APEX CUSTOMER TECHNICAL DATASHEET | REV E

ApexCarport CP II System

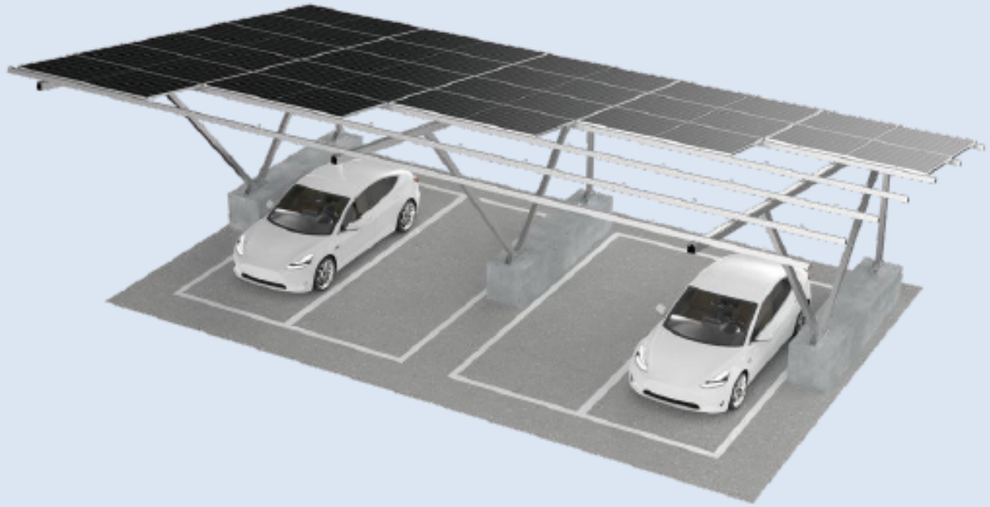
Solar carport structure for parking assets, combining PV generation, shade coverage and engineered column spacing.

APPLICATION
Double-parking or commercial carport PV structures

FOUNDATION
Concrete foundation with steel column and beam structure by local design

WIND
Up to 45-50 m/s by span, column spacing and local code

SNOW
Up to 1.2-1.6 kN/m2 by span, drainage design and purlin spacing



Advantages

Customized Solution
Design case by case, making a good utilization of ground resource and pursuit for easy and quick installation.

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.

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WARRANTY
12-year product warranty

Design Envelope

Parameter	Min	Max	Condition
Clearance	1800 mm	3000 mm	Vehicle type and local code
Column spacing	Project	Span review	Parking layout and drainage
Wind review	Project	45-50 m/s	Span and exposure dependent
Drainage	Open	Waterproof option	Order scope dependent

Core Specification

Item	Specification
Application	Double-parking or commercial carport PV structures
Foundation	Concrete foundation with steel column and beam structure by local design
Clearance	1800-3000 mm review range; custom clearance by vehicle type
Wind	Up to 45-50 m/s by span, column spacing and local code

Materials / Compliance / Warranty

Item	Specification
Material	Q235B / Q355B HDG steel and AL6005-T5 aluminium module interface
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**
Parking layout	Vehicle clearance
Foundation condition	Drainage requirement

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.
Structural layout	Column spacing, clearance, drainage and foundation interface reviewed.

Carport Model Focus

Column spacing, beam span, vehicle clearance, drainage and foundation reactions define the project 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.

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Engineering Technical Controls

Item	Specification
Wind	Up to 45-50 m/s by span, column spacing and local code
Snow	Up to 1.2-1.6 kN/m2 by span, drainage design and purlin spacing
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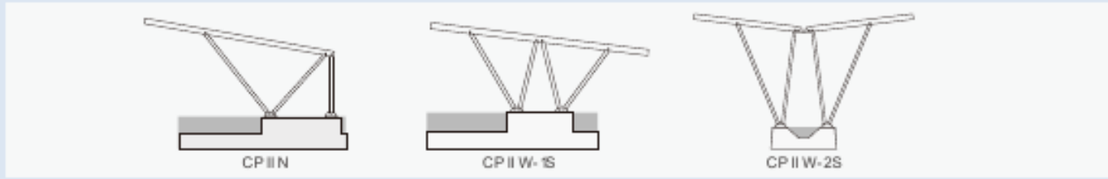
Structure



Component Details

Installation Guide