GroundRack

GROUND MOUNTING GT2

Overview

Ground Terrace Ground Mounting GT2 is a highly pre-assembled ground mounting system, which can be applied to the installation of large commercial and utility scale solar PV projects. Made of high quality aluminum material, GT2 has excellent corrosion resistance performance. The single-pile patented structure design saves installation time and cost, with good compatibility to varied solar modules.


Ground Mounting System

Tilt Angle


Ground Clearance 500-2000mm


Suitable for framed or frameless Solar Modules


Solar Module Layout Portrait or Landscape

10 YEARS
Warranty

Advantages

Pre-assembled Components Save Onsite Installation Time

Solution design case by case, maaost components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.

Structure Configuration Multi-Options

Single or double embrace bars structure configuration available to meet varied projects requests.

Single-Pile Design

Single-pile design reduce half of the ramming time, saving the construction cost.

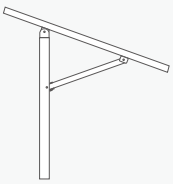
Flexibility and Adjustability

The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.

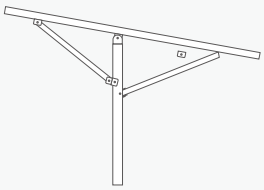
Technical Parameters

System Name	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10 International Building Code IBC 2009, California Building Code CBC 2010
Foundation	U Post		
Tilt Angle	0-60°		
Wind Load	≤60m/s	Material	Steel Q235B(Hot-Dip Galvanized),AL6005-T5(Anodized)
Snow Load	≤1.6KN/m²	Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	≤500mm~2000mm	Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Structure



Single Arm Side Support

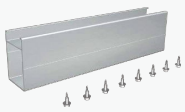


Double Arms Side Support

Component Details

Rail 85

Specification :
L*63.5*85
Material :
3100mm 4100mm 5100mm



Splice for Rail 85

Specification :
L260mm
Components :
Hexa Self-Tapping Screw
With EPDM Washer ST6.3*19

GT2 Pre-assembled Support

Components :
U Beam ; T Shape Jointer ; C clamp Kit
Pre-Assembled Square Tube
Spring WasherM12 ; Washer M12 Hexagon Nut M12 ;
Hexagon Bolt M12*95 Hexagon Bolt M12*75

C Clamp Kit

Components :
C Clamp
Cross Module
Spring Washer M8
Hexagon Socket Bolt

End Clamp Kit

Components :
End Clamp
Cross Module
Spring Washer M8
Hexagon Socket Bolt

Inter Clamp Kit

Components :
Inter Clamp
Cross Module
Spring Washer M8
Hexagon Socket Bolt

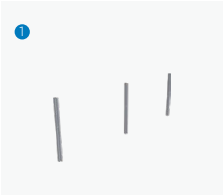
Post Plate

Material :
AL6005-T5(Anodized)
Specification :
Plate A: L90
Plate B: L70

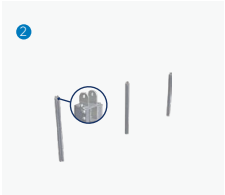
U Post

Material :
Steel Q235B
(Hot-Dip Galvanized)

Installation Guide



Install the U post with driven pile based on project solution



Install Post Plate onto U post

Install the Pre-assemble Support on the Post Plate & U post

Fasten the rail with C Clamp Kit

Fix the solar module with Inter Clamp Kit & End Clamp Kit

Installation is done

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CONCRETE BASE OR GROUND SCREW MOUNTING

Overview

Ground Terrace Concrete Base Or Ground Screw is a highly pre-assembled ground mounting system, with strong wind load and snow load resistance. The system can achieve minor adjustment onsite with special design of Anchor Plate to adapt to different sites, and is mainly applied to medium to large scale solar PV projects. Patented and certified system design ensure projects safety and quick installation.


Ground Mounting System

Tilt Angle


Ground Clearance 500-2000mm


Suitable for framed or frameless Solar Modules


Solar Module Layout Portrait or Landscape

Warranty

Advantages

Pre-assembled Components Save Onsite Installation Time

Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.

No Drill on Portrait Beam

It improves the strength of the system to fix the portrait beam onto the post by special designed clamps, with force at the same direction of the gravity

Quick Modular Kit Fixation

Most of the components are designed as modular kit with anodized aluminum to further ensure easy and fast construction on site.

Flexibility and Adjustability

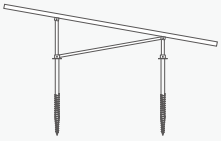
The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.

Technical Parameters

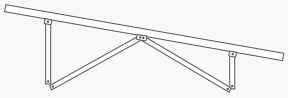
System Name	Ground
Foundation	Concrete Base or Ground Screw
Tilt Angle	0-60°
Wind Load	≤60m/s
Snow Load	≤1.6KN/m²
Ground Clearance	≤500mm~2000mm
Applicable Solar Module	Framed or Frameless
Panel Layout	Portrait or Landscape

Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10 International Building Code IBC 2009, California Building Code CBC 2010
Material	AL6005-T5(Anodized)
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Small Components	AL6005-T5 (Anodized)
Color	Silver or Customized
Warranty	10-Year Warranty

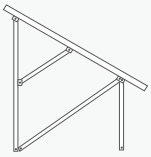
Structure



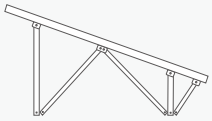
N Shape
Preassembled Supports



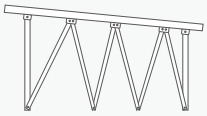
W Shape
Preassembled Supports



Multiple Support I



Multiple Support II



Multiple Support III

Component Details

Cross Beam 85

Specification :
L*71*85
Material :
3100mm 4100mm 5100mm

Splice for Cross Beam85

Specification :
L260mm
Components :
Hexa Self-Tapping Screw
With EPDM Washer ST6.3*19

GT4 Preassembled Support

Components :

C Clamp 80
T Front Jointer
T Back Jointer
Flat Washer M8
Spring Washer M8
Flat head Hexagon Bolt
GT4 Square Tube A
GT4 Square Tube B
GT4 Square Tube C
Flat Washer M12
Spring Washer M12
External Hexagon Bolt M12
External Hexagon Bolt Kit M12*90

C Clamp Kit

Components :
C Clamp
Cross Module
Spring Washer M8
Hexagon Socket Head Bolt M8*28

Wide End Clamp Kit

Components :
Wide End Clamp
Cross Module
Spring Washer M8
Hexagon Socket Head Bolt

U25 Inter Clamp Kit

Components :
Inner Clamp
Cross Module
Spring Washer M8
Hexagon Socket Head Bolt

GT4 Corrugated T Anchor Plate Kit

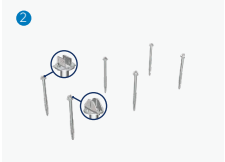
Components :
Corrugated Gasket
Corrugated T Plate
Hexagon Bolt Kit
Material :
AL6005-T5(Anodized)

GT4 Corrugated U Anchor Plate Kit

Components :
Corrugated Washer
Corrugated U Anchor Plate
M12*95 External Hexagon Bolt Kit
Material :
AL6005-T5(Anodized)

Installation Guide

Install the ground screw based on project solution



Fix Corrugated U Anchor Plate Kit & Corrugated T Anchor Plate Kit on ground screw.

Install the Pre-assemble Support on ground screw

Install Back Side Support

Install Beam

Fix the solar module with Inter Clamp Kit & End Clamp Kit

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C-SHAPE,I-SHAPE,π-SHAPE PILES GROUND MOUNTING

Overview

C-shape, I-shape, π-shape Piles Ground Solar Pv Mounting System is applied for the installation of large-scale and utility-scale solar PV power plant. Main components are made of hot-dip galvanized steel, with good performance of structure strength, stability, and anti-corrosion. Compatible with varied solar modules. Unique piles and structure design save installation time and cost.


Ground Mounting System

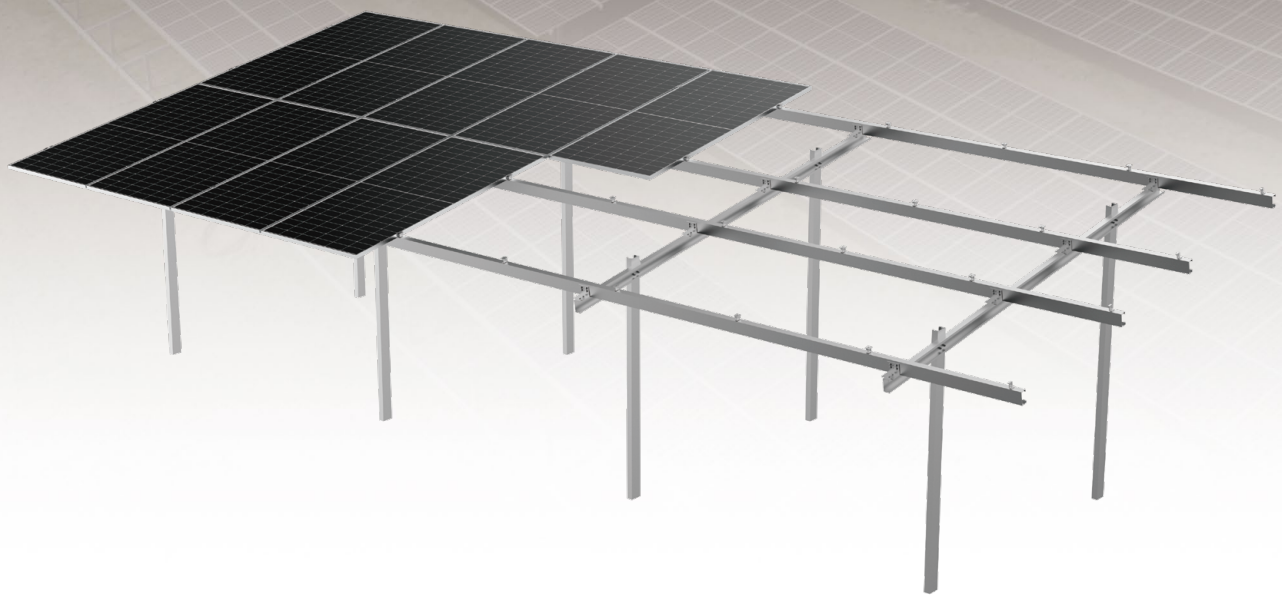
Tilt Angle


Ground Clearance 500-2000mm


Suitable for framed or frameless Solar Modules


Solar Module Layout Portrait or Landscape

Warranty



Advantages

Unique Pile Design

Unique post design suitable for varied soil conditions and strengthen the whole structure stability.

Flexibility and Adjustability

The structure can be adjusted with some tolerance with east-west, west-south and south-north directions, assuring flexible on-site installation to achieve best yield for solar modules.

Pre-assembled Components Save Onsite Installation Time

Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.

Compatible to Varied Solar Modules

With module clamps, the system compatible with most kinds of framed 60-cell, 72-cell, half-cut cells modules and frameless modules.

Technical Parameters

System Name	Ground	Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10 International Building Code IBC 2009, California Building Code CBC 2010
Foundation	C-shape, I-shape, TT-shape Piles		
Tilt Angle	0-60°		
Wind Load	≤60m/s	Material	Q235B(Hot-Dip Galvanized)
Snow Load	≤1.6KN/m²	Fastener	SUS304 & Hot Dip Galvanized
Ground Clearance	≤500mm~2000mm	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Structure

Component Details

Rail

Material :
Steel Q235B
(Hot-Dip Galvanized)

Beam Connector

Material :
Steel Q235B
(Hot-Dip Galvanized)

C-shape Pile

Material :
Steel Q235B
(Hot-Dip Galvanized)

Pile

Material :
Steel Q235B
(Hot-Dip Galvanized)

Inter Clamp Kit

Components :
Inter Clamp
Spring Washer M8
Hexagon Socket Bolt

End Clamp Kit

Components :
End Clamp
Spring Washer M8
Hexagon Socket Bolt

Installation Guide

Install the ground screw based on project solution

Install Inclined Support

The installation of Inclined Support is done

Installation the Beam

Fix the solar module with Inter Clamp Kit & End Clamp Kit

Installation is done

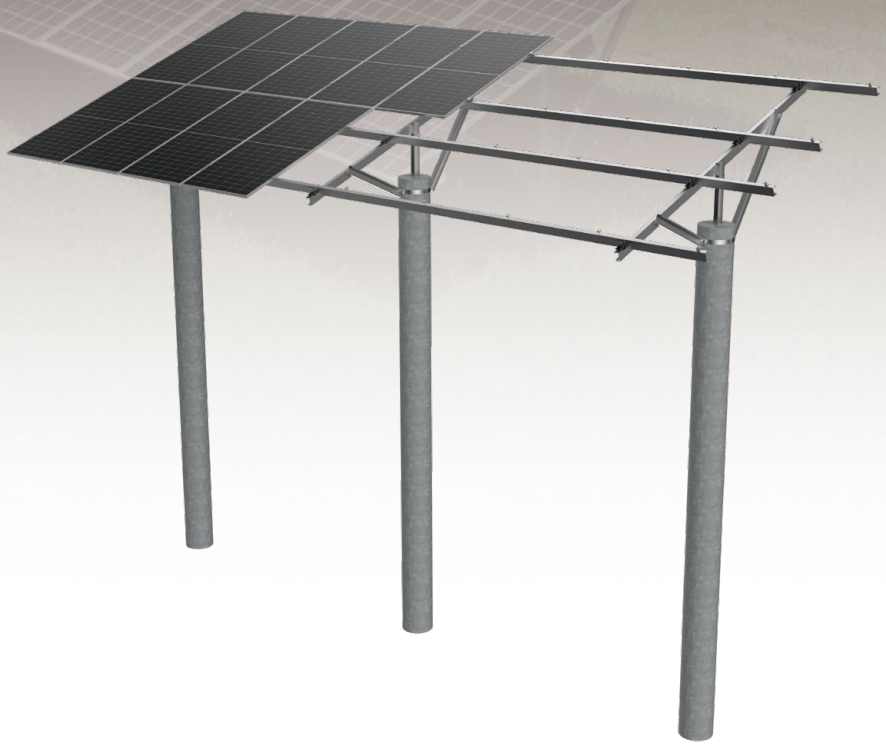
GroundRack

CONCRETE PILE HIGH ELEVATION MOUNTING SYSTEM

Overview

Concrete Pile High Elevation Mounting System is applied to fish Pond,flood area and sandy land solar PV projects. Main components are made ofhot-dip galvanized steel, with good performance of structure strength,stability and anti-corrosion, compatible with varied solar modules. Uniquepiles and structure design save installation time and cost.

Ground Mounting System | Tilt Angle | Ground Clearance 2000mm+ | Suitable for framed or frameless Solar Modules | Solar Module Layout Portrait or Landscape | Warranty



Advantages

Pre-assembled Components Save Onsite Installation Time

Solution design case by case, most components pre-assembled in factory, no onsite cut and drill request, saving the onsite installation time and cost.

Quick Modular Kit Fixation

Most of the components are designed as modular kit with anodized aluminum to further ensure easy and fast construction on site.

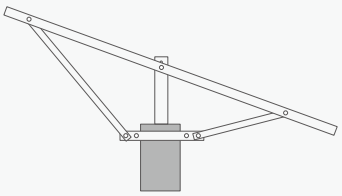
Dual-Use of Land or Utilize Waste Land Improve the Economic Benefit

Install solar projects above the fishpond, achieving the dual-use of land to improve the economic benefit. This system can utilize waste land like flood area or sandy area to save land resources.

Technical Parameters

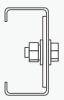
Installation Site	Ponds, Reservoirs	Design Standard	AS/NZS 1170,DIN 1055,JIS C8955:2017, International Building Code IBC 2009, California Building Code CBC 2010;
Foundation	Pre-stressed Concrete Pile		
Tilt Angle	0-45°		
Wind Load	60m/s	Material	Q235B (Hot-Dip Galvanized) & Al6005-T5(Anodized)
Snow Load	≤1.4KN/m²	Fastener	Q235B (Hot-Dip Galvanized) & Zinc-Nickel Alloy Electroplated Steel
Ground Clearance	400-1200mm	Small Components	AL6005-T5(Anodized)
Applicable Solar Module	Framed or Frameless	Color	Silver or Customized
Panel Layout	Portrait or Landscape	Warranty	10-Year Warranty

Structure



Concrete Pile High Elevation Mounting System structures

Hoop Kit



Beam (Side viewing)

Component Details

Beam

Hoop Spec :
C100*50*15*2*L4500
Material :
Q235B(Hot-Dip Galvanized)

Side Beam

Hoop Spec :
C10*50*15*2*L2800
Material :
Q235B(Hot-Dip Galvanized)

Front/Back Post

Specification :
Front Support Back Support
Components :
Q235B(Hot-Dip Galvanized)

Hoop Kit

Hoop Spec :
300*5.0*100
Components :
Flat Washer M14 Spring Washer M14
Hexagon Socket Head Bolt M12*65

End Clamp Kit

Components :
End clamp
Cross Module
Spring Washer M8
Hexagon Socket Bolt

Inter Clamp Kit

Components :
End clamp
Cross Module
Spring Washer M8
Hexagon Socket Bolt

Post

Hoop Spec :
C100*50*15*2*L557
Components :
Flat Washer M16 Spring Washer M16
Hexagon Socket Head Bolt Nut M16
Hexagon Socket Head Bolt M16*50

Small Connector

Hoop Spec :
80*40*5*40
Components :
Flat Washer M12 Spring Washer M12
Hexagon Socket Head Bolt Nut M12
Hexagon Socket Head Bolt M12*30

Big Connector

Hoop Spec :
80*40*5*100
Components :
Flat Washer M12 Spring Washer M12
Hexagon Socket Head Bolt Nut M12
Hexagon Socket Head Bolt M12*30

INSTALLATION GUIDE

Install concrete pillar based on project solution

Install Post and Hook Kit

Install Front & Back Support and Inclined Support

The installation of Front & Back Support and Inclined Support is done.

Install beam

The installation of beam is done

Fix the solar module with Inter Clamp Kit & End Clamp Kit

Installation is done