



Arctech Solar Carport

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Date : Nov 2021

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01

Arctech Introduction



Company Overview

Founded

2009

Headquarters

Kunshan, China

Employees

1000+

Accumulated Installation

32GW+

R&D Team members

170+

Patents

200+

Completed Projects

1100+

Global Reach

40 Countries+

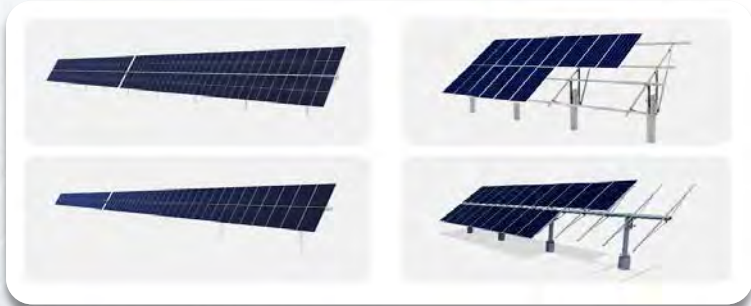


History & Milestones

Remain true to our original aspiration and keep our mission firmly in mind



**Source: IHS Markit & Wood Mackenzie*



Single Axis Tracker

- (1P) SkyLine II
- (2P) SkySmart II

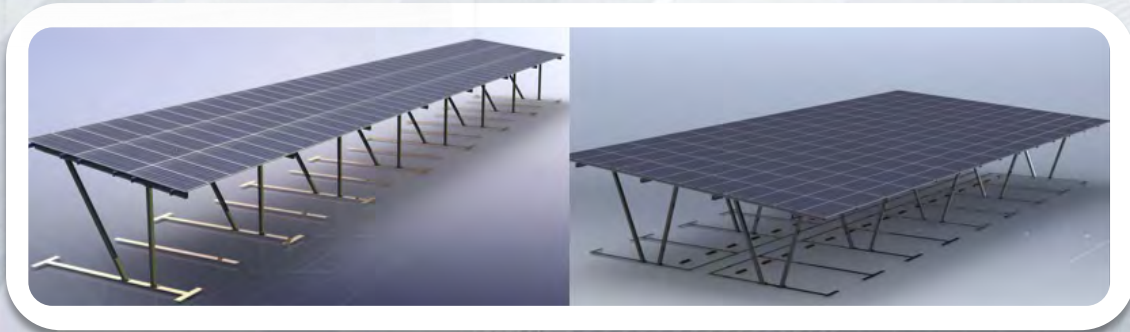
Fixed tilt mounting

- Single pole
- Dual pole

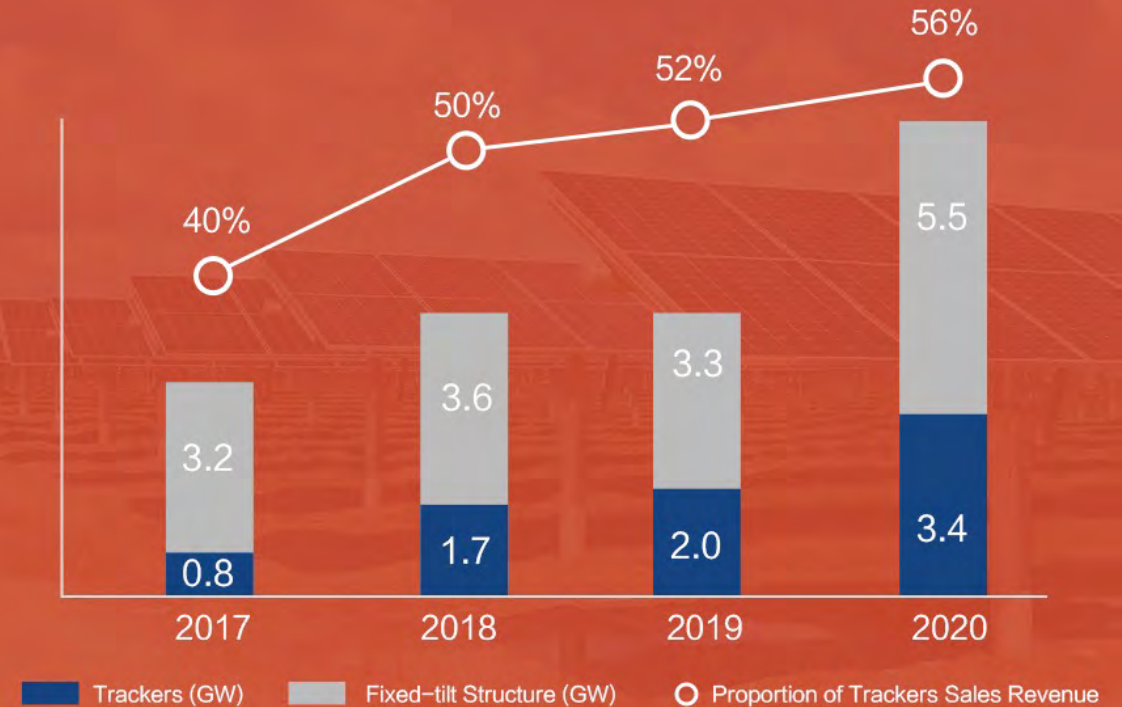


Adjustable Fixed-tilt Structure
Rooftop **BIPV**

Solar carport series

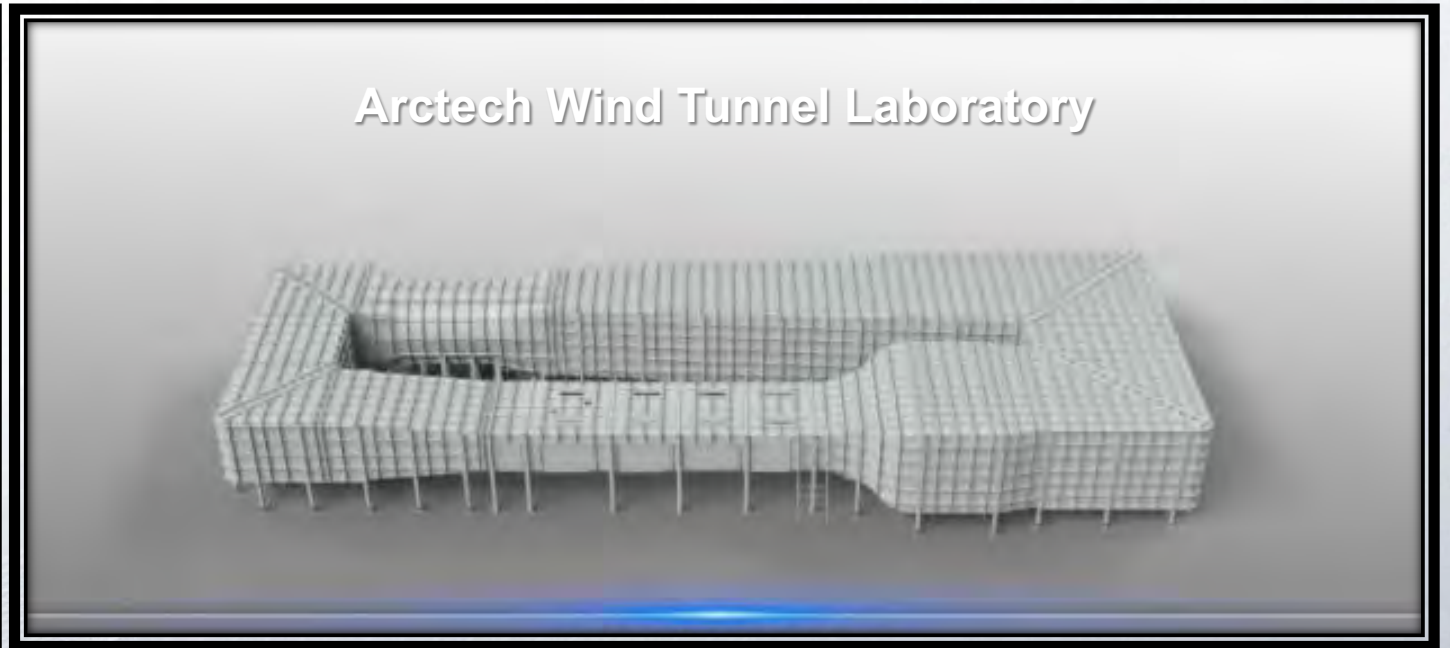


Cumulative Shipment of PV Trackers from 2017 to 2020



Arctech Wind Tunnel Laboratory

*In 2021, Arctech became the **1st PV company** with its own wind tunnel laboratory.*



Arctech Wind Tunnel Laboratory can

- simulate speeds of up to 90m/s
- reportedly simulate most real-world scenarios

The 142m tunnel, which is 48m wide, occupies an entire factory building.

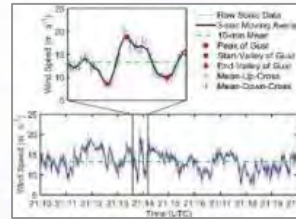
AeroPlus – the Top-level Wind Tunnel Test

Put forward groundbreaking **AeroPlus** wind tunnel test, and the laboratory cooperated with academy is under construction

Level 1
Static

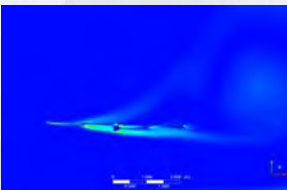


Level 2
Dynamic

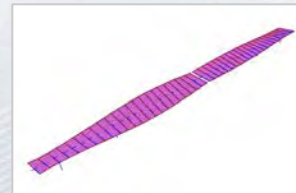


Data Collection for Calculation

Level 3
Instability



Level 4
Aeroelasticity



2D Simulation

3D Test

Level 5

Arctech AeroPlus Wind Tunnel Test



Aeroelastic Data Collection

Global Delivery and Services

Integrating global resources, developing global business and forging global competitiveness





02

Arctech Solar Carport

Single Row Series



6L 60 cell module



3P 72 cell module

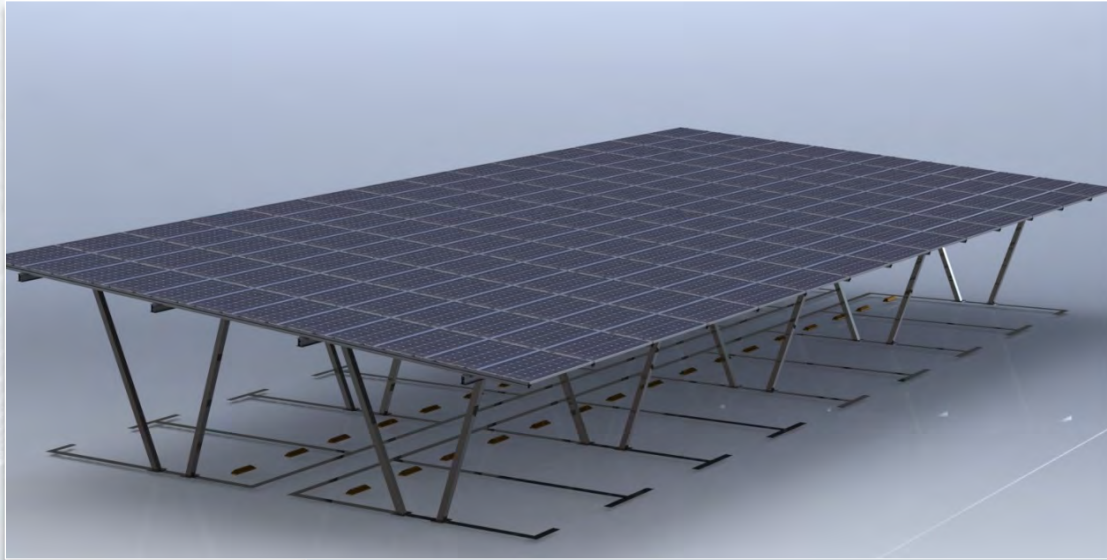


The 3P V frame

Specs

Parking lot arrangement	1 row perpendicular parking
Number of parking lots	Customizable
Length per lot	Appx. 6m
Width per lot	2.6m (other options available)
Tilt	5~15°
Height	2.2~3.5m
Module Orientation	Horizontal/Vertical
Module Supported	All commercially available modules
Post material	Carbon steel (HDG)
Beam	Aluminum alloy
Purlin (waterproof)	Aluminum alloy
Module installation	Clamps (Bolts and nuts optional)
Waterproof	Available
Wind load	≤80m/s
Snow load	≤2.0KN/m ²
Warranty	10 years durability on material

Double Row Series



V frame
single slope



An architectural rendering

Specs

Parking lot arrangement	2 row perpendicular parking
Number of parking lots	Customizable
Length per lot	Appx. 12m
Width per lot	2.6m (other options available)
Tilt	5~15°
Height	2.2~3.5m
Module Orientation	Horizontal/Vertical
Module Supported	All commercially available modules
Post material	Carbon steel (HDG)
Beam	Aluminum alloy
Purlin (waterproof)	Aluminum alloy
Module installation	Clamps (Bolts and nuts optional)
Waterproof	Available
Wind load	≤80m/s
Snow load	≤2.0KN/m ²
Warranty	10 years durability on material

The SkyHarbor Single Row Solar Carport

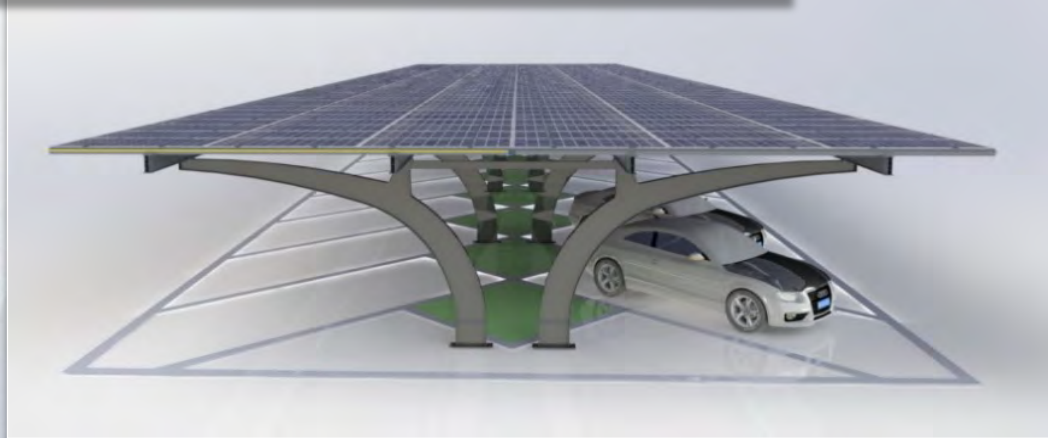


Single row with covered edge

Specs

Parking lot arrangement	1 row perpendicular parking
Number of parking lots	Customizable
Length per lot	Appx. 6m
Width per lot	2.6m (other options available)
Tilt	5° (customizable)
Height	2.2~3.5m
Module Orientation	Horizontal/Vertical
Module Supported	All commercially available modules
Post material	Carbon steel (HDG)
Beam	Aluminum alloy
Purlin (waterproof)	Carbon steel (HDG)
Edge Cover	Optional
Module installation	Clamps (Bolts and nuts optional)
Waterproof	Available
Wind load	≤80m/s
Snow load	≤2.0KN/m ²
Warranty	10 years durability on material

The SkyHarbor Double Row Solar Carport

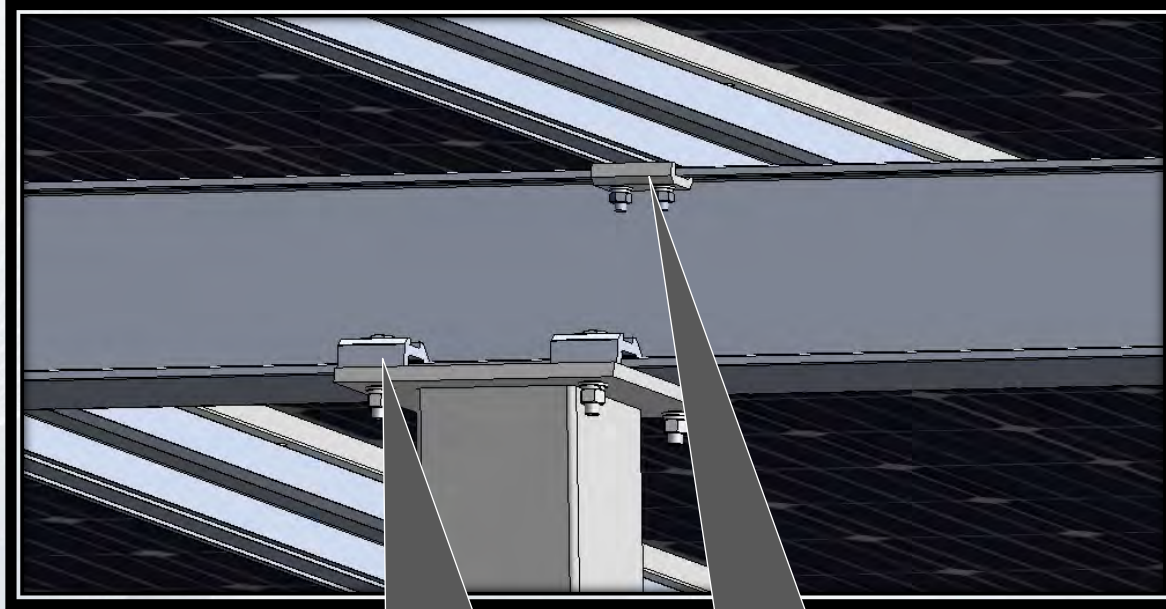


An architectural rendering

Specs

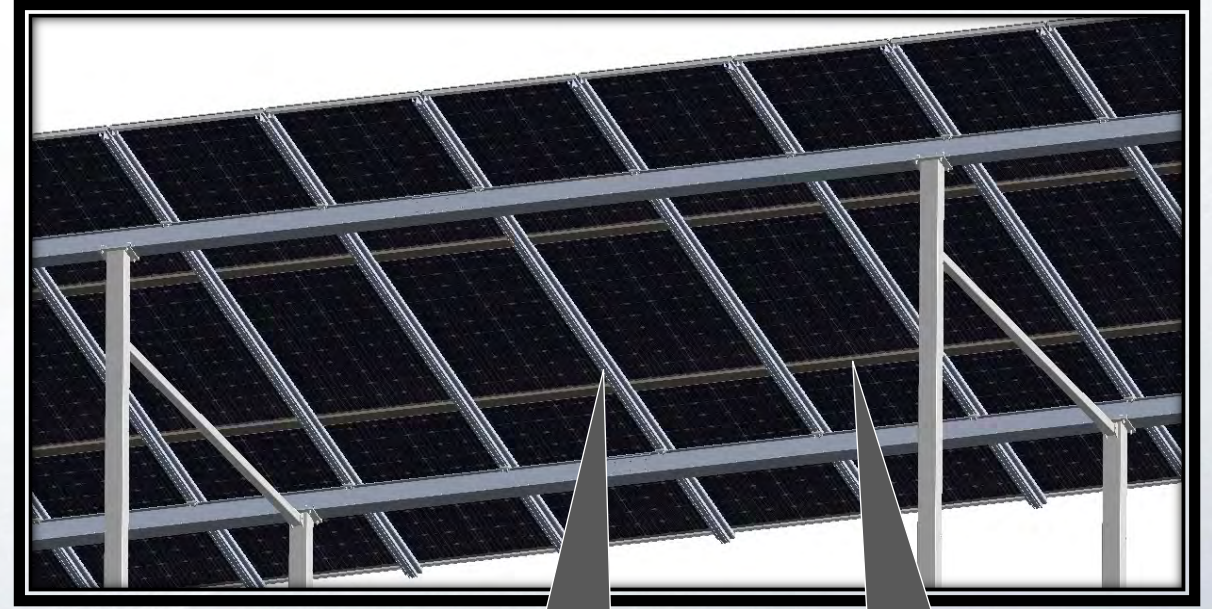
Parking lot arrangement	2 row perpendicular parking (other angles available)
Number of parking lots	Customizable
Length per lot	Appx. 12m
Width per lot	2.6m (other options available)
Tilt	0° (customizable)
Height	2.2~3.5m
Module Orientation	Horizontal/Vertical
Module Supported	All commercially available modules
Post material	Carbon steel (HDG)
Beam	Aluminum alloy
Purlin (waterproof)	Carbon steel (HDG)
Edge Cover	Optional
Module installation	Clamps (Bolts and nuts optional)
Waterproof	Available
Wind load	≤80m/s
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Clamp Mounting → Waterproof Architecture



The beam and the posts are fixed by clamp

The purlins and the beam are fixed by clamp



The purlins lead the drainage

Horizontal gutter

- **Connected by clamps**, no more difficulties from the unmatched module holes.
- **Adaptable to project customization**, and easy to produce.
- **Excellent waterproof performance**, thanks to the combination of waterproof purlins and horizontal gutters.

EV Compatibility



- Adaptable to all popular EV charger and all types of EV.
- Capable for from 7kW slow charger to upto 50kW ultra fast charger.

03

Case Studies



Mercedes Benz

Mercedes Benz

Size	1.5MWp
Status	Operation
Energy Yield per year	2190MWh
CO2 Savings	2183t



Dual pole fixed with
flange on concrete
pad



BMW BIPV Solar Carport Project

Size	16MWp
Status	Operation
Energy Yield per year	20770MWh
CO2 Savings	20707t

Building requirement
Prevention of leakage
Anti-subsidence
Prevention of expansion



14 Ha of land, covering 4500 standard parking lots



Major BIPV requirement
Wind resistance
Snow resistance
Waterproof

Yueda KIA

Size	36MWp
Status	Under Construction
Est. Energy Yield per year	42040MWh
Est. CO2 Savings	41914t



An architectural rendering



The plan for the KIA solar carport project

StarCharge

Solar carport with EV charger



Project located at the Arctech HQ

Other Projects



- Dongfeng Motor Corporation 7MW Solar Carpark
- Wanbang New Energy Automobile 50kW Solar Carport
- Arctech StarCharge 50kW Solar Carport
- And more to come ...



Thank you!

