

Solar Mounting Systems



XIAMEN FASTEN SOLAR TECHNOLOGY CO., LTD

Unit4B, No.16 Xiangxing 3rd Road, Free Trade Zone, 361006, Xiamen, China
Tel: 0086-592-5685361 Fax: 0086-592-5685361
Web: www.fastensolar.com Mail: info@fastensolar.com

MORE INFO PLS SEE THE WEBSITE AT: www.fastensolar.com



Fasten Solar

The Leading Supplier of Solar Mounting Systems



Fasten Solar

- Established in 2012
- Registered Capital: 2 million USD
- Headquarter: Xiamen, Fujian, China

Fasten Group:

- Fasten Group Limited
- Xiamen Fasten Solar
- Xiamen Fast Power
- Hainan One Technology
- Longyan Xinzhenjin Energy

Main Business Scope:

Researching, manufacturing and marketing for solar mounting solutions, including roof mounts, ground mounts, carport mount, solar farm and other solar accessories.

Main Business Markets:

Mainland China, Hongkong, Japan, Australia, New Zealand, Thailand, Korea, Vietnam, Philippines, MENA, European Countries, North and South America etc.

2.5GW+

installed capacity

1500MW+

annual production capacity

2000+

project cases

10+

certifications

30+

domestic and international patents

100+

Export to More Than 100 Countries and Regions Worldwide



TABLE OF CONTENTS

ABOUT US	01
CONTENTS	02
FACTORY VIEW	03-04
SYSTEMS OVERVIEW	05-06
OVERVIEW PITCHED ROOF SYSTEMS	
GS-Tile For tile roofs	07-08
GS-Tin For metal roofs	09-10
GS-Railless For metal roofs	11-12
GS-Clamp For metal roofs	13-14
OVERVIEW FLAT ROOF SYSTEMS	
GS-Tilt Adjustable kit for metal roofs	15-16
GS-Tri Fixed angle for metal roofs	17-18
GS-Wind For flat roofs	19-20
OVERVIEW GROUND MOUNTED SYSTEMS	
S-Terrain System concrete / ground screw	21-22
F-Terrain System concrete / ground screw	23-24
F-Steel Pile System pile foundation	25-26
F-AL Pile System pile foundation	27-28
Solar Farm concrete / ground screw	29-30
Piles Ground Screw	31-32
ACCESSORIES	33-34
PROJECT REFERENCE	35-38



Being with the complete supply chain from ingot melting, extrusion, anodizing, power coating, finishing and packing, Fastensol strictly controls the production process of every product, records the manufacturing process of every part. Each high quality product comes from Fastensol's intelligent automatic production system and transparent quality control management system. In order to ensure high performance of products, Fastensol is equipped with the latest production technology from the world's leading equipment manufacturers. Fastensol has full process inspection on raw materials, production process and finished products, and has most efficient design and management, calibration and verification on measures, to ensure reliability of each product.



Roof Mount



GS-Tile Mounting System
For Tile Roofs

Page 07



GS-Tin Mounting System
For Metal Roofs

Page 09



GS-Railless Mounting System
For Metal Roofs

Page 11



GS-Clamp Mounting System
For Standing Seam Roofs

Page 13



GS-Tilt Mounting System
For Flat Metal Roofs

Page 15



GS-Tri Mounting System
For Flat Concrete or Metal Roofs

Page 17



GS-Wind Mounting System
For Flat Concrete or Metal Roofs

Page 19

Ground Mount



S-Terrain System
Concrete / Ground Screw Foundation

Page 21



F-Terrain System
Concrete / Ground Screw Foundation

Page 23



F-Pile Steel System
Pile Foundation

Page 25



F-Pile AL System
Pile Foundation

Page 27



Solar Farm
Concrete / Ground Screw Foundation

Page 29



Helix Piles | Ground Screw

Page 31

GS-TILE | FOR TILE ROOFS



Features

- Application: Pitched Tile Roofs
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components



GS Mounting Rail-Silver or Black
Material: Aluminum 6005-T5 / 512pcs per pallet



GS Rail Splice Kit
Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton



Adjustable Pantile Roof Hook 1#
Material: Aluminum 6005-T5 & SUS304 / 30pcs per carton



Adjustable Pantile Roof Hook 2#
Material: SUS304 / 40pcs per carton



Pantile Roof Hook 1#
Material: SUS304 / 40pcs per carton



Pantile Roof Hook 2#
Material: SUS304 / 40pcs per carton



GS End Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Mid Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Grounding Clip
Material: SUS304 / 4000pcs per carton



GS Grounding Lug
Material: Aluminum 6005-T5 & SUS304 / 800pcs per carton



GS Rail End Cap
Material: Rubber / 600pcs per carton

GS-TIN | FOR METAL ROOFS



Features

- Application: Pitched Metal Roofs
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components



GS Mounting Rail-Silver or Black
Material: Aluminum 6005-T5 / 512pcs per pallet



GS Rail Splice Kit
Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton



Hanger Bolt with Aluminum L-foot
Material: Aluminum 6005-T5 & SUS304 / 160pcs per carton



Hanger Bolt with Steel L-foot
Material: SUS304 / 160pcs per carton



Hanger Bolt with Steel Plate
Material: SUS304 / 160pcs per carton



GS L Foot
Material: Aluminum 6005-T5 & SUS304 / 160pcs per carton



GS End Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Mid Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Grounding Clip
Material: SUS304 / 4000pcs per carton

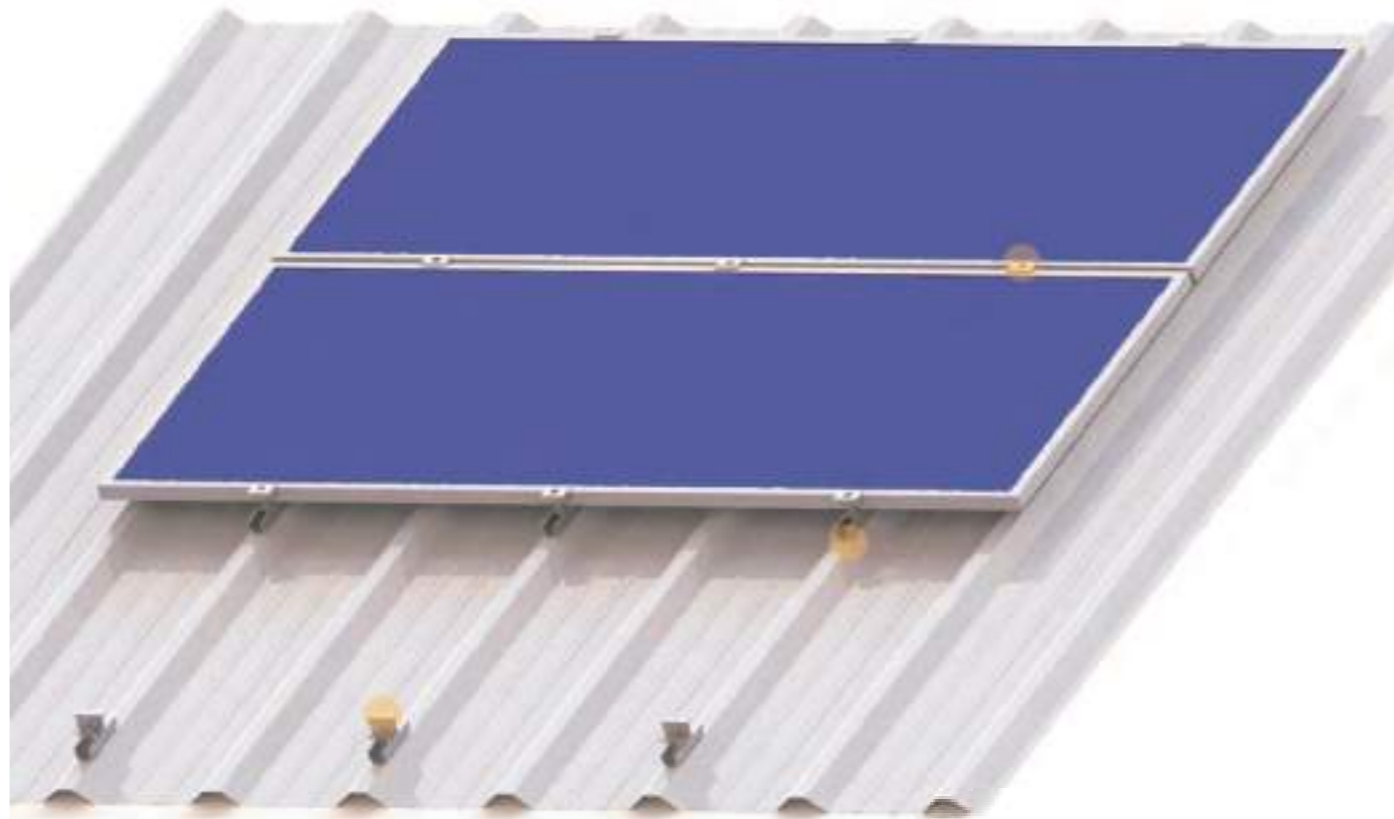


GS Grounding Lug
Material: Aluminum 6005-T5 & SUS304 / 800pcs per carton



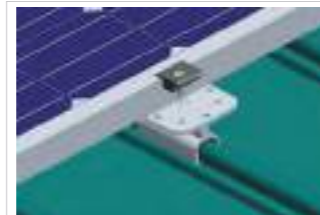
GS Rail End Cap
Material: Rubber / 600pcs per carton

GS-RAILLESS | FOR METAL ROOFS



Features

- Application: Metal Roofs
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components



GS Mini Rail
140mm,300mm or Customized Length



GS End Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Mid Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



Kliplok700
Material: Aluminum 6005-T5 & SUS304 / 60pcs per carton



Kliplok750
Material: Aluminum 6005-T5 & SUS304 / 60pcs per carton



Kliplok800
Material: Aluminum 6005-T5 & SUS304 / 60pcs per carton



Kliplok88
Material: Aluminum 6005-T5 & SUS304 / 60pcs per carton



Standing Seam Hook 1#
Material: Aluminum 6005-T5 & SUS304 / 100pcs per carton



GS Grounding Clip
Material: SUS304 / 4000pcs per carton



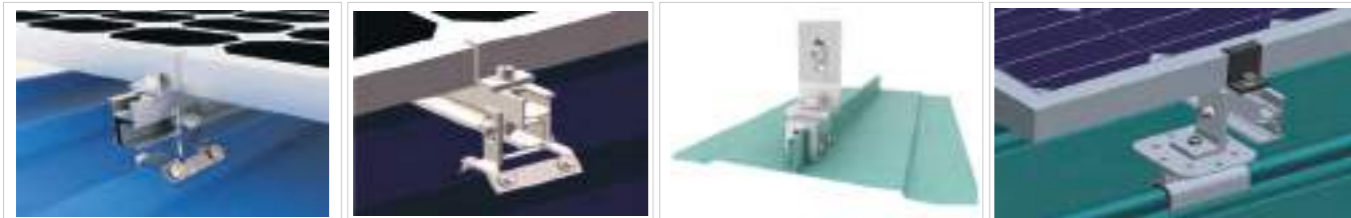
GS Grounding Lug
Material: Aluminum6005-T5 & SUS304/800pcs per carton

GS-CLAMP | FOR STAND SEAM ROOFS














Features

- Application: Metal Roofs
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	GS Mounting Rail-Silver or Black Material: Aluminum 6005-T5 / 512pcs per pallet
	GS Rail Splice Kit Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton
	Kliplok700 Material: Aluminum 6005-T5 & SUS304 / 60pcs per carton
	Standing Seam Hook 1# Material: Aluminum 6005-T5 & SUS304 / 100pcs per carton
	Standing Seam Hook 2# Material: SUS304 / 100pcs per carton
	Standing Seam Hook 3# Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	Metal Roof Clamp 1# Material: SUS304 / 100pcs per carton
	Metal Roof Clamp 2# Material: SUS304 / 100pcs per carton
	Universal Metal Roof Clamp 3# Material: Aluminum 6005-T5 & SUS304 / 100pcs per carton
	GS End Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS Mid Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton

GS-TILT | FOR METAL ROOFS









Features

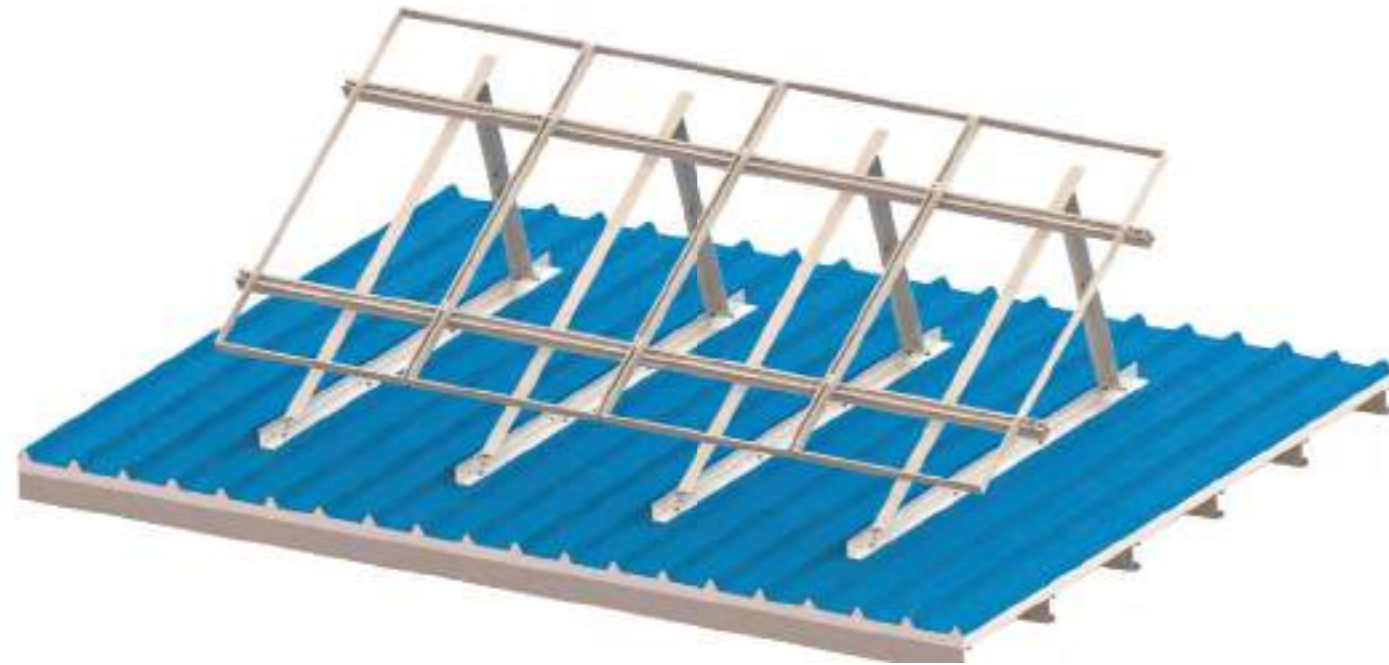
- Application: Metal Roofs
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	GS Mounting Rail-Silver or Black Material: Aluminum 6005-T5 / 512pcs per pallet
	GS Rail Splice Kit Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton
	GS Front Leg 1# Material: Aluminum 6005-T5 & SUS304 / 20pcs per carton
	GS Front Leg 1# Material: Aluminum 6005-T5 & SUS304 / 20pcs per carton
	GS Rear Leg 1# Material: Aluminum 6005-T5 & SUS304 / 20pcs per carton
	GS Rear Leg 2# Material: Aluminum 6005-T5 & SUS304 / 20pcs per carton
	GS Rear Leg 3# Material: Aluminum 6005-T5 & SUS304 / 20pcs per carton
	GS End Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS Mid Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS Grounding Clip Material: SUS304 / 4000pcs per carton
	GS Grounding Lug Material: Aluminum 6005-T5 & SUS304 / 800pcs per carton
	GS Rail End Cap Material: Rubber / 600pcs per carton

GS-TRI | FOR ROOFS & GROUNDS



Features

- Application: Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components



GS Mounting Rail-Silver or Black
Material: Aluminum 6005-T5 / 512pcs per pallet



GS Rail Splice Kit
Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton



Triangle Bracket 1#
Material: Aluminum 6005-T5 & SUS304 / 10pcs per carton



Adjustable Bracket
Material: Aluminum 6005-T5 & SUS304 / 10pcs per carton



Triangle Bracket 2#
Material: Aluminum 6005-T5 & SUS304 / 10pcs per carton



GS Rail Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS End Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Mid Clamp
Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton



GS Grounding Clip
Material: SUS304 / 4000pcs per carton



GS Grounding Lug
Material: Aluminum 6005-T5 & SUS304 / 800pcs per carton



GS Rail End Cap
Material: Rubber / 600pcs per carton

GS-WIND | FOR ROOFS & GROUNDS



Features

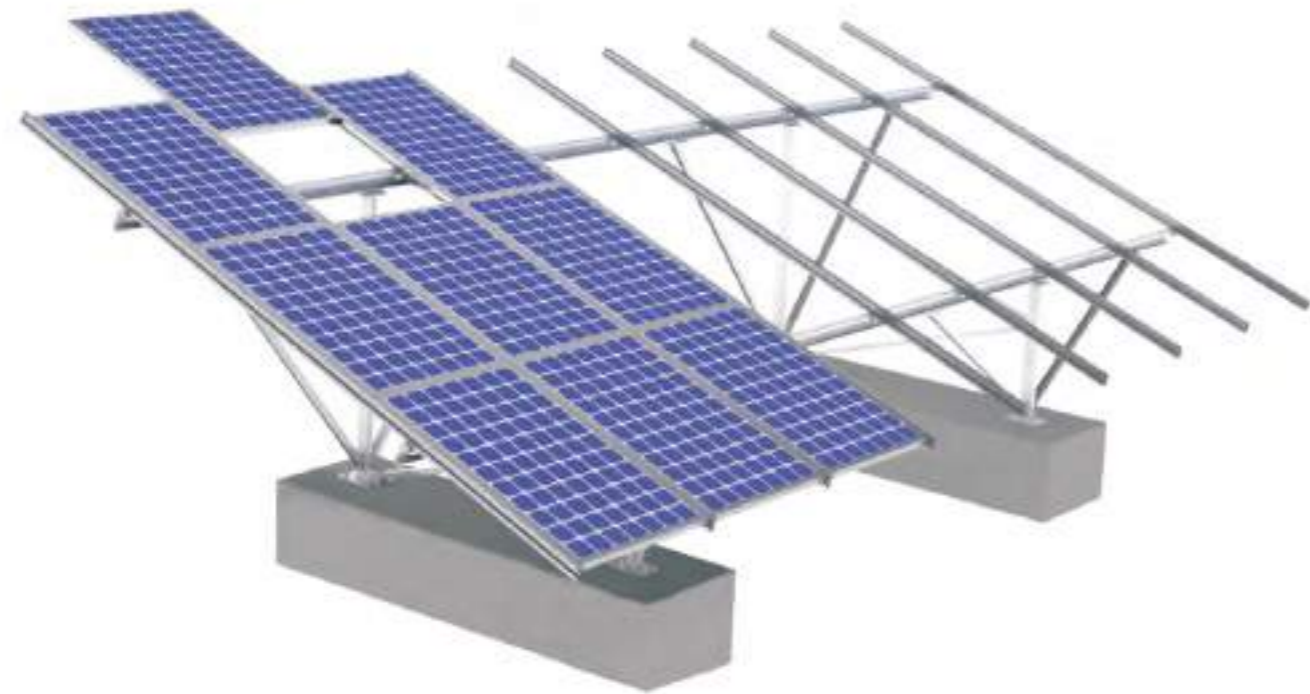
- Application: Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	GS Mounting Rail-Silver or Black Material: Aluminum 6005-T5 / 512pcs per pallet
	GS Rail Splice Kit Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton
	GS Flat Roof Kit Material: Aluminum 6005-T5 & SUS304 / 200pcs per carton
	GS Rail Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS End Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS Mid Clamp Material: Aluminum 6005-T5 & SUS304 / 400pcs per carton
	GS Grounding Clip Material: SUS304 / 4000pcs per carton
	GS Grounding Lug Material: Aluminum 6005-T5 & SUS304 / 800pcs per carton
	GS Rail End Cap Material: Rubber / 600pcs per carton

S-TERRAIN | CONCRETE/SCREW















Features

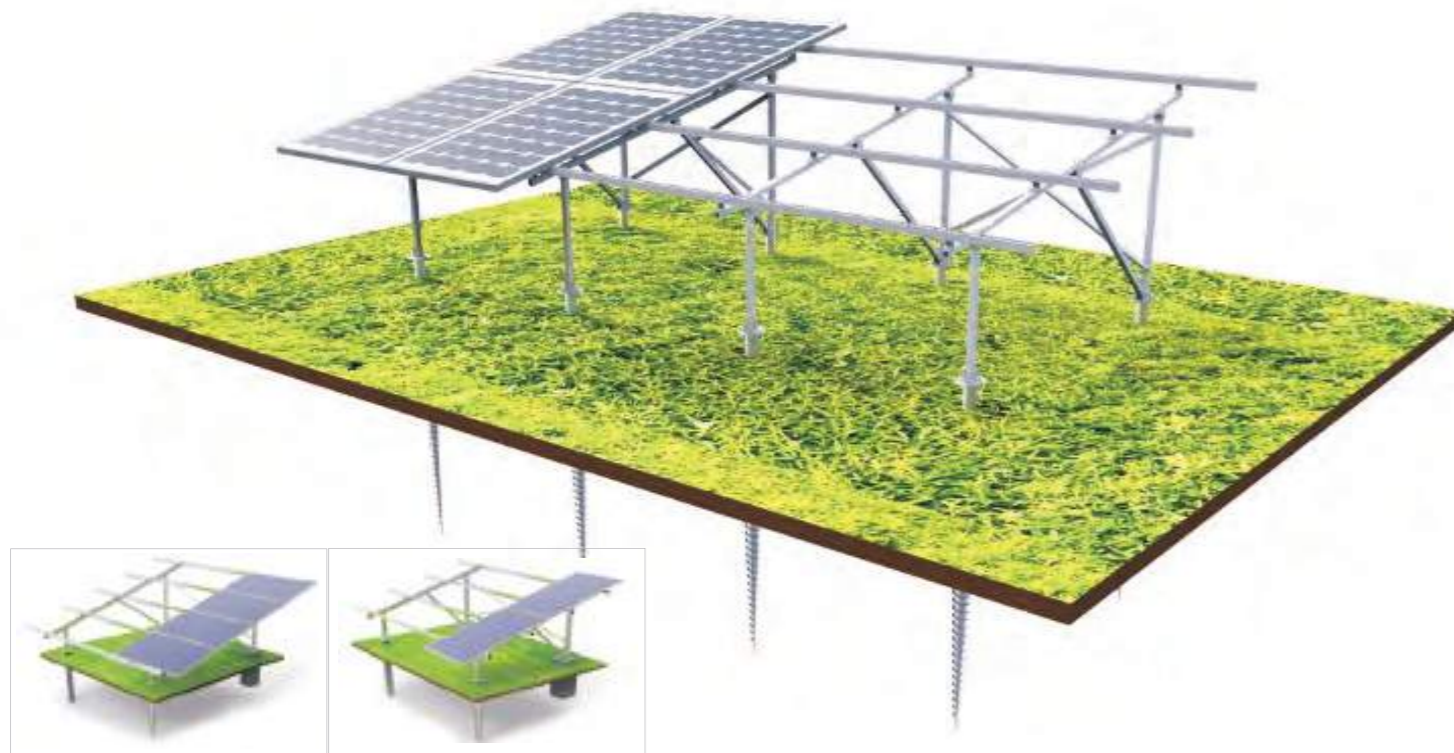
- Application: Flat Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	Panel Mounting Rail Material: Aluminum 6005-T5
	Rotating Supporting Beam Material: Aluminum 6005-T5
	Beam Splice Kit Material: Aluminum 6005-T5 & SUS304
	Front Leg, Rear Leg, Brace Material: Aluminum 6005-T5 & SUS304
	Cross Brace Material: Aluminum 6005-T5
	Rotating Beam Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in End Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in Mid Clamp Material: Aluminum 6005-T5 & SUS304
	Base Material: Aluminum 6005-T5
	Grounding Clip 2# Material: SUS304
	T-Bolt: M10*25 & M10*45 Material: SUS304
	Ground Screw: 76*Length Material: Galvanized steel Q235

F-TERRAIN | CONCRETE/SCREW










Features

- Application: Flat Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	Panel Mounting Rail Material: Aluminum 6005-T5
	Supporting Beam Material: Aluminum 6005-T5
	Beam Splice Kit Material: Aluminum 6005-T5 & SUS304
	Front Leg, Rear Leg, Brace Material: Aluminum 6005-T5 & SUS304
	Cross Brace Material: Aluminum 6005-T5
	Beam Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in End Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in Mid Clamp Material: Aluminum 6005-T5 & SUS304
	Base Material: Aluminum 6005-T5
	Grounding Clip 3# Material: SUS304
	T-Bolt: M10*25 & M10*45 Material: SUS304
	Ground Screw: 76*Length Material: Galvanized steel Q235

F-STEEL PILE | PILE FOUNDATION



Features

- Application: Flat Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5, SUS304 & Q235 HDG
- Standard: AS/NZS1170, MCS ,JIS & SGS



Components



C Purlin
Material: Galvanized steel Q235



Z Purlin
Material: Galvanized steel Q235



Supporting Beam
Material: Galvanized steel Q235



Brace
Material: Galvanized steel Q235



Purlin Clamp
Material: Aluminum 6005-T5 & SUS304



C Pile
Material: Galvanized steel Q235



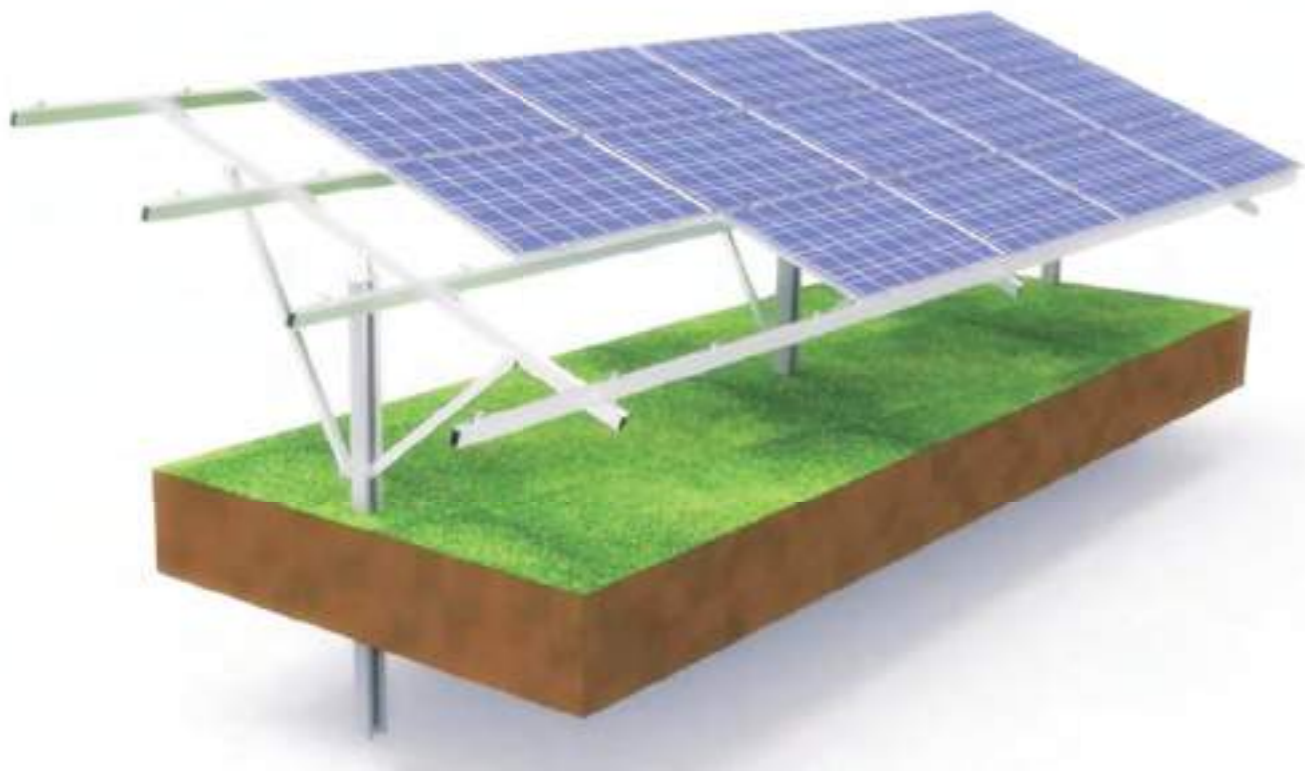
Steel Head
Material: Galvanized steel Q235



Mounting Click-in End Clamp
Material: Aluminum 6005-T5 & SUS304

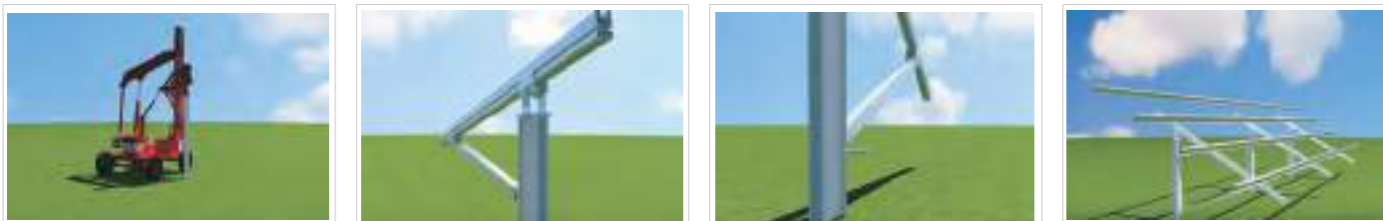
Mounting Click-in Mid Clamp
Material: Aluminum 6005-T5 & SUS304

F-AL PILE | PILE FOUNDATION













Features

- Application: Flat Roofs & Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS ,JIS & SGS



Components

	<p>Mounting Rail Material: Aluminum 6005-T5</p>
	<p>Supporting Beam Assembly Material: Aluminum 6005-T5 & SUS304</p>
	<p>Rail Splice Kit Material: Aluminum 6005-T5</p>
	<p>C Pile Material: Galvanized steel Q235</p>
	<p>Head Assembly Material: Aluminum 6005-T5 & SUS304</p>
	<p>Brace Connector Material: Aluminum 6005-T5 & SUS304</p>
	<p>Rail Clamp Material: Aluminum 6005-T5 & SUS304</p>
	<p>Click-in End Clamp Material: Aluminum 6005-T5 & SUS304</p>
	<p>Click-in Mid Clamp Material: Aluminum 6005-T5 & SUS304</p>
	<p>Grounding Clip 3# Material: SUS304</p>

F-SOLAR FARM



Features

- Application: Grounds
- Wind Speed: 88 m/s
- Module: Frame & Thin Film
- Orientation: Portrait & Landscape
- Material: Aluminum 6005-T5 & SUS304
- Standard: AS/NZS1170, MCS, JIS & SGS



Components

	Panel Mounting Rail Material: Aluminum 6005-T5
	Supporting Beam Material: Aluminum 6005-T5
	Beam Splice Kit Material: Aluminum 6005-T5 & SUS304
	Front Leg, Rear Leg, Brace Material: Aluminum 6005-T5 & SUS304
	Cross Brace Material: Aluminum 6005-T5
	Beam Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in End Clamp Material: Aluminum 6005-T5 & SUS304
	Click-in Mid Clamp Material: Aluminum 6005-T5 & SUS304
	Base Material: Aluminum 6005-T5
	Grounding Clip 3# Material: SUS304
	T-Bolt: M10*25&M10*45 Material: SUS304
	Ground Screw: 76*Length Material: Galvanized steel Q235

HELIX PILES

GROUND SCREW



- Shaft material: Seamless high tensile pipe, conforms to ASTM A500, GRADE B
- Helices material: ASTM A36 Hot rolled plate
- Corrosion protection conform to ASTM A153 standard for hot dip, zinc coating
- Round Shank Anchors are Hot Dip Galvanized to meet ASTM, Specification A153
- Leading edge of Helices beveled 45 degrees
- Greater Section Modulus Strength to resist Twisting and Deflection
- Greater Load Capacities



- A time-proven, versatile, and technically sound system
- Lower cost and faster installation than other methods
- Installs quickly with small or handheld equipment
- Can be installed in limited-access areas or tight access
- Site cleanliness and minimize damage to landscape
- Soil load bearing capacity is tested during installation
- Ground screw available with single, double and triple helix blades



▶▶▶ PRODUCTION PROCESS



Cutting



Sharp contraction



Automatic welding robot

▶▶▶ PRODUCTION PROCESS



Drilling



Zinc plating



Packing

Roof Hooks



F-TH04-GS



F-TH02-GS



F-TH03-GS



F-TH07-GS



F-TH10-T



F-TH11-T



F-TH12-T



F-TH13-T



F-TH14-T



F-MC05-GS



F-ATH07-GS



F-AMC07-GS

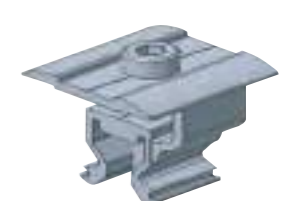
Others



F-EC80-GS



F-MC80-GS



F-UC80-GS



F-HB



F-SSIB-GS



F-ALIB-GS



F-TN-GS



F-CC01-GS



F-CC02-GS



F-CC04-GS



F-BJ-GS



F-CMB06-B



F-CMB06-S



F-SM02-B



F-SM02-W

Project Reference Ground Mounts

Project Reference Ground Mounts



2.0mw ground screw solution in Japan



3.1mw ground screw solution in Japan



1.1mw concrete foundation solution in Japan



500kw ground screw solution in Mexico



3.8mw sloping mounting solution in Japan



4.3mw ground screw solution in Japan



760kw pile ground solution in Holland



50kw carport solution in Japan



1.3mw ground screw solution in Ukraine



1.3mw ground screw solution in Japan



5mw sloping ground mount in Japan



2.7mw ground screw mount in Japan

Project Reference Roof Mount

Project Reference Roof Mount



200kw flat roof solution in Hongkong



530kw triangle solution in New Zealand



700kw L foot solution in UK



2.4mw railless solution in New Zealand



200kw adjustable tilt solution in Australia



980kw railless solution in Brazil



105kw hanger bolt solution in UK



2.0mw mini rail solution in UK



3.2mw clamp solution in Japan



250kw tilt solution in Thailand



800kw tin solution in Mauritius