SOLAR ROOF MOUNTING SYSTEM
INSTALLATION MANUAL
Model Name: TT-ADJUSTABLE TILT LEGS

JIANGYIN TITANERGY CO.,LTD

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Contents

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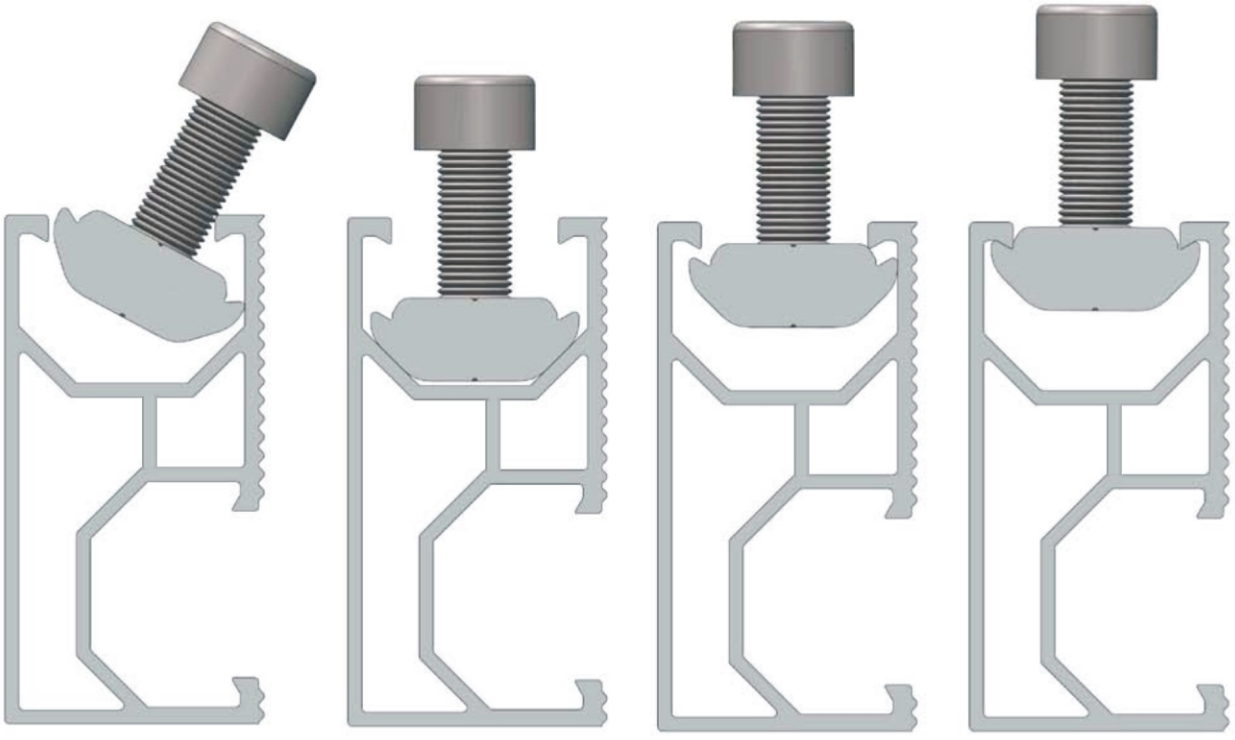
1. General information

Thank you for choosing the Titan solar roof mounting system. Made from custom-built aluminum extrusions and components, Titan Solar's innovated design and improved frame strength greatly simplify solar panel installation. The easy installation four steps make the D-Modules can be put into the D Rail on any position quickly. So, the D-Modules is pre-assembly with the clamp to save your install time.



Tilt-in Align Up Fasten

Easy installation four steps

Titan solar's versatile design makes it suitable for a wide variety of building types and zones including residential, commercial and remote environments.

Titansolar is backed by a 10-year warranty **(Fire Rated:A)** .

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2. Safety and Installer Responsibilities

Caution

Installation of this product is to be performed only by professionally trained installers. Any attempt by an unqualified person to install this product could result in death or serious injury.

2.1 Handling and Installing Titan solar

It is critically important that safety practices are observed when installing

※ Do not throw or roughly handle any Titan solar components.

※ Do not bring Titan solar system into contact with sharp or heavy objects.

※ Do not modify Titan solar components in any way. The exchange of bolts, drilling of holes, bending or any other physical changes not described in standard installation procedure will void the warranty.

※ It is the installer's responsibility to verify the integrity of the structure to which Titan solar components is fixed. Roofs or structures with rotten/rusted bearers, undersized bearers, excessively spaced bearers, or any other unsuitable substructure cannot be used with Titan solar components, and installation on such structures will void the warranty, and could result in death or serious injury.

2.2 Wind and Climate Design

Determining the wind pressures applies to your Titan solar system install site, taking into account roof shape and geographic location. Sufficient guidance is given in this document, but you may wish to procure a copy of these standards.

※ REMEMBER average wind speeds are higher for structures mounted closer to the roof perimeter zone (edge). Refer to 'Fixing within Roof Installation Zone' for more information)

※ Make sure your installation complies with local and national building codes. Take into account relevant design parameters (wind speed, exposure and topographic factor) when determining the loading for the installation.

※ If alternative fasteners are used to fix the framing to the roof (assuming supplied fasteners are unsuitable for any reason), all screw fasteners must be of equal or greater strength to those supplied with your Titan solar system order.

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3. Technical Specifications

3.1 Applications

※ Commercial and residential buildings
※ Marine applications and remote areas

Caution

Refer to the section "Designing Your System" before attempting installation. Failure to correctly establish the requirement of the proposed installation site is dangerous and will void the framing warranty.

3.2 Features

※ 6005-T5 Aluminum extrusion
※ Innovated designed of the D-Modules, which can be pre-assembly with the clamp, make the installation easy and quick.
※ Suitable for difference conditions and the most solar panels at present market.
※ Significantly higher strength-to-weight ratio than other framing products, providing improved efficiency due to greater frame spans, inherent corrosion resistance resulting in low ongoing maintenance and an extended product life.
※ Anodized finish

3.3 Material

Material	Tensile strength	
	Ultimate	Yield
6005-T5 Aluminum Extruded	260MPa	240Mpa
Stainless Steel 304	635MPa	235MPa
Stainless Steel A2-70	700MPa	450Mpa

3.4. Installation condition

Roof slope	0° to 60°
Building height	Up to 20m
Mounting structure	Timber
Roof type	Flat steel
System angle	Flushed with the roof

Note: if the condition is over the table list, please contact us to confirm.

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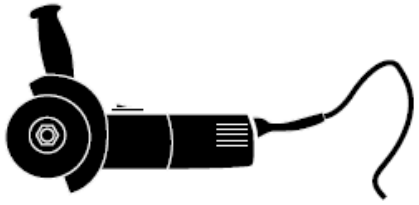
4. Tools for Installation

The following tools are required for the installation:

※ 6 mm Allen key or hexagonal driver bit. If using a 6mm driver bit, make sure the cordless power tool used for the driving has a hand-tight clutch setting a fine (soft) impact drive to prevent damage to the fragile glass panels and threads on the Structure.	
※ Cordless drill; Drill or impact driver for driving roof material fixings	
※ Angle grinder; For terracotta tile roof installation, and angle grinder fitted with a continuous edge diamond tipped tile cutting blade; gloves, hearing protection, a face protection mask, and a suitably rated breathing protection mask for all people in proximity of grinding	
※ Gloves; Protect the hazard of the sharp corners.	
※ Cord or color pen; Mark the installation position;	
※ Spirit level	
※ Rule	

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5. Components Description

TT- Rail

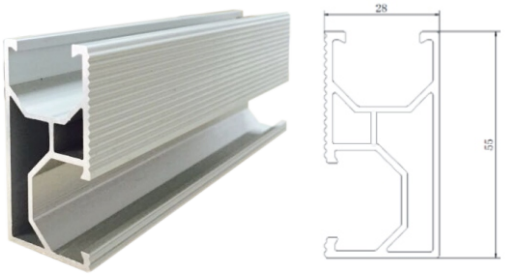
※ hold each panel row

※ length can be customized

※ 6005-T5 extruded aluminum

Standard Rail Length	
808~826mm wide panels	990~1100mm wide panels
2560mm (3 panels)	
3405mm (4 panels)	4200/4400mm (4 panels)

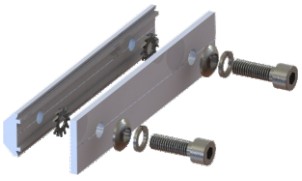
※The length of TT-Rail can be customized.(1.05m~15.90m)
※The installation direction of panels can be customized.(horizontal or vertical)



TT Rail Splice Kit (with toothed gears)

※ Extend TT Rail to any length as required by the quantity or width of the solar panels

※ IncInclude 2pcs M8 toothed gears,2pcs M8*20 bolts, 2pcs M8 spring washers, 2pcs M8,OD18 lock washers



Inter Clamp Kit for Framed Modules

※ Fit between two panels

※ Fastened with a 6mm Allen key

※ Standard pre-assembly for the usual panels with thickness 30, 35, 40, 46, 50, 57mm

※ Include 1pc M8 bolt,1pc M8 spring washer,1pc nut

Type	Bolt
Inter clamp kit 35	M8*45
Inter clamp kit 40	M8*50
Inter clamp kit 46	M8*55
Inter clamp kit 50	M8*60

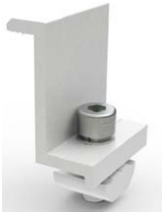
End Clamp Kit for Framed Modules

※ Hold the edge of each end panels

※ Fastened with a 6mm Allen key

※ Standard pre-assembly for the usual panels with thickness 30, 35, 40, 46, 50, 57mm

※ Include 1pc M8*25 bolt,1pc M8 spring washer,1pc nut



Front Leg

※ Fit on the roof

※ Include 2pcs st6.3*80 wood screws

※ Include 1pc M8*25 bolt,1pc M8 spring washer, 2pcs M8,OD18 lock washers,1pc nut,1pc M8*55 bolt, 1pc flange nut with M8 locking teeth

Rear Leg

※ Fit on the roof

※ Include 2pcs st6.3*80 wood screws

※ Include 1pc M8*25 bolt,1pc M8 spring washer, 2pcs M8,OD18 lock washers,1pc nut,1pc M8*55 bolt, 4pcs flange nuts with M8 locking teeth,1pc M8*20 bolt, 1pc M8*15 bolt

Bolts& Nuts

※ Include 1pc M8*25 bolt,1pc M8 spring washer, 1pc M8,OD18 lock washer,1pc nut

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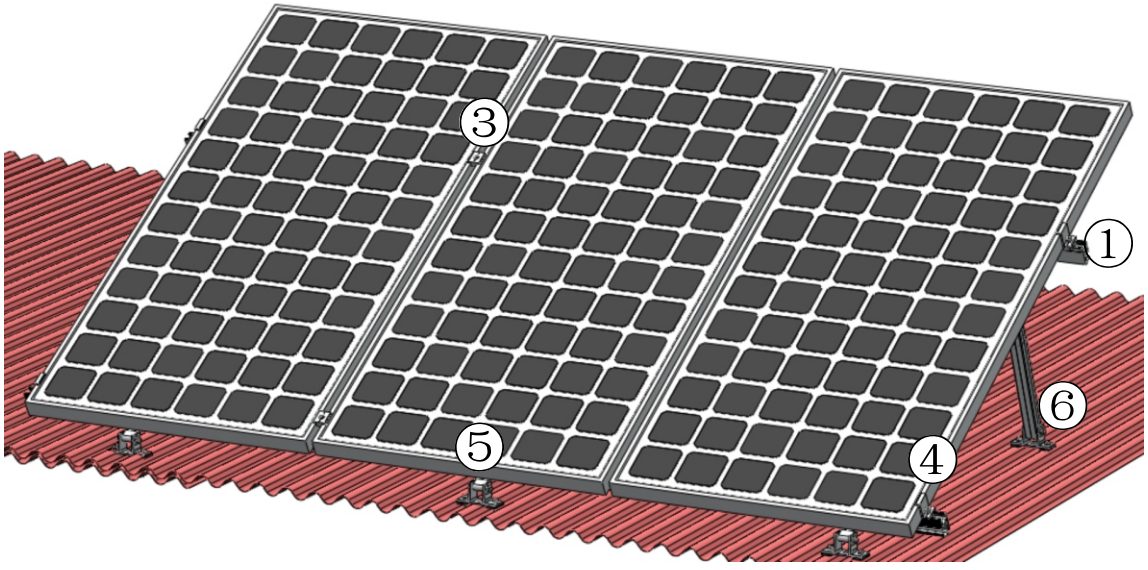
Grounding Lug ※ Fix the wire ※ Material:Cu ※ Include 1pc M8*25 bolt,1pc M8 spring washer,1pc M8, OD18 lock washer,1pc nut,1pcM6*15 bolt	
Grounding Clip ※ Electric Conduction ※ Material:Stainless steel	
Rubber Pad ※ Wearing pads ※ Change in time	

Variety of Screws	
Wood Screw ※ With pad	
Socket Head Screw	

6. System overview



① TT Rail	② TT Rail Splice (Optional)
③ Inter Clamp	④ End Clamp
⑤ Front Leg	⑥ Rear Leg

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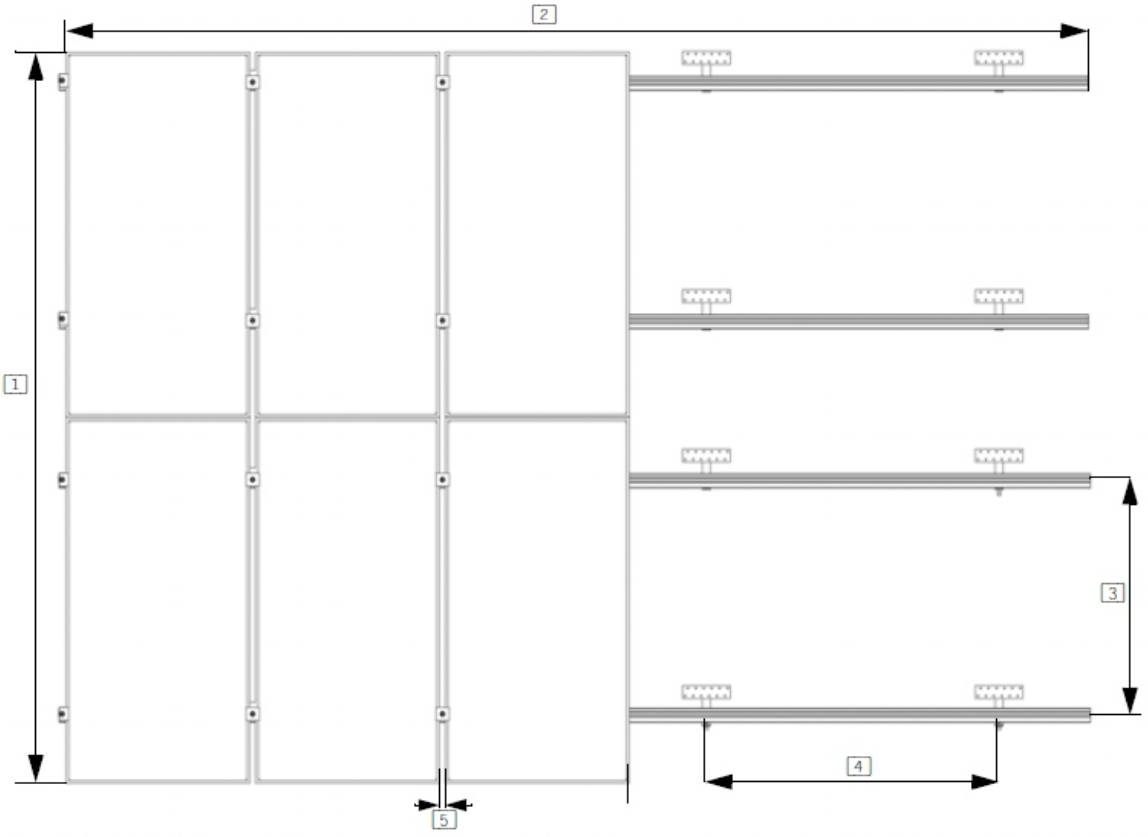
7. Designing the module field

Below, the distances between roof connections for a portrait installation are specified. Clamp on roof hooks need to be installed in specific distances, depending on the distance of rafters and the stoical conditions.



1 Height of the module field: module height x number of modules vertically
2 Width of the module field: number of modules horizontally x (width of the module + 18 mm)+32 mm
3 Distance between roof connections vertically (according to the clamping points pre-defined by the module producer): Quarter-points of the modules, about 1/2 of module height.
4 Distance between roof connections horizontally: Depending on the distance between rafters and on the static requirements (please see the ***Chapter 8*** on page 11).
5 Distance between modules: 17 mm

When positioning the modules, please take into consideration

※ That the values above are
※ That dimensions of tiles or other roof covering and the position of the rafters define the precise actual horizontal distance between roof connections
※ That the distance between roof laths defines the precise actual vertical distance between roof connections.

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8. Planning

8.1 Determine the wind region of your installation site

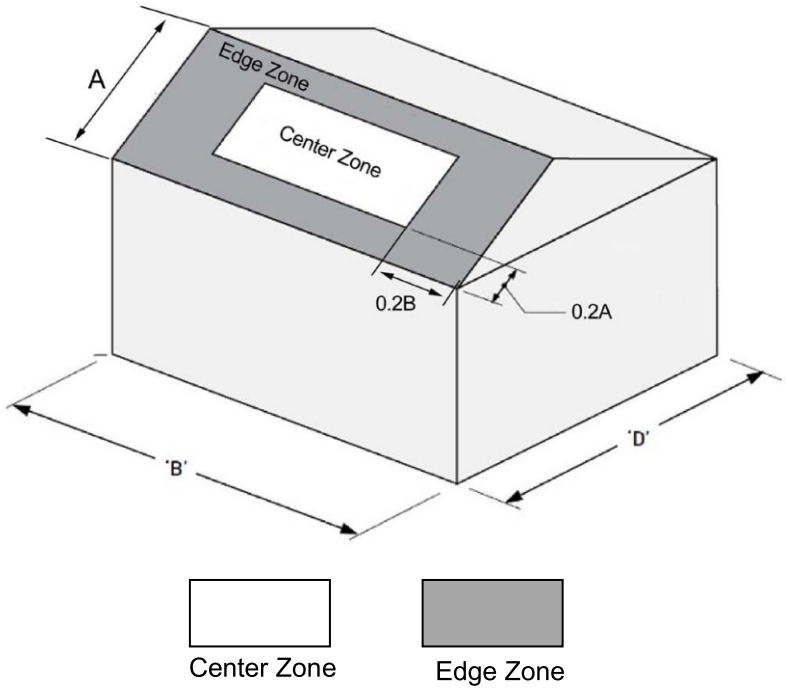
Region A	A≤ 41msec
Region B	41msec < B≤ 48msec
Region C	48msec < C≤ 56msec
Region D	56msec < D≤ 66msec

8.2. Determine the height of the of your installation site

This document provides sufficient information for Titan solar system installation height less than 20 meters. If your installation site is more than 20 meters in height, please contact Titan solar to obtain engineering data to support your installation.

8.3 Determine Roof Installation Roof Areas

Titan solar system can be installed anywhere on a roof but fixing centers are required to be reduced at ridges and edges. The diagram below shows the area of higher wind loadings within 0.2A and 0.2Bof a roof edge ridge (where A and B are the planned dimension of the building).



The following table will help you determine the maximum rail support spacing for your project.
Also note that if the roof slope is less than 10 degree the reduction on spacing does not apply.

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8.4 Determine the Maximum Rail Support Spacing

Please use the following table to determine the base rail support spacing for tin roof installations

Max PV panel length: 2100mm. Max panel weight: 15kg/m^2

*When we fix two screws into the left and right holes of the rear leg,please use the following table.

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 1700mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	1450	300	1000	300	625	300	375	N/A
10 m	1200	300	825	300	550	300	325	N/A
15m	1100	300	750	300	500	300	300	N/A
20m	1025	300	725	300	425	300	N/A	N/A

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 2100mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	1225	300	850	300	525	300	325	N/A
10 m	1000	300	700	300	475	300	N/A	N/A
15m	900	300	625	300	400	N/A	N/A	N/A
20m	850	300	600	300	375	N/A	N/A	N/A

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 2200mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	1170	300	810	300	500	300	310	N/A
10 m	950	300	670	300	455	300	N/A	N/A
15m	850	300	590	300	375	N/A	N/A	N/A
20m	805	300	570	300	360	N/A	N/A	N/A

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Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 1700mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	1350	300	925	300	575	300	350	N/A
10 m	1125	300	775	300	525	300	325	N/A
15 m	1025	300	700	300	450	300	N/A	N/A
20m	950	300	650	300	400	300	N/A	N/A

Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 2100mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	1125	300	775	300	475	300	300	N/A
10m	925	300	625	300	425	300	N/A	N/A
15m	850	300	575	300	375	N/A	N/A	N/A
20m	800	300	550	300	325	N/A	N/A	N/A

Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 2200mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	1070	300	740	300	450	300	290	N/A
10 m	875	300	590	300	400	100	N/A	N/A
15m	805	300	545	300	355	N/A	N/A	N/A
20m	760	300	525	300	305	N/A	N/A	N/A

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Tin Roof 30° < a < 60 ° Adjustable Racking / Tilt Frame

For Up To 1700mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	1250	300	850	300	525	300	325	N/A
10m	1050	300	725	300	500	300	300	N/A
15m	950	300	650	300	400	300	N/A	N/A
20m	875	300	575	300	375	100	N/A	N/A

Tin Roof 30° < a < 60 ° Adjustable Racking / Tilt Frame

For Up To 2100mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	1025	300	700	300	425	300	275	N/A
10m	850	300	550	300	375	100	N/A	N/A
15m	800	300	525	300	350	N/A	N/A	N/A
20m	750	300	500	300	275	N/A	N/A	N/A

Tin Roof 30° < a < 60 ° Adjustable Racking / Tilt Frame

For Up To 2200mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	970	300	660	300	400	100	260	N/A
10 m	800	300	505	300	345	100	N/A	N/A
15m	760	300	495	300	335	N/A	N/A	N/A
20m	720	300	480	100	250	N/A	N/A	N/A

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*When we fix one screw into the middle hole of the rear leg,please use the following table.

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 1700mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	725	300	500	300	325	100	N/A	N/A
10m	650	300	450	300	280	100	N/A	N/A
15m	600	300	400	300	245	100	N/A	N/A
20m	550	300	350	100	225	100	N/A	N/A

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 2100mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	625	300	500	300	300	100	N/A	N/A
10m	550	300	450	100	275	100	N/A	N/A
15m	475	300	400	100	250	N/A	N/A	N/A
20m	425	300	350	100	225	N/A	N/A	N/A

Tin Roof 10° < a <15 ° Adjustable Racking / Tilt Frame

For Up To 2200mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	600	300	500	100	295	300	N/A	N/A
10 m	525	300	450	100	275	300	N/A	N/A
15m	445	300	400	100	240	N/A	N/A	N/A
20m	395	100	350	100	225	N/A	N/A	N/A

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Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 1700mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	675	300	490	300	325	100	N/A	N/A
10m	562	300	420	300	280	100	N/A	N/A
15m	510	300	380	100	245	100	N/A	N/A
20m	475	300	360	100	225	100	N/A	N/A

Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 2100mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5m	560	300	440	100	290	100	N/A	N/A
10m	490	300	380	100	250	100	N/A	N/A
15m	430	300	340	100	220	N/A	N/A	N/A
20m	410	100	320	100	210	N/A	N/A	N/A

Tin Roof 15° < a < 30 ° Adjustable Racking / Tilt Frame

For Up To 2200mm Long Panel (2Rails)								
Max. Support Spacing (mm)								
Installation	Region A		RegionB		RegionC		RegionD	
Height(m)	Center	Edge	Center	Edge	Center	Edge	Center	Edge
5 m	530	300	430	100	280	100	N/A	N/A
10 m	470	300	370	100	240	100	N/A	N/A
15m	410	100	330	100	215	N/A	N/A	N/A
20m	395	100	310	100	205	N/A	N/A	N/A

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Note for Tin Roof

- Each foot should be fixed to the purlins using at least 2-12g(6mm) screw through sheet metal roofs with gasket.
- Please note that the screws provided with our products are designed for mounting in to wooden structures (10TPI). Titan Solar recommend using 12G 14TPI screws (or M6 Buildex RoofZip®) to fix to steel purlins.
- Maximum spans not to exceed 2400mm
- Minimum 35mm embedment length into timber
- Minimum metal purlins/ battens 0.55mm
- Spacings may be increased by 35% if 0.75mm metal battens and 45% into 35mm min timber battens

8.5 Verify acceptable Rail End Overhang

Rail End Overhang must equal 50 percent or less of foot spacing. Thus, if foot spacing is 1200mm, the Rail End Over hang can be up to 600mm. In this case, two feet can support a rail of as much as 2400mm (1200mm between the feet and 600mm of overhang at each end).

8.6 Determine Roof Slope

Titan solar system can be used for roof slope up to 60 degrees. Please verify the Installation site roof slope should be between 0 degrees and 60 degrees.

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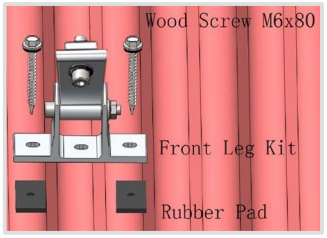
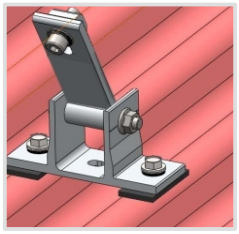
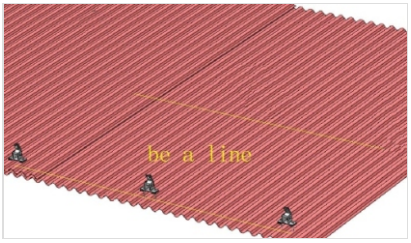
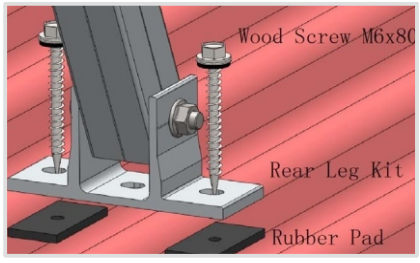
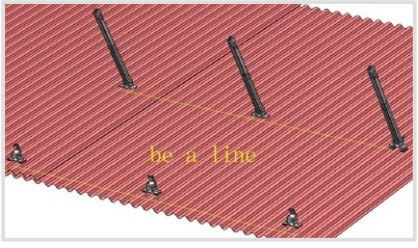
9 . Installation

Install on Tin Roof	
1. Fix the front leg (together with rubber pad) to the rafter using two 6*80 wood screws. Determine the positions of the front leg according to your plans. ※ Tighten the screws in the situation when the roof undamaged.	  
2. Fix the rear leg (together with rubber pad) to the rafter using two 6*80 wood screws. Determine the positions of the rear leg according to your plans. ※ Tighten the screws in the situation when the roof undamaged.	 

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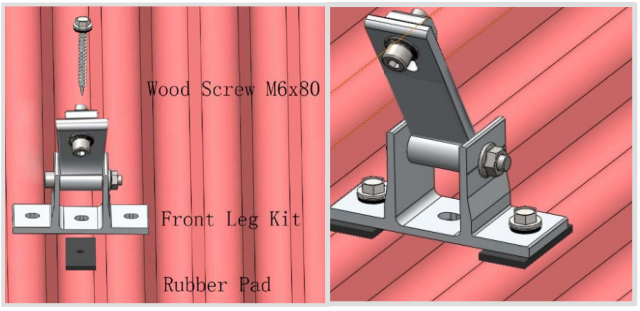
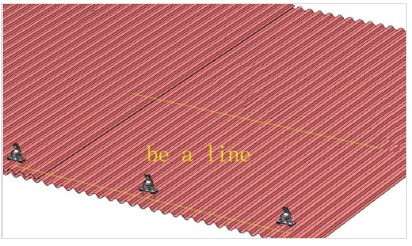
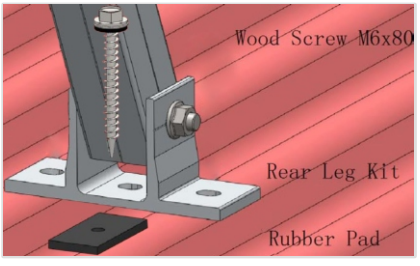
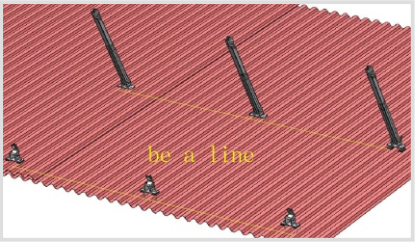
*When we fix one screw into the middle hole of the tilt leg.

Install on Tin Roof	
3. Fix the front leg (together with rubber pad) to the rafter using one 6*80 wood screw. Determine the positions of the front leg according to your plans. ※ Tighten the screw in the situation when the roof undamaged.	 
4. Fix the rear leg (together with rubber pad) to the rafter using one 6*80 wood screw. Determine the positions of the rear leg according to your plans. ※ Tighten the screw in the situation when the roof undamaged.	 

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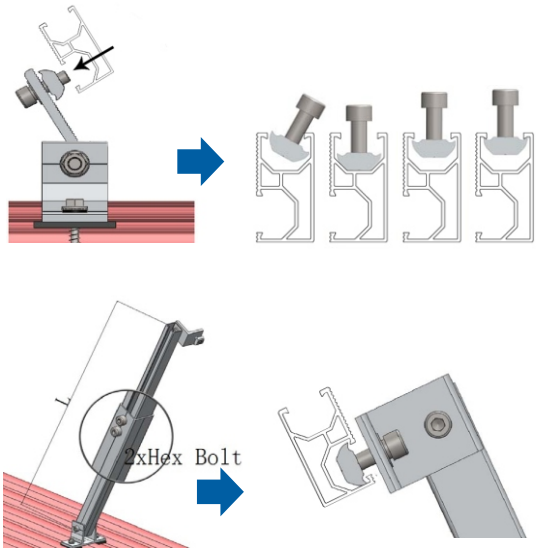
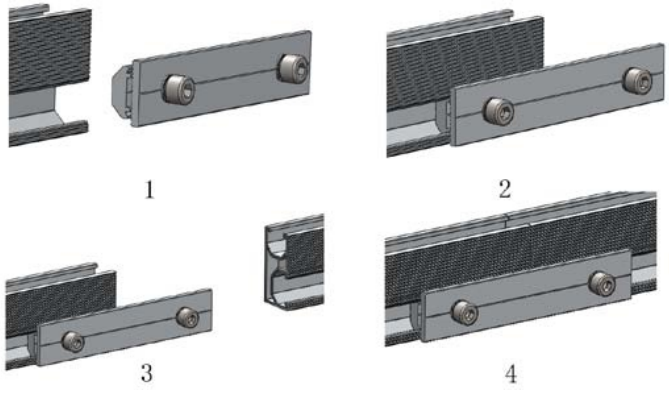
5. Use the M8*25 Hexagon screw, M8 spring washer, M8 antiskid washer and fixing nut to connect the rail with the front leg and the rear leg. ※ Torsion:23-25N.m	
6. TT Rail connect (with toothed gears) a. Put the TT Rail Splice into the side channel of the TT Rail about 75mm, then fasten the M8 Bolt. b. Put the other TT Rail into the other side of the TT Rail Splice and fasten the other M8 bolt. ※ Torsion:23-25N.m	

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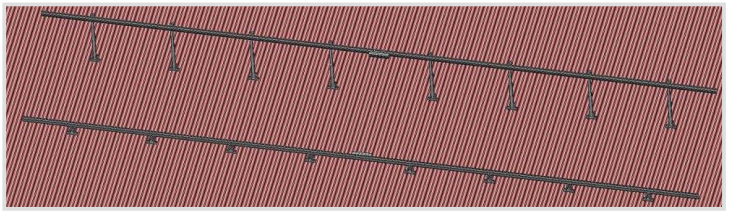
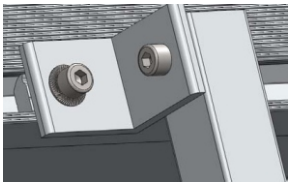
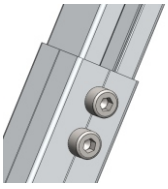
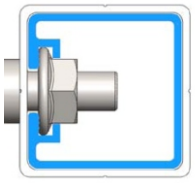
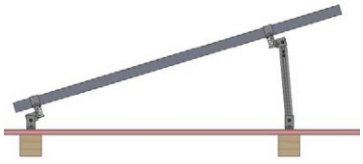
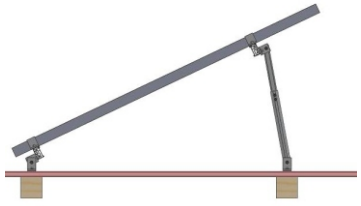
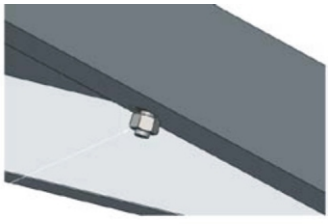
7. Repeat the above steps in accordance with the planned layout.	
8. After finishing installation of whole system, adjust the lengths of rear legs to adjust the tilt angle of panels. Slowly unlock the screw on rear leg with a wrench and then unlock two screws on rear legs and adjust.	   Telescopic Tubs
9. Calculate the suitable length of rear leg according to the required angle (for choice, 10°-15°, 15°-30°and 30°-60° rear legs are available). Then stretch or shorten the rear leg tube and lock the two screws, assuring height of rear legs keeping in the same line. Angle differences shown as the picture:	 

Install the module	
10 Installing anti-slip protection The anti-lip protection is only necessary on the lowermost row of modules. At first, fit two bolts M6*20 and nuts into the lower holes of each module. Then place the first module of the bottom row so that the anti-slip protection sits in the rail channel of the lowest row of rails ※ Torsion:23-25N.m	 

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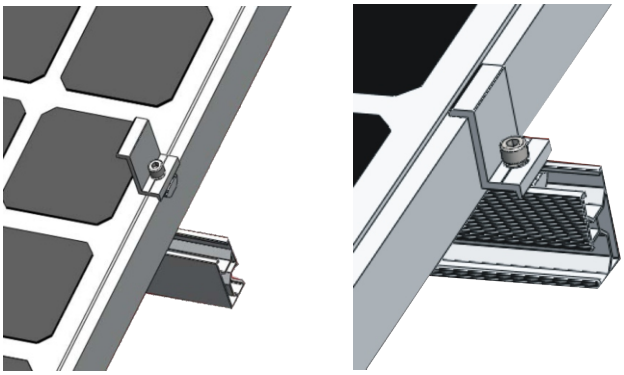
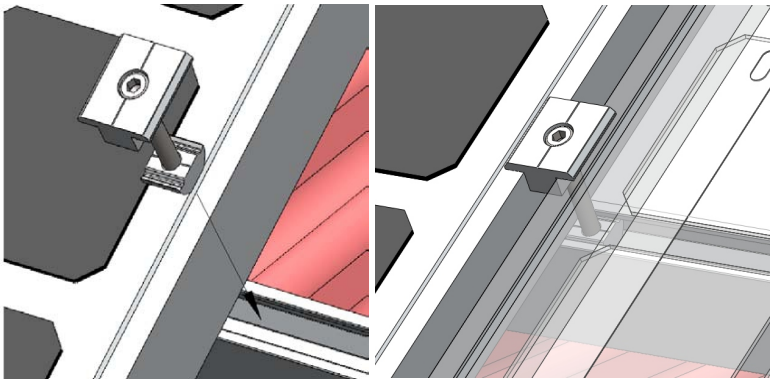
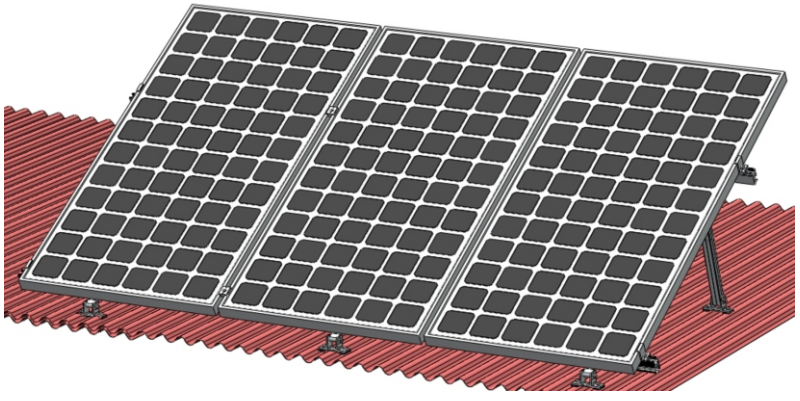
11. Fixing the outer modules by End clamp. a. Put the end clamp kit into the top channel of the TT -Rail as the step 9. b. Push the side of module to firmly against the end clamp and then fasten the bolt. ※ Torsion:23-25N.m	
12. Fixing the inter modules by inter clamp. a. Put the inter clamp kit into the top channel of the TT -Rail as the step 9. b. Push the Inter-module clamp firmly against the already fixed module. c. Push the next module against the other side of the module-inter clamp. d. Tighten the bolt ※ Torsion:23-25N.m	
13. Installing the further rows of modules	

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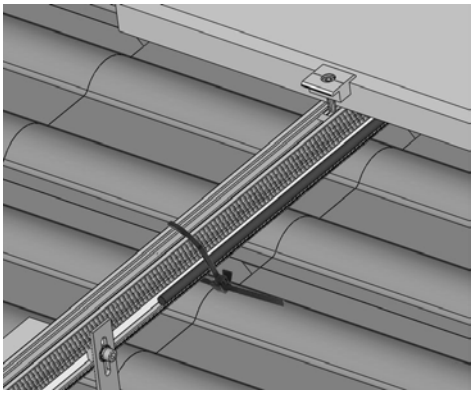
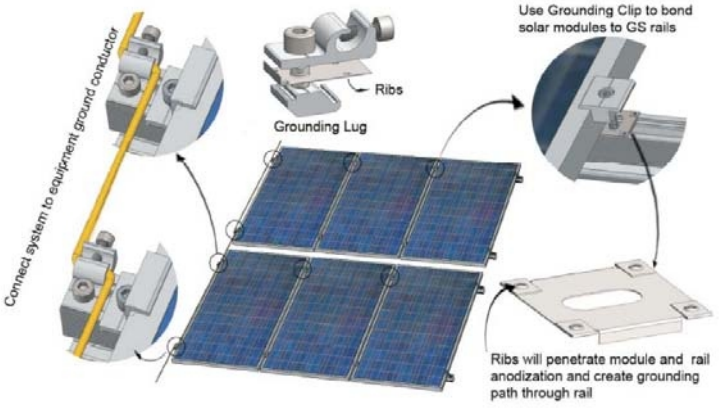
Cable tie and Grounding	
14. Tie cable with the rail a. Tie the cable with the rail using the zip tie	
15. Grounding Please see the Titan Solar Grounding System Installation Guide.	

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10 . Warranty

1. To be used only in combination with modules that include this specific rack system in their installation manual.
   Fire Rated:A
   The minimum distance between module and roof is 8.5cm.
2. This racking system may be used to ground and/or mount a PV module complying with UL 1703 only when the specific module has been evaluated for grounding and/or mounting in compliance with the included instructions.

Jiangyin Titanergy Co., Ltd. warrants that its Titan Solar Panel Mounting System is free from defects in materials and workmanship for a period of 10 years from the date on which the Frame is purchased from Titan Solar, on the terms set out in this warranty.

In the event that the Frame does not conform to this warranty during the Warranty Period, Titan Solar will, at its option, either repair or replace the Frame or pay the cost of having the Frame repaired or replaced. To the extent permitted by law, Titan Solar's total liability under this warranty will in no circumstances exceed the repair or replacement of the Frame or payment of the cost of having the Frame repaired or replaced. In the event of replacement of the Frame, any remaining part of the Warranty Period will be transferred to the replacement Frame.

This warranty will not apply to any defect or damage to the Frame arising directly or indirectly from:

1.Shipment or storage of the Frame;

2.Improper installation, maintenance, repair or use of the Frame;

3. Normal wear and tear;

4. Misuse, neglect, abuse, accidental damage or modification to the Frame;

5. Failure to observe the instructions set out in the System Manual; or

6. Power failure, power surges, lightning, fire, explosion, flood, extreme weather conditions, environmental disasters or other causes outside Grace Solar's control, as determined by Titan Solar in its sole discretion.

This warranty does not cover, and under no circumstances will Titan Solar be liable for, any costs associated with the removal, shipping, handling or re-installation of the Frame or the costs of sending personnel to any site to repair or replace the Frame. This warranty is only provided to the original purchaser of the TItan Solar panels mounting system (Purchaser) or, where the Purchaser is an installer or builder who on-supplies the Frame to another party, to that other party (End-User). This warranty is not transferable.

Where an End-User wants make a claim under this warranty, the End-User must in the first instance contact the installer or builder from whom the Frame was purchased.

This warranty will not apply to any claims received by Titan Solar after the expiration of the Warranty Period. Titan Solar makes no warranties, express or implied, other than the warranties made herein, and specifically disclaim all other warranties, representations and conditions to the extent permitted by law. To the extent permitted by law, in no circumstances will Titan Solar be liable for direct, indirect, special or consequential damages arising from a defective Frame or for any damage or injury to persons or property. Titan Solar's aggregate liability, if any, in damages or otherwise, will not exceed the invoice value of the Frame at the time of purchase from Titan Solar.

Any provision contained in this warranty which is prohibited or unenforceable in any jurisdiction will be deemed to be ineffective to the extent of such prohibition or unenforceability and will not invalidate the remaining provisions nor affect the validity or enforceability of that provision in any other jurisdiction.

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11 . Revision History

Table:Revision History

Revision Number	Revision Date	Reason for change	Document Author
01	2015-10-20	Initial Release	Josie
02	2017-08-01	Add Contents(P14-P15)	Josie
03	2018-08-01	Product Update:TT-R-SPB	Jason
04	2019-06-13	Product Update(P18)	Jason
05	2021-03-01	Product Update(P7)	Jason