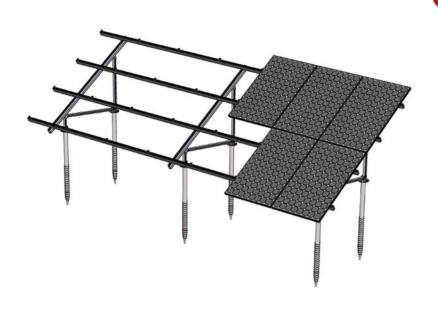
POW-BPW-10



#### POW-BPW-15



### **Ground Mounting**



#### **Standard Ground Mounting System**

Aluminum ground mount, optimized for lightweight,quick and efficient installation with flexible on engineering upon site conditions. Optional on foundation by ground screw or concrete. Maximize pre-assembled before shipment

Technical features:				
Product name	Standard ground mounting system			
Application	Flat concrete roof, open terrain			
Inclination	Customized			
Material	AL 6005-T5, SUS 304, Q235			
Finish	AL 6005-T5 Anodized, Q235 Hot-dip galvanizing			
Module orientation	Landscape or Portrait			

#### Assembly





POW-GS2

POW-GIC-XX

POW-ELG



P

POW-R80

POW-B95



POW-GRC



POW-CH2-02

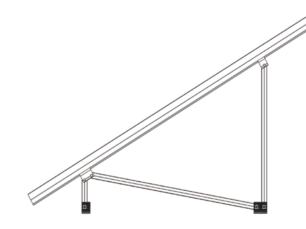
POW-CH2-03

POW-SFR-R80

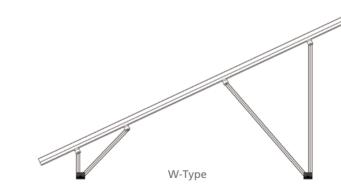


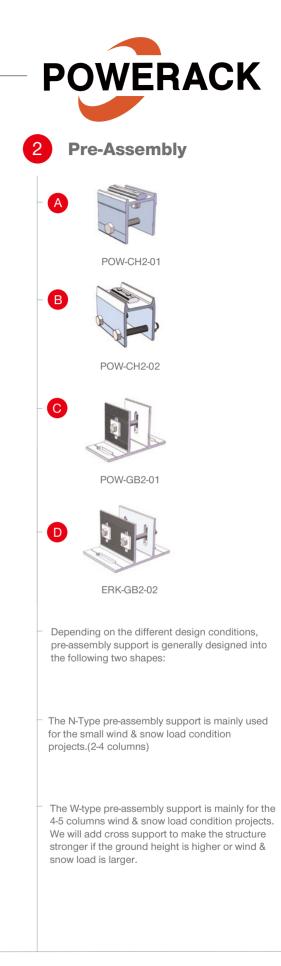


Ground mounting system has been maximized pre-assembly before shipment, which make the installation more convenient.

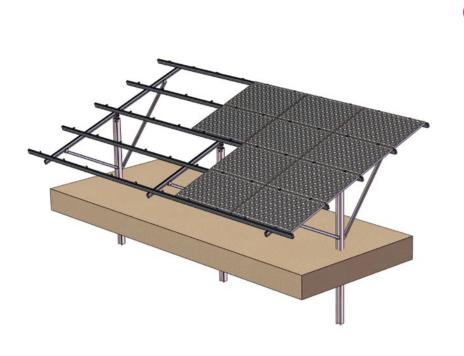


N-Type





### **Ground Mounting**



#### **U Pile Ground Mounting System**

Powerack U Pile Ground Mounting Systems suitable for large scale power station installation, Pile to the ground makes installation faster and lower cost than others. Each components are Maximize pre-assembled, widely save your labor cost and installation time. Customization allowed according to project wind &snow load, provide economic & effective solutions.

### Technical features: Product name U Pile ground mounting system

Application	Open terrain
Inclination	Customized
Material	AL 6005-T5, SUS 304, Q235
Finish	AL 6005-T5 Anodized, Q235 Hot-dip galvanizing
Module orientation	Landscape or Portrait







— End clamp

Rail



Rail fixing clamp



Main structure

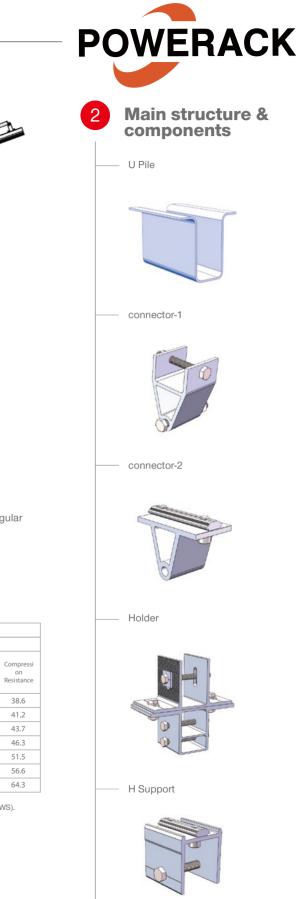




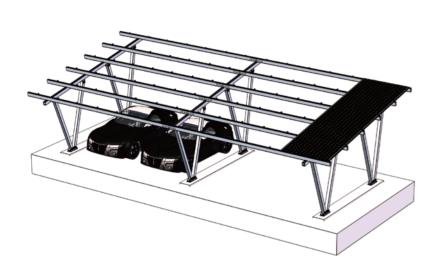
The U type Pile Ground Mounting System has been folded into a rectangular shape before shipment. Easy to transport.

	ConventionalUpilecompressionandtensilestrengthreferencevalues(KN)						
Penetration depth	N=3		N=5		N=7		N=10
	Resistance	Compressi on Resistance	Resistance	Compressi on Resistance	Resistance	Compressi on Resistance	Resistance
1500	9.5	11.5	15.7	19.3	21.9	27	31.13
1600	10.1	12.3	16.7	20.6	23.3	28.8	3.235
1700	10.8	13.1	17.8	21.8	24.8	30.6	.337.
1800	11.4	13.9	18.8	23.1	26.2	32.4	341.4
2000	12.6	15.4	20.8	25.7	29.1	36	45.65
2200	13.8	17	22.9	28.3	32	39.6	1.7
2500	15.7	19.3	26	32.1	36.3	45	

Remarks: The N value of the soil in this table are based on the Swedish penetration test (SWS).

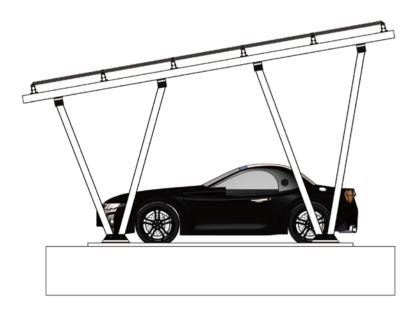


### **Carport Mounting**

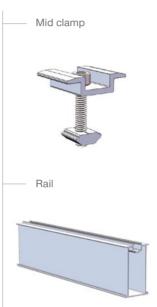


#### **Carport Mounting System**

Powerack Carport Mounting Systems offers a simplified and economical solutions that provides a perfect combination of Shade parking and solar power generation as well as electric vehicle charging. It applied for family parking, commercial parking, awnings and even bus stops.



#### **Structure & components**



End clamp



Rail fixing clamp



Main structure







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