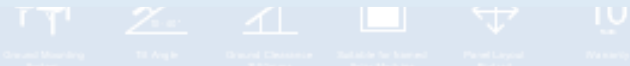


APEX CUSTOMER TECHNICAL DATASHEET | REV E

ApexGround Adjust Manual Tilt System

Utility-ready ground mounting platform with project-specific foundation sizing, corrosion review and optimized steel scope.

APPLICATION Ground-mounted PV arrays requiring seasonal or site-specific angle adjustment	FOUNDATION Driven pile, ground screw or concrete foundation by project
TILT 10-40 deg adjustable range typical	WIND Up to 40-60 m/s by selected tilt, stow setting and local code



Advantages

Strong adaptability to the environment, high power generation efficiency
Suitable for different ground environments

Apex Advantage

Any Scale, Any Solution. Apex provides project-ready mounting structures, optimized BOM support, engineering documentation and dependable material control for global PV projects.

Reliable Structures. Faster Project Review. Global PV Support.

CUSTOMER TECHNICAL DATASHEET | REV E 2026

ApexGround Adjust Manual Tilt System

Utility-ready ground mounting platform with project-specific foundation sizing, corrosion review and optimized steel scope.

WIND Up to 40-60 m/s by selected tilt, stow setting and local code	SNOW Up to 0.8-1.6 kN/m2 by angle, span and project requirement
TILT 10-40 deg adjustable range typical	WARRANTY 12-year product warranty

Design Envelope

Parameter	Min	Max	Condition
Tilt	10 deg	45 deg	Standard/optional by project
Pile/screw depth	1000 mm	3500 mm	Soil report and pull-out test
Pile spacing	2000 mm	4500 mm	Span and load dependent
Module envelope	Standard	2500 x 1400 mm	Module datasheet required

Core Specification

Item	Specification
Application	Ground-mounted PV arrays requiring seasonal or site-specific angle adjustment
Foundation	Driven pile, ground screw or concrete foundation by project
Tilt	10-40 deg adjustable range typical; final stops by structural review
Wind	Up to 40-60 m/s by selected tilt, stow setting and local code

Materials / Compliance / Warranty

Item	Specification
Material	Q235B / Q355B HDG steel; AL6005-T5 rail and clamp package by BOM
Design Basis	ASCE 7-16 / 7-22; IBC 2021 / 2024; EN 1991 / EN 1993 / EN 1999; AS/NZS 1170; JIS C8955 / GB 50009 by project
Warranty Profile	Mechanical structure: 12-year limited; corrosion protection and design life target by exposure class and order scope.

Apex engineering support: layout drawing, structural calculation basis, optimized BOM, packing list and material documentation.

PROJECT DESIGN INPUT SHEET

Project Design Input Sheet

Site wind profile

Snow zoning

Module datasheet

Corrosion class C3/C4/C5

Soil class / geotech report

Pull-out test

Terrain category

Seismic zone

Engineering Output Definition

Item	Specification
Design load envelope	Wind, snow and seismic basis defined for project review.
MTO / BOM	Material take-off and component list prepared by layout.
Drawing pack	Layout, section/detail drawings and installation reference by order scope.
Foundation schedule	Pile/screw spacing, embedment and section selection reviewed.

Ground Model Focus

Pile/screw embedment, post spacing, rail/beam span, stiffness path and soil pull-out capacity define the structural model.

Engineering calculation entry

Submit design inputs to define load envelope, model assumptions, MTO and drawing pack.

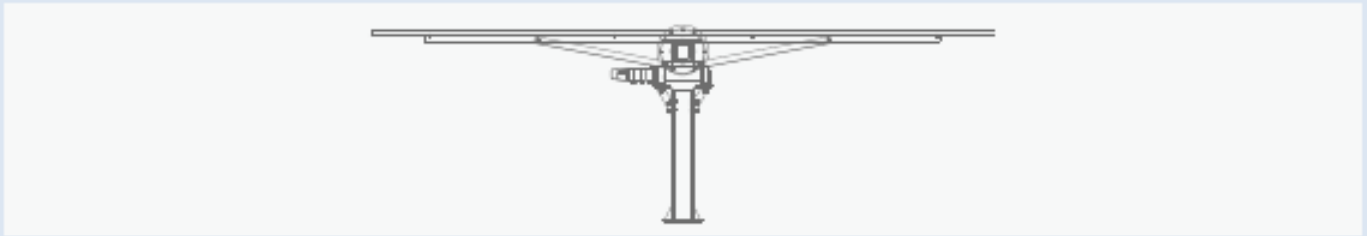
Request Apex EPC review for load envelope, structural assumptions, MTO and drawing pack.

info@apexsolarmount.com | www.apexsolarmount.com

Engineering Technical Controls

Item	Specification
Wind	Up to 40-60 m/s by selected tilt, stow setting and local code
Snow	Up to 0.8-1.6 kN/m2 by angle, span and project requirement
Tilt	10-40 deg adjustable range typical; final stops by structural review
Foundation	Driven pile, ground screw or concrete foundation by project
Material	Q235B / Q355B HDG steel; AL6005-T5 rail and clamp package by BOM
Design Basis	ASCE 7-16 / 7-22; IBC 2021 / 2024; EN 1991 / EN 1993 / EN 1999; AS/NZS 1170; JIS C8955 / GB 50009 by project
Warranty Profile	Mechanical structure: 12-year limited; corrosion protection and design life target by exposure class and order scope.

Structure



Component Details

Square Steel
Material : Steel Q235B (Hot-Dip Galvanized)

Angle Bar
Material : Steel Q235B (Hot-Dip Galvanized)

Control Box
Material : Steel Q235B (Hot-Dip Galvanized)

Post
Material : Steel Q235B (Hot-Dip Galvanized)

Holder for Post of Push Rod
Material : Steel Q235B (Hot-Dip Galvanized)

Bearing's Plate
Material : Steel Q235B (Hot-Dip Galvanized)

Bearing base
Material : Steel Q235B (Hot-Dip Galvanized)

U-shape Bolt
Material : Steel Q235B (Hot-Dip Galvanized)

Electric Push Rod
Material : Steel Q235B (Hot-Dip Galvanized)

Hoop Kit
Material : Steel Q235B (Hot-Dip Galvanized)

Installation Guide

1
Install Posts according to the engineering drawing

2
Install motor and bearing sleeve

3
Install main beams

4
Install damper

5
Install portrait beams

6
Use Inter Clamp Kits and End Clamp Kits to fix panels