



# SOLAR CARPORT MOUNTING SYSTEM

The solar carport mounting system is an integrated ground-based solution that combines photovoltaic power generation with parking infrastructure, built with durable ZAM/HDG steel components and customizable to various parking lot layouts.

It turns parking areas into clean energy assets while sheltering vehicles from harsh weather, and suits commercial, industrial, residential and EV charging applications for dual benefits of space efficiency and sustainable energy production.

## ADVANTAGE

- **Space-efficient**  
Dual-use parking-energy setup, zero extra space needed
- **Highly Customizable**  
Fits any parking layout, adjustable angles & orientations
- **All-in-one Solution**  
Integrated PV modules, structure, and inverter, etc
- **Flexible Energy Management**  
Stable output, ideal for on-use, storage & EV charging
- **Sturdy & Durable**  
ZAM/HDG steel build, weather-resistant
- **Cost-effective & Reliable**  
Low-maintenance, cuts separate infrastructure costs

# CONFIGURATION

Our solar carport system features hybrid, grid-tied and off-grid connectivity options, and we supply a integral system to meet all project requirements.



Structure



Solar Panels



Inverters

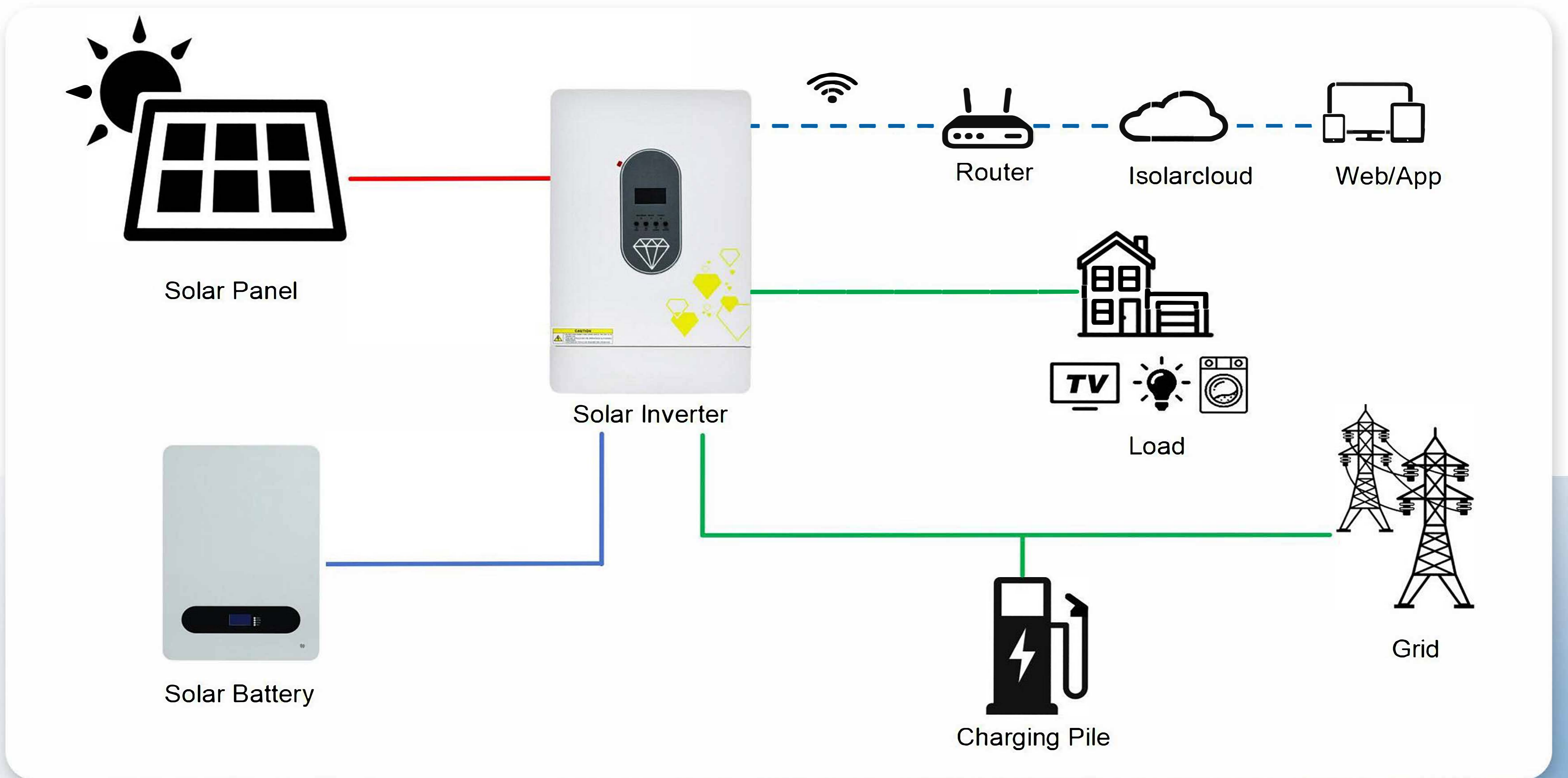


Battery  
(optional)

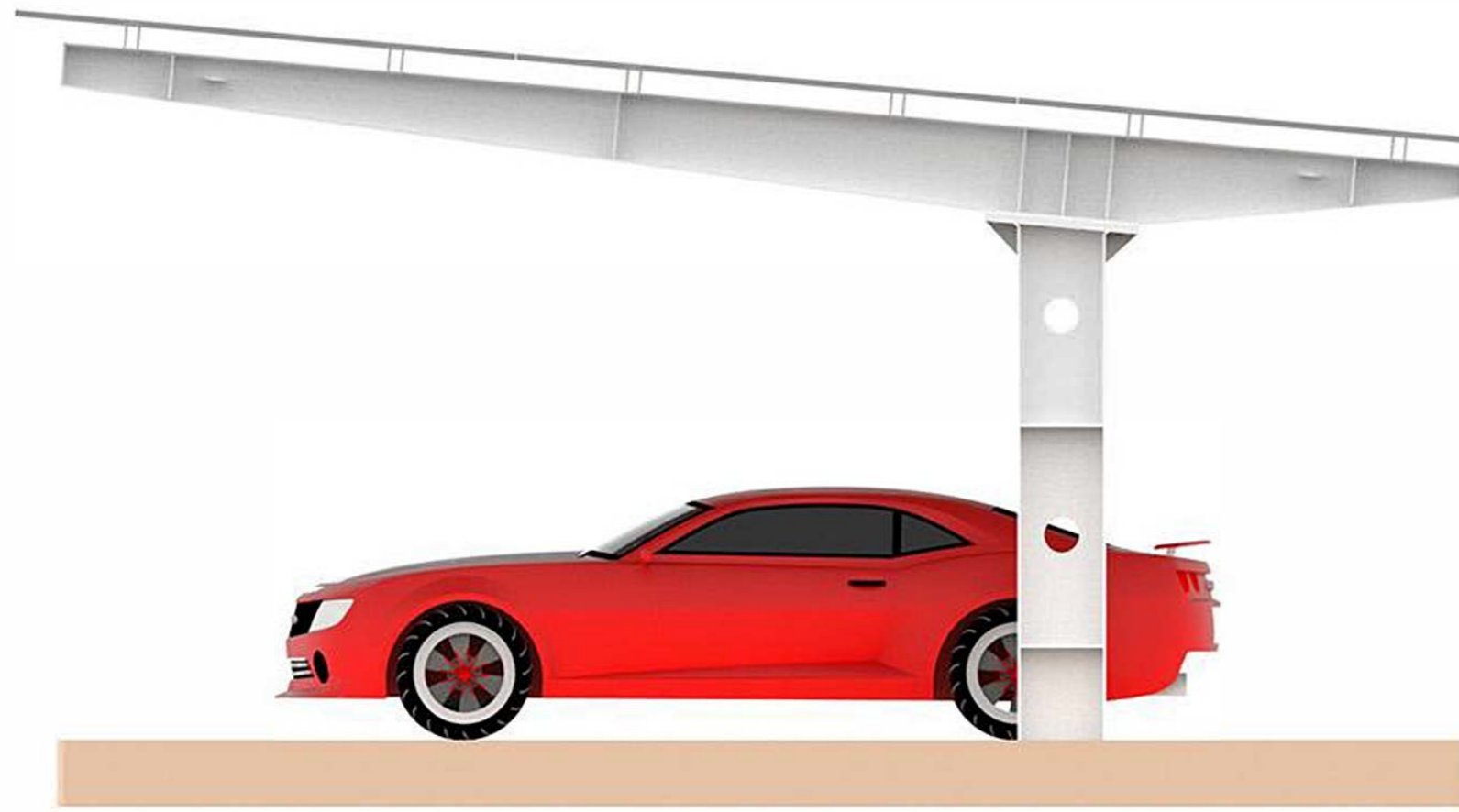


Cables & Connectors

# WORKFLOW



# I TYPE SOLAR CARPORT SYSTEM



Longitudinal Beam



Purline



Connector



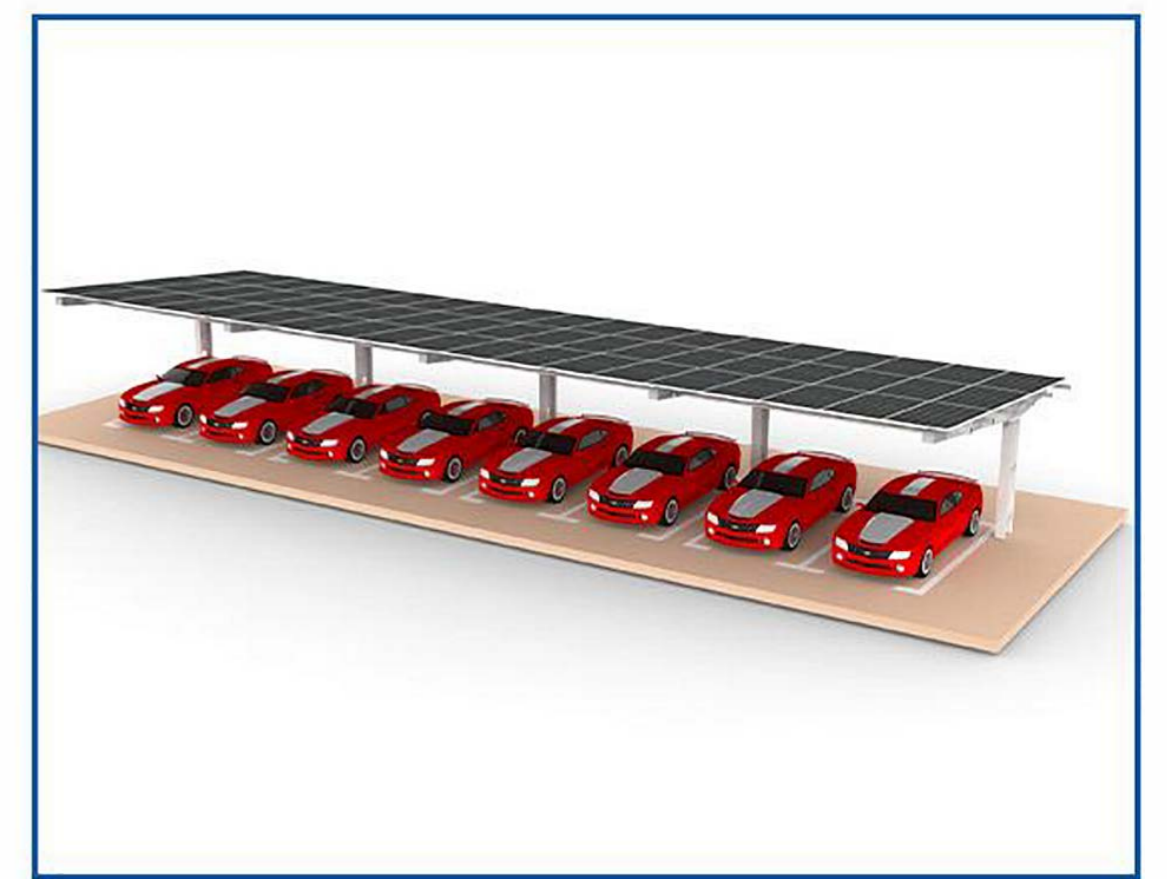
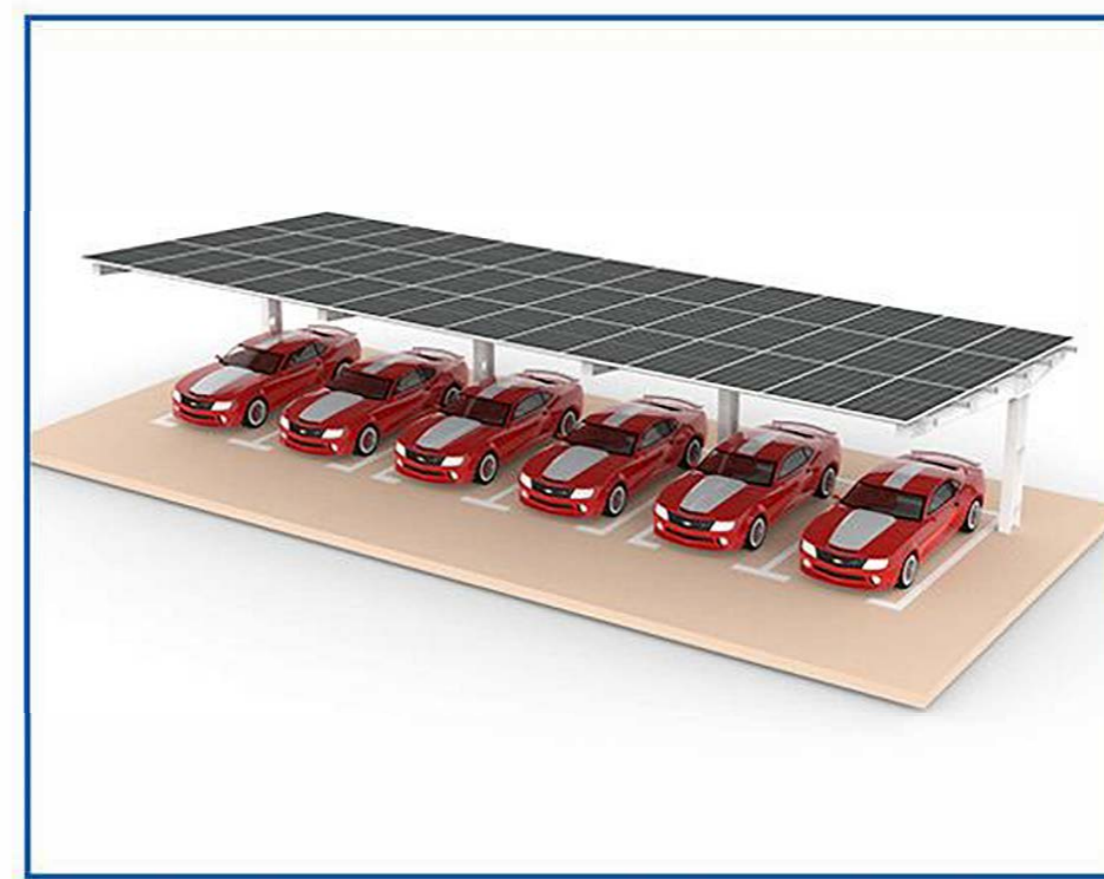
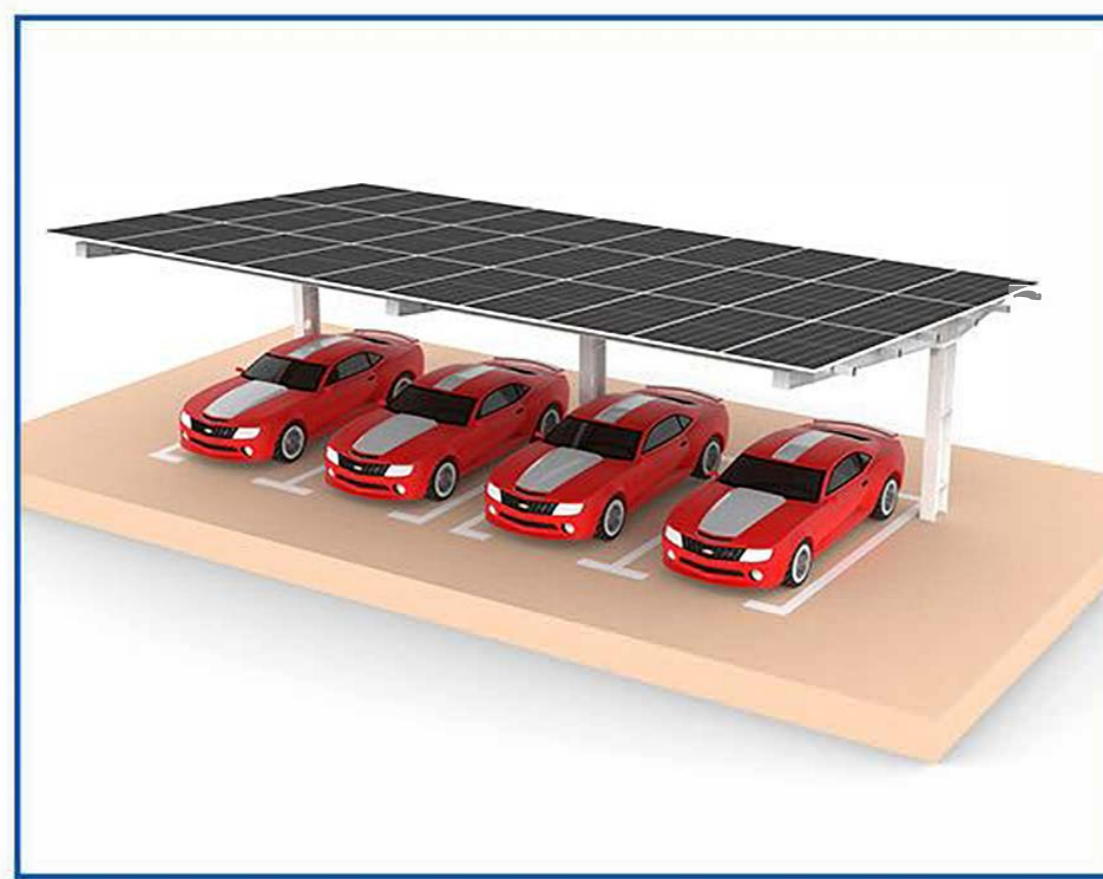
Column



Plate



PV Clamp



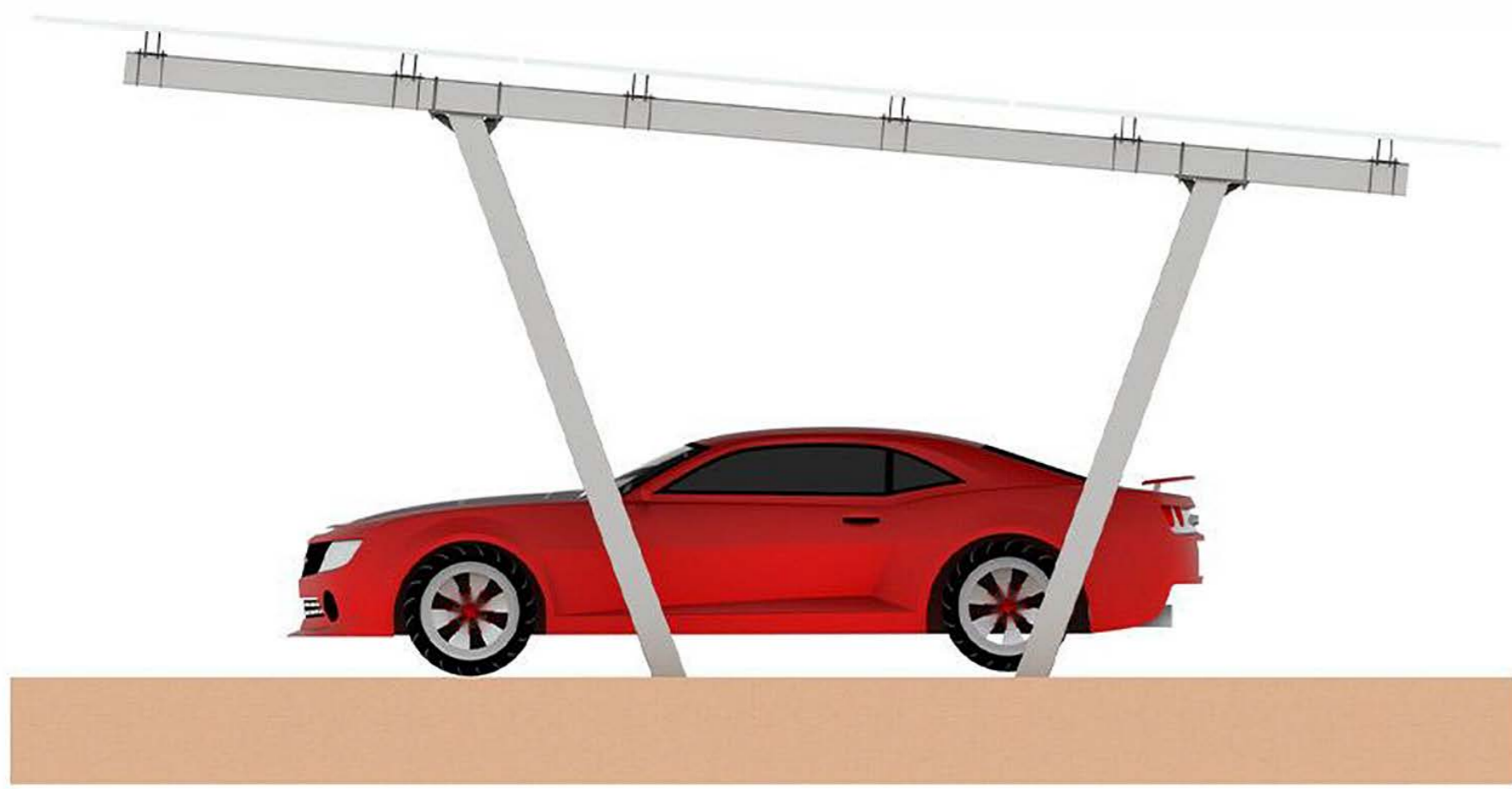
ITEM	2-Parking-Space	4-Parking-Space	6-Parking-Space	8-Parking-Space
Wind Load & Snow Load		40m/s & 0kN/m <sup>2</sup> 25m/s & 0.6kN/m <sup>2</sup>	50m/s & 0kN/m <sup>2</sup> 40m/s & 1.5kN/m <sup>2</sup>	
Tilt Angle	5 degrees			
Structure Material	Q355B(HDG/Spray) / ZAM Steel			
Weight	1270kg	2080kg	2810kg	3580kg
Dimension	5.9*6.8m	11.5*6.8m	16*6.8m	21.8*6.8m
Suggested Config				
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)			
Number of Modules	15pcs	30pcs	42pcs	57pcs
Inverter	11000W	11000W*2	11000W*3	11000W*4
Rated voltage	220VAC/single-phase			

## APPLICATION SCENARIOS

- Parking lots
- EV charging stations
- Industrial parks
- Residential communities



# V-TYPE SOLAR CARPORT(TWO-COLUMN)



Column



Purline



Connector



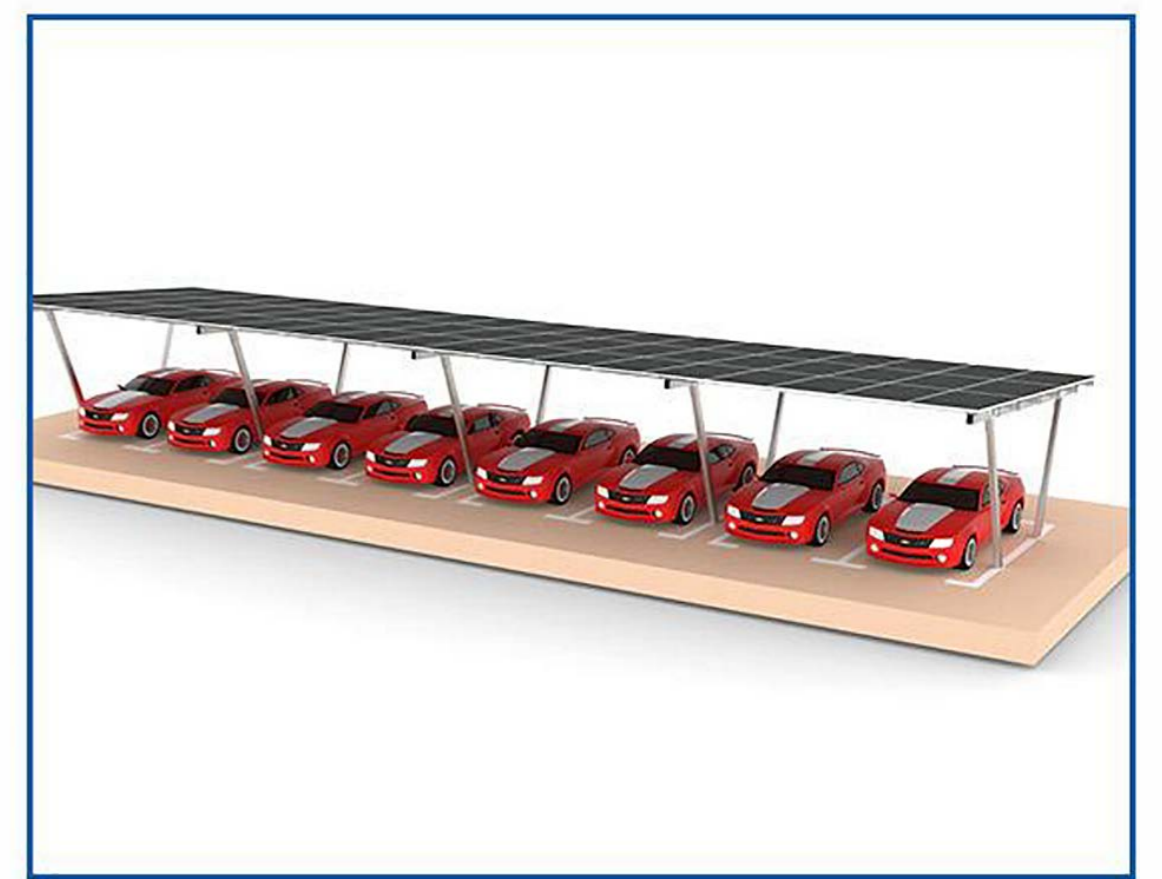
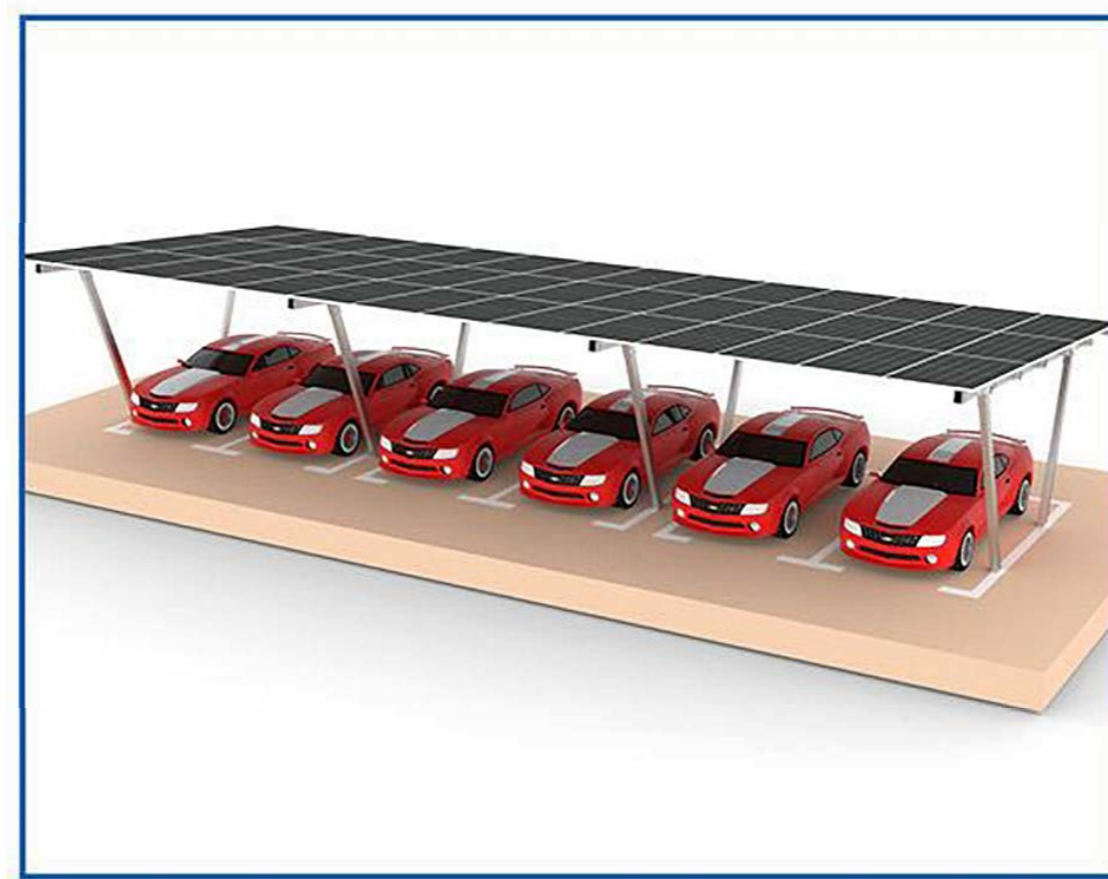
Welded Plate



Welded Plate



U Bolt



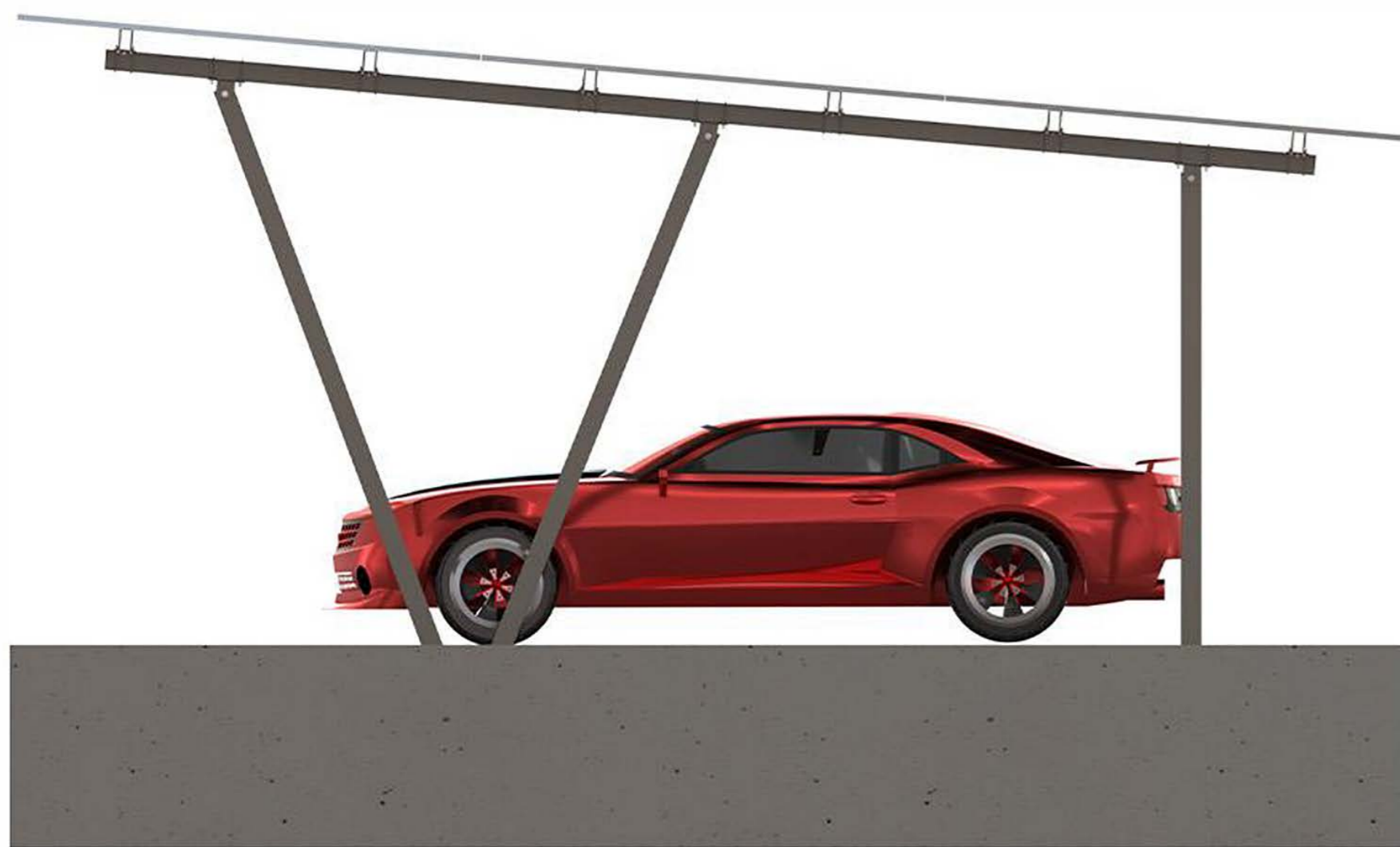
ITEM	2-Parking-Space	4-Parking-Space	6-Parking-Space	8-Parking-Space
Wind Load & Snow Load	40m/s & 0kN/m <sup>2</sup> 40m/s & 1.5kN/m <sup>2</sup>			
Tilt Angle	5 degrees			
Structure Material	ZAM Steel			
Weight	610kg	1030kg	1420kg	1850kg
Dimension	5.9*6.8m	11.5*6.8m	16*6.8m	21.8*6.8m
<b>Suggested Config</b>				
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)			
Number of Modules	15pcs	30pcs	42pcs	57pcs
Inverter	11000W	11000W*2	11000W*3	11000W*4
Rated voltage	220VAC/single-phase			

## APPLICATION SCENARIOS

- Commercial Parking Lots
- Industrial & Business Parks
- Residential Communities
- EV Charging Stations



# N-TYPE SOLAR CARPORT (THREE-COLUMN)



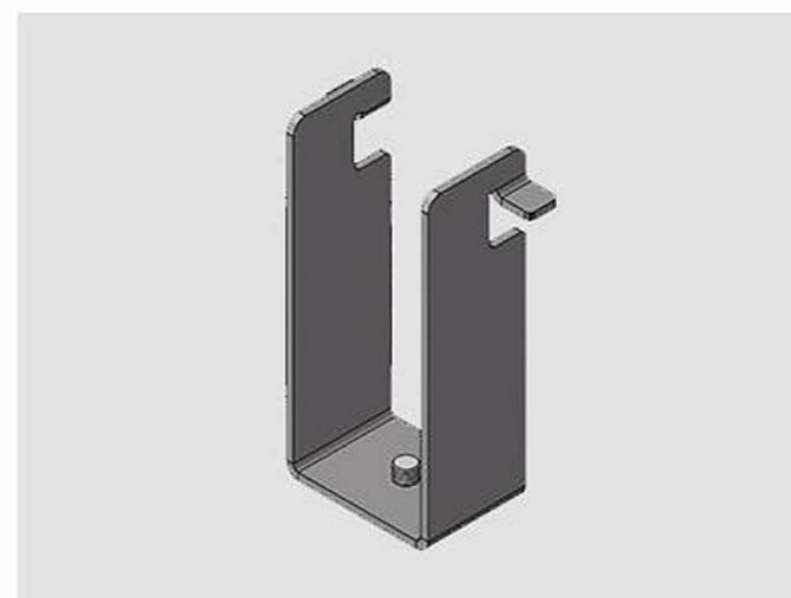
Column



Purline



Connector



PV Clamp



Plate



U Bolt



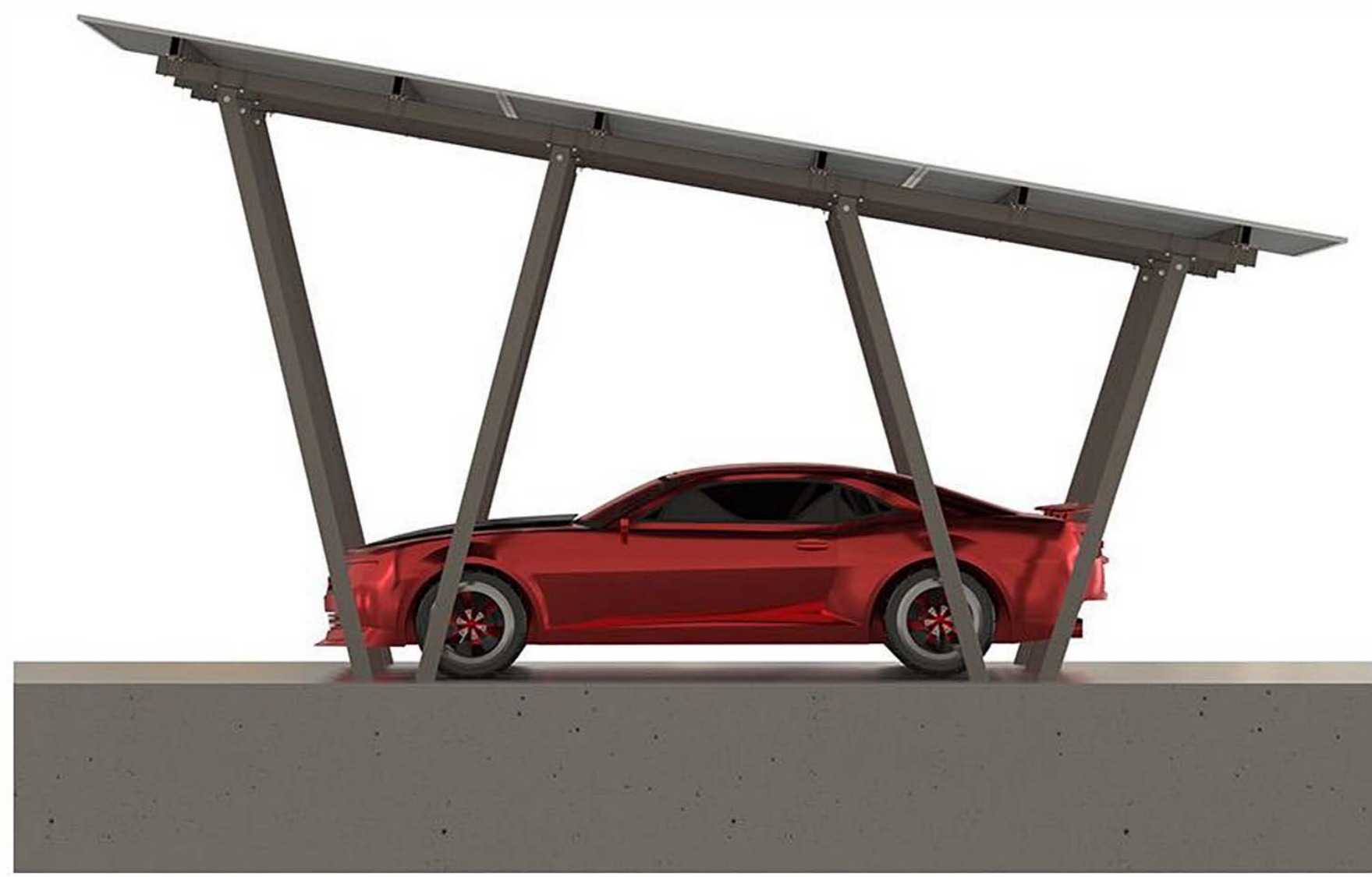
ITEM	2-Parking-Space	4-Parking-Space	6-Parking-Space	8-Parking-Space
Wind Load & Snow Load		40m/s & 0kN/m <sup>2</sup> 25m/s & 0.6kN/m <sup>2</sup>	50m/s & 0kN/m <sup>2</sup> 40m/s & 1.5kN/m <sup>2</sup>	
Tilt Angle	5 degrees			
Structure Material	ZAM Steel			
Weight	580kg	990kg	1360kg	1780kg
Dimension	5.9*6.8m	11.5*6.8m	16*6.8m	21.8*6.8m
Suggested Config				
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)			
Number of Modules	15pcs	30pcs	42pcs	57pcs
Inverter	11000W	11000W*2	11000W*3	11000W*4
Rated voltage	220VAC/single-phase			

## APPLICATION SCENARIOS

- Commercial applications
- Industrial applications
- Public applications
- Residential applications



## W-TYPE SOLAR CARPORT(FOUR-COLUMN)



Column



Purline



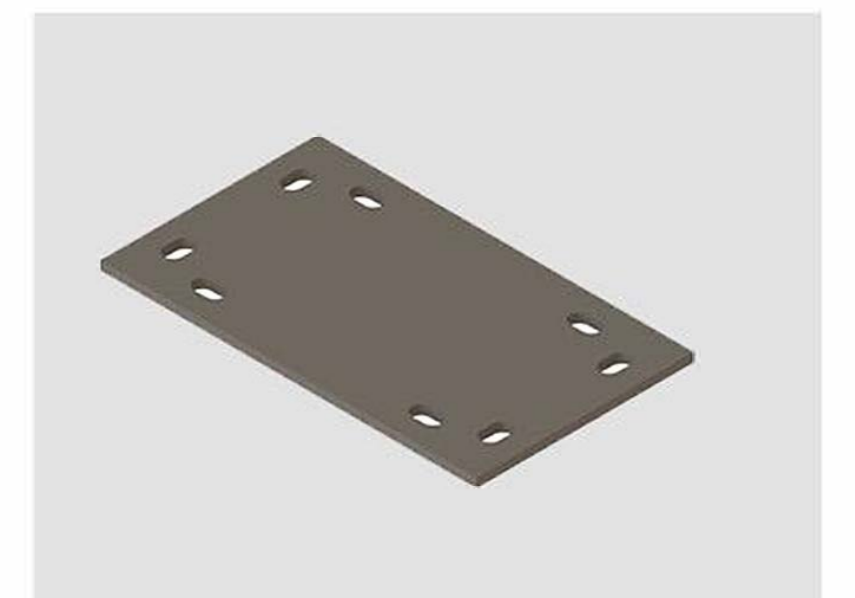
Connector



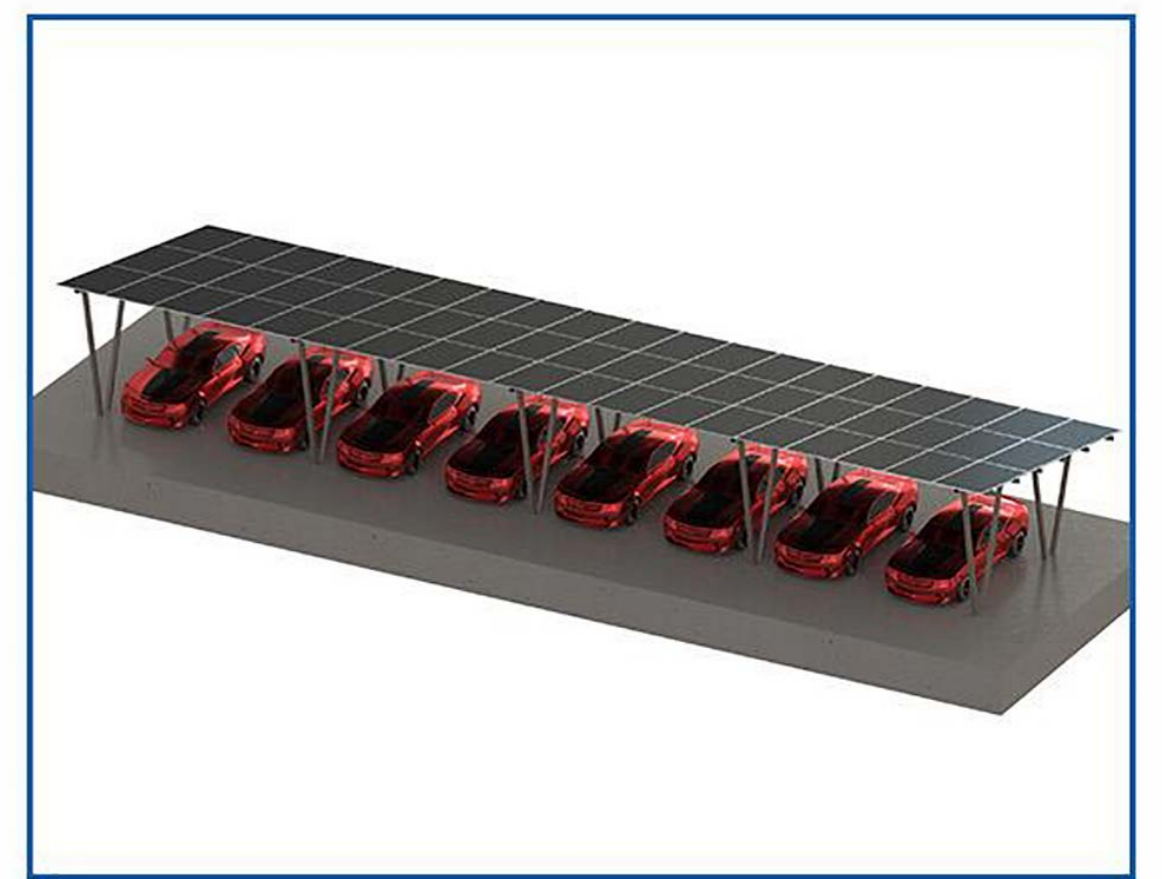
PV Clamp



Plate



Fixing Plate



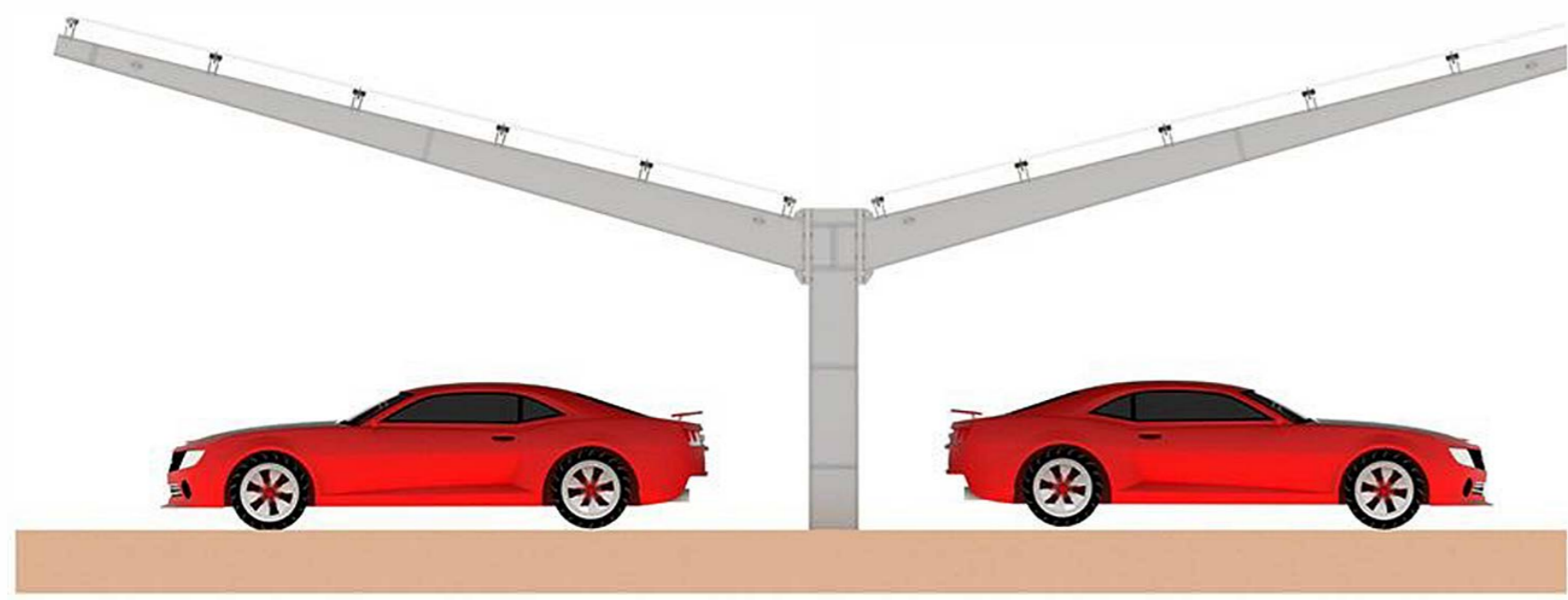
ITEM	2-Parking-Space	4-Parking-Space	6-Parking-Space	8-Parking-Space
Wind Load & Snow Load		40m/s & 0kN/m <sup>2</sup> 25m/s & 0.6kN/m <sup>2</sup>	50m/s & 0kN/m <sup>2</sup> 40m/s & 1.5kN/m <sup>2</sup>	
Tilt Angle	5 degrees			
Structure Material	ZAM Steel			
Weight	590kg	1010kg	1380kg	1800kg
Dimension	5.9*6.8m	11.5*6.8m	16*6.8m	21.8*6.8m
Suggested Config				
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)			
Number of Modules	15pcs	30pcs	42pcs	57pcs
Inverter	11000W	11000W*2	11000W*3	11000W*4
Rated voltage	220VAC/single-phase			

### APPLICATION SCENARIOS

- Industrial and commercial parks
- Highway service areas
- Commercial complexes parking areas
- Logistics parks & bus stations for heavy vehicles



## Y TYPE SOLAR CARPORT MOUNTING



Longitudinal Beam



Purlin



Connector



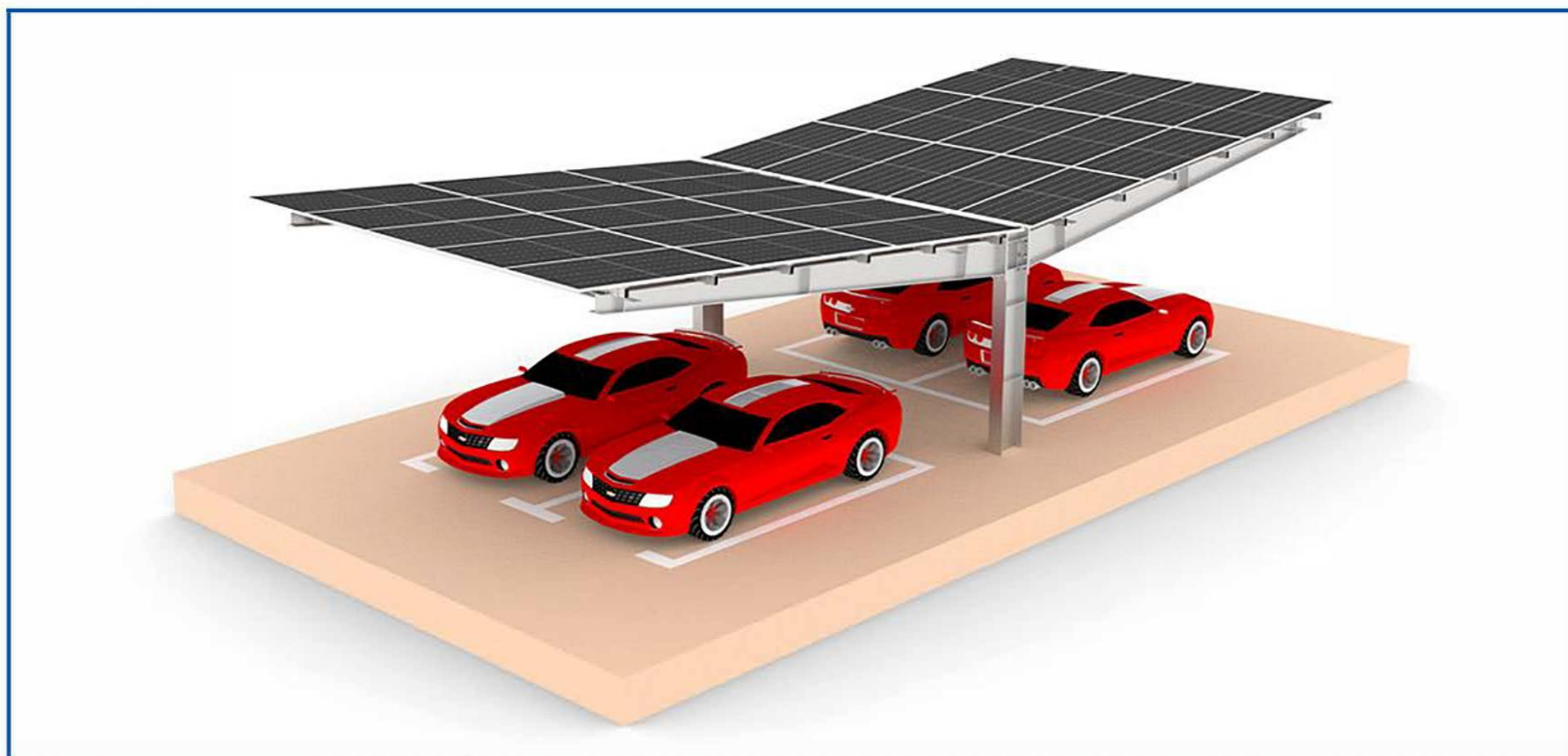
Column



Plate



PV Clamp



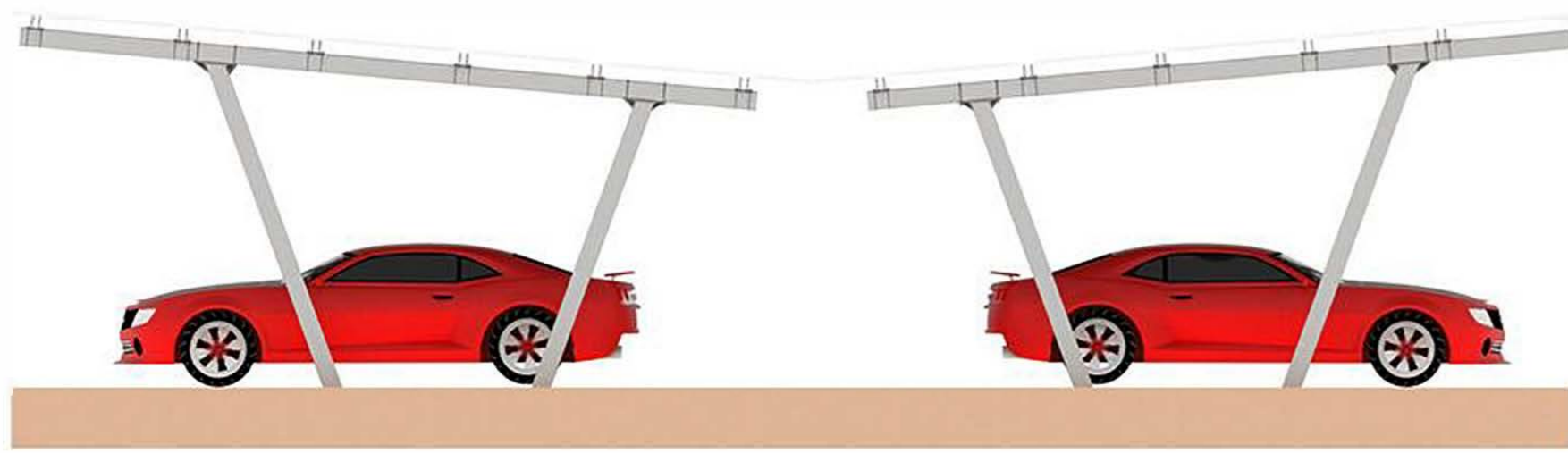
ITEM	2x2-Parking-Space	4x2-Parking-Space
Wind Load & Snow Load	40m/s & 0kN/m <sup>2</sup> 25m/s & 0.6kN/m <sup>2</sup>	50m/s & 0kN/m <sup>2</sup> 40m/s & 1.5kN/m <sup>2</sup>
Tilt Angle	5 degrees	
Structure Material	Q355B(HDG/Spray) / ZAM Steel	
Weight	2890kg	4670kg
Dimension	5.9*13.8m	11.5*13.8m
Suggested Config		
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)	
Number of Modules	30pcs	60pcs
Inverter	11000W*2	11000W*4
Rated voltage	220VAC/single-phase	

### APPLICATION SCENARIOS

- Industrial & Commercial Parks
- Residential Communities
- Public & Municipal Facilities
- Commercial & Transportation Hubs



## VV TYPE SOLAR CARPORT MOUNTING



Longitudinal Beam



Purline



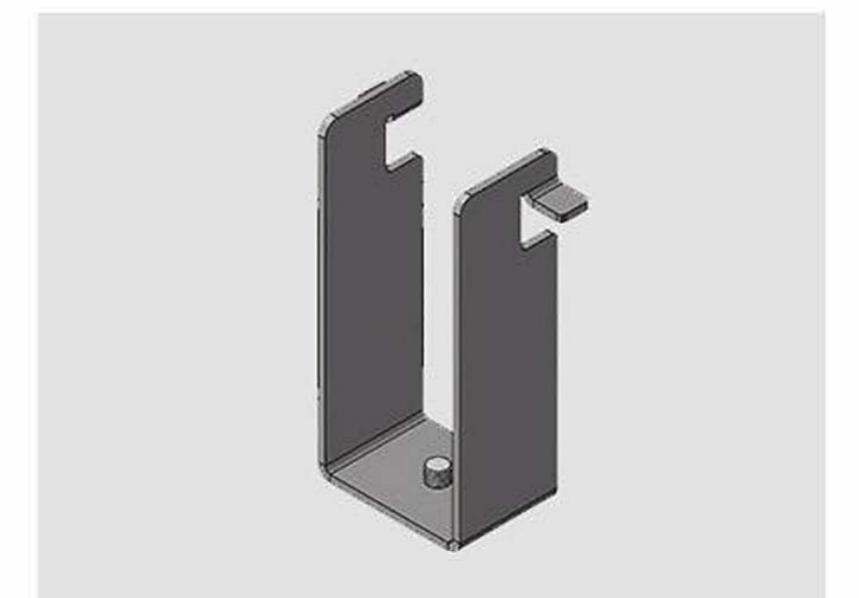
Connector



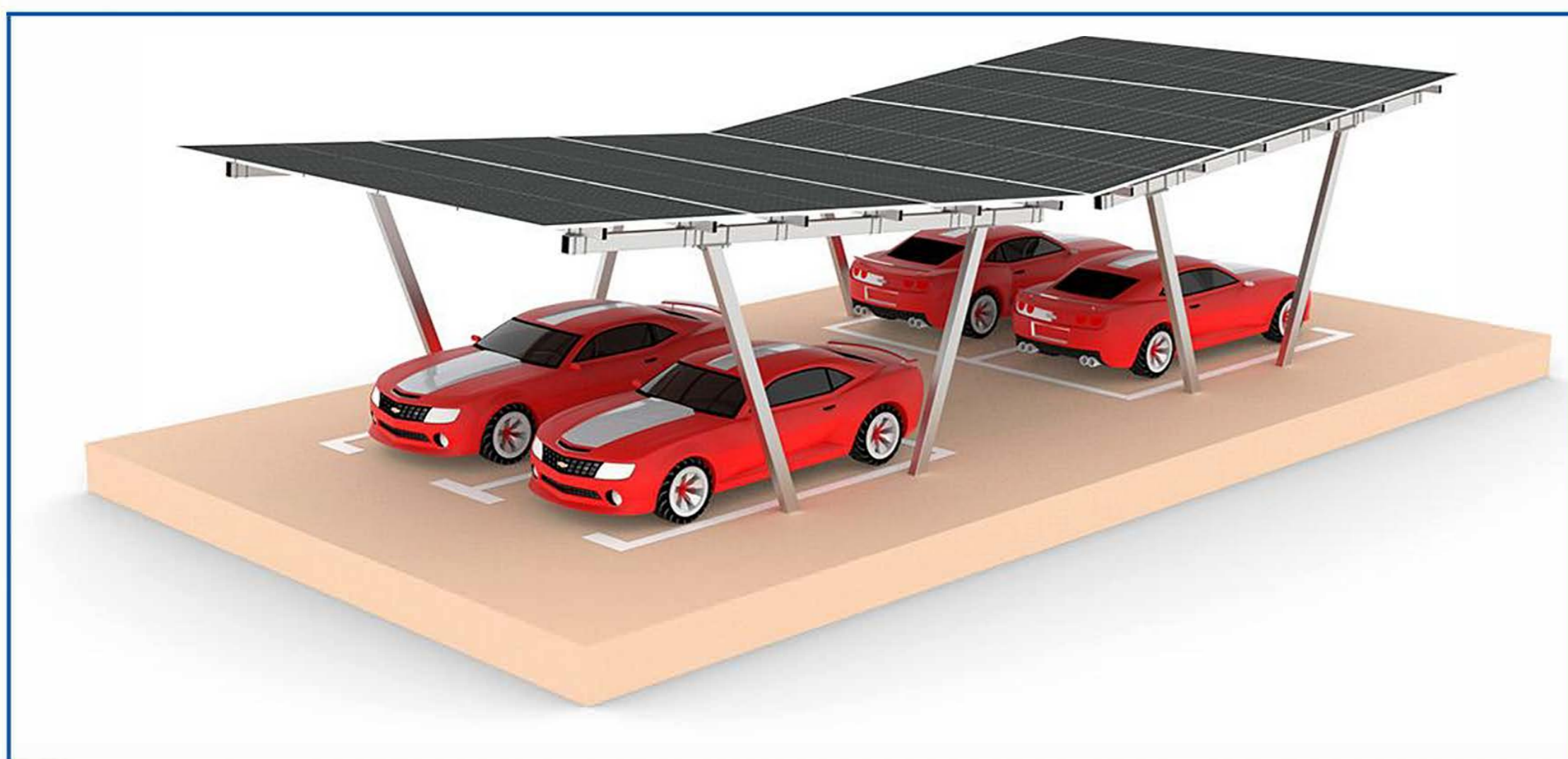
Welded Plate



Welded Plate



PV Clamp



ITEM	2x2-Parking-Space	4x2-Parking-Space
Wind Load & Snow Load	40m/s & 1.5kN/m <sup>2</sup>	
Tilt Angle	5 degrees	
Structure Material	ZAM Steel	
Weight	1400kg	2420kg
Dimension	5.9*13.8m	11.5*13.8m
<b>Suggested Config</b>		
Solar Panel Power	580~650W(Single Dimension:2278*1134mm)	
Number of Modules	30pcs	60pcs
Inverter	11000W*2	11000W*4
Rated voltage	220VAC/single-phase	

### APPLICATION SCENARIOS

- Commercial Buildings & Office Parks
- Public Institution Premises
- Logistics & Transportation Hubs
- Factory & Industrial Park Parking Lots

