

# ALTAS

## Datasheets



**SOLAR CARPORT**

Photovoltaic Carport  
System Kits



## SOLAR CARPORT

5kW / 10kW / 20kW / 50kW



### Product Description

Solar carport are designed to utilize new or existing parking areas and generate power without sacrificing real estate. Typically offered as an On-Grid PV solution, their innovative design delivers a cross-platform solution combining energy generation and a substitute to shading/weather protection for vehicles.



#### Space optimizer

Ideal for sites that are restricted in space. Our carport kits serve as an economical alternative to traditional carport structures.



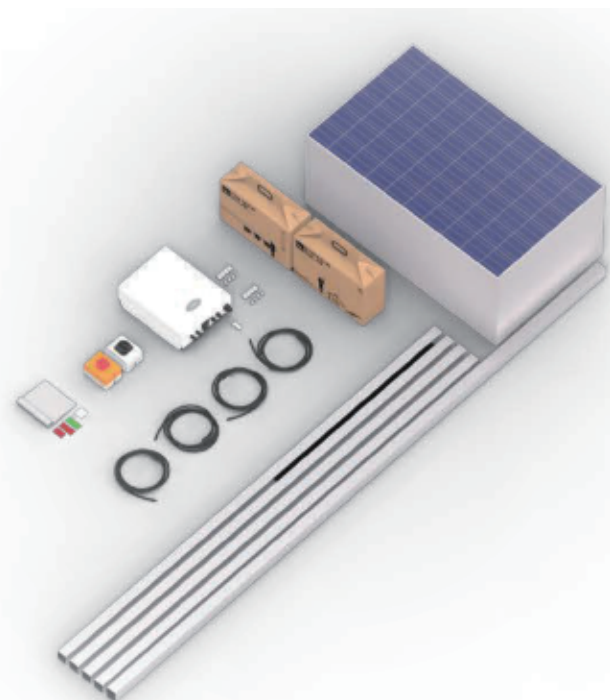
#### Weather resistant

Shinson use solar modules for the roofing canopy and are structurally engineered to guarantee corrosion and wind resistance ensuring a good as gold performance to price ratio.



#### Thought for the future

Shinson carport grid tie systems are compatible with most electric vehicle charging stations, making them an innovative, clean and environment-friendly fuel source platform.



### What's in the Box

- Solar modules
- Solar on-grid inverter
- Custom carport mounting system
- PV wiring and grounding harnesses
- DC and AC disconnects
- Wire management kit
- Grounding hardware
- Safety label kit
- Single and three-line electrical and mechanical schematics

## Shinson | Product Line

### Your Own Solar Power Plant

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Solar Canopies are an innovative product that can turn a typical, non-productive parking lot or walkway into a cost effective solar power plant. with no field welding, drilling, or other on-site fabrication, Solar Carports are ready to install upon delivery. Manufactured & designed for simplicity, practicality, & peace of mind.

#### Product Benefits

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- Multi benefit functionality including solar energy and covered parking technology
- Simple and elegant design
- Easily scalable from 5kW to 5MW
- Reduce the carbon emissions from vehicles(when used as a charging station)

#### Common Applications

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- Commercial centers
- Schools
- Residential homes
- Shopping centers and malls
- Housing developments
- Car charging stations





# Shinson | Product Line

## Solar Carport Systems

PRODUCT NAME	5KW	10KW	20KW	50KW
Product Serie	Shinson Carport Series			
System size Nominal(kWp)	5.3	10.6	21.2	53
Part #	PCC-5	PCC-10	PCC-20	HER-50
Parking Spaces(for average compact car)	2	4	8	20

### PV MODULE SPECIFICATIONS (\*POLY)

Power(W)	265			
Vmp(V)	31.1			
Voc(V)	38.2			
Isc(A)	9.1			
Imp(A)	8.55			
Dimensions(L x W x H)(mm)	1638x982x35			
PV module weight(kg)	19.5			
Certifications	TUV(IEC61215&IEC61730)/VDE(IEC61215&IEC61730)/UL/CE - TUV(IEC61215&IEC61730)/CE			

Monocrystalline PV modules also available upon request - 72 Cell modules also available upon request

### INVERTER SPEC (\*230V-400V Nominal)

Inverter Size(kw)	5	10	20	50
Max DC Power(W)	5800	11500	24000	55
Max DC Voltage(V)	600	1000		1100
MPPT Voltage range(V)	100-500	200-800		200-1000
No.of MPPT'S/Max Strings	2/2	4/8		4/12
Max AC Power(VA)	5.5	11	22	50
Max Output Current(A)	45.9			80
AC Nom.Voltage/Voltage Range(V)	230V/160 to 285	400/304-460		
AC Grid Frequency range(Hz)	50-60			
Number of phases	1	3		
Dimensions(L x W x H)(mm)	310x543x160	430x613x269	530x700x357	630x700x357
Inverter weight(kg)	11.5	29	57.2	53
Certifications	CAN / CSAC22.2 N107.1, UL 1741, UL 1998, UL 1699B, FCC part 15, Class B — AS4777, AS / NZS 3100, CE, VDE 0126-1-1, DK5940, G83 / 1-1, G59 / 2, RD 1663, EN50438, VDE-AR-N4105, CEI-021, IEC-62109, ENEL-Guide			

120/240/480V UL inverters also vailable upon request

### BOS CONFIGURATION(1000VDC)

AC/DC Disconnect	1/2	1/2	1/4	2/10
*PV Wire - 4mm(meters)	100	200	350	500
*Ground Wire - 4mm(meters)	50			

\* Extra wire is available upon request

### SYSTEM LAYOUT

# of Modules		20	40	80	200
PV Layout options		Landscape or Portrait			
PV Array Surface Area(m2)		34	68	136	340
PV Array Weight(kg)		390	780	1560	3900
PV Module Configuration 600-1000VDC	No.of PV Modules/String	10	20		
	Total Strings	2	2	4	10
	String Voc - Poly	382	764		
	String Vmp - Poly	311	622		
	String Imp	8.55			

### PRODUCTION ESTIMATES(KWh AC)

*Projected yearly output at 1100kWh/year	4955.5	9911	19822	49555
*Projected yearly output at 1460kWh/year	6577.3	13154.6	26309.2	65773
*Projected yearly output at 1825kWh/year	8221.625	16443.25	32886.5	82222

\* Based on 0.85% system derating(formula=DC Power x peak sunshine hours/year x derate factor)(GHI=Global Horizotal Irradiance)

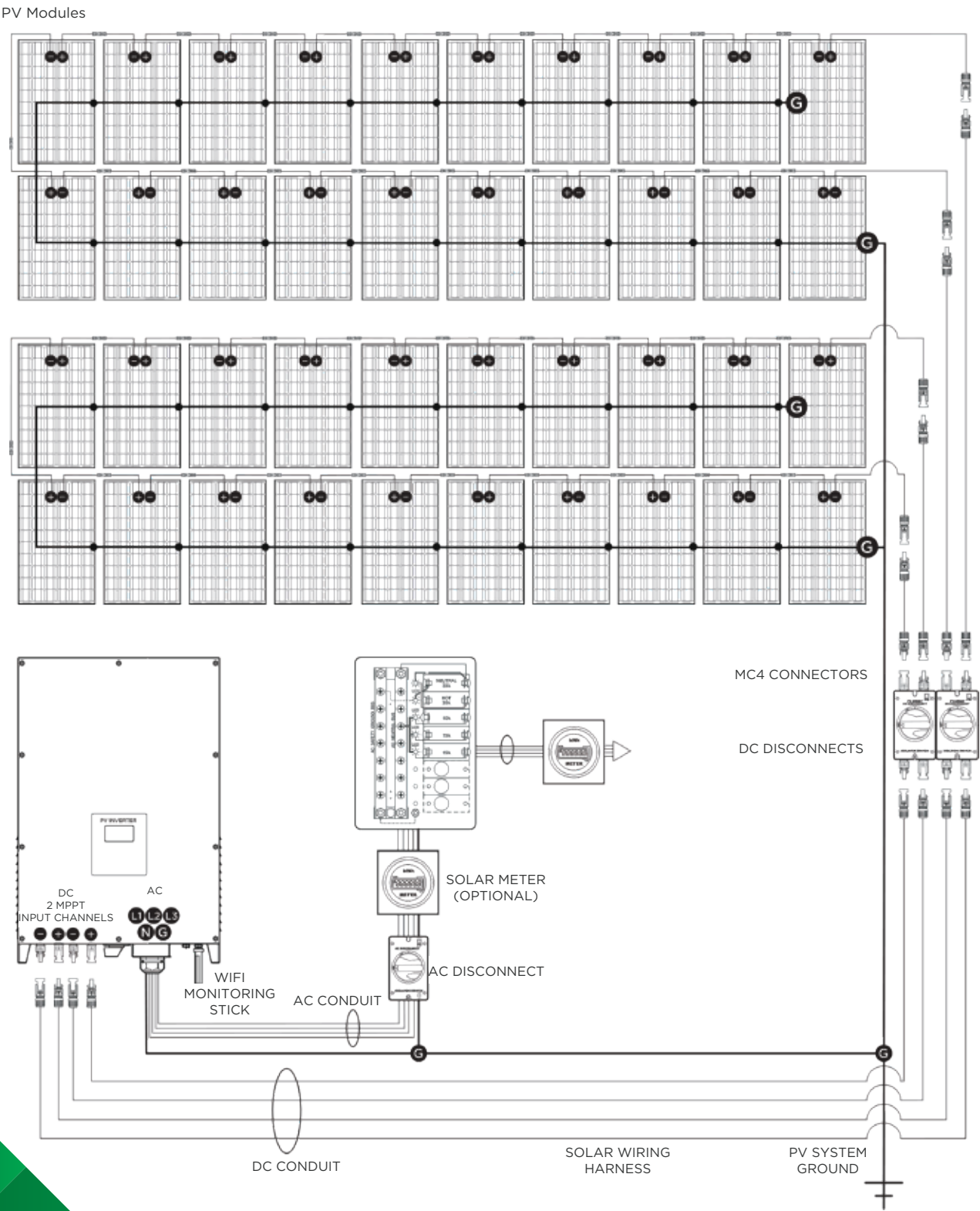
### SYSTEM OPTIONS

Wifi Monitor	Wifi or GPRS			
PV Module Type	Monocrystalline or Polycrystalline - 60 or 72 Cell			
PV System Color	Silver or Black			

### PRODUCTION ESTIMATES(KWh AC)

PV Kit Weight(kg)	750	1500	2400	7500
PV Kit Shipping Size(L/W/H)(m)	1.7/1.1/1-4/0.6/0.6	1.7/1.1/1-4/1.2/0.6	1.7/1.1/1-4/1.2/1.2	20'Container
Total number of Boxes	2	3	5	1
Packing Material	Shinson Wood Crates			Cardboard/Pallets

Solar Carport Example Layout (10kW)



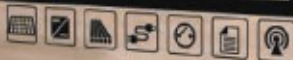
**Shinson®**  
Technology Beyond Limits  
SOLAR CARPORT 20kW



SOLAR CARPORT

20kW

Designed by SymtechSolar



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**Shinson®**  
Technology Beyond Limits



SOLAR CARPORT

20kW

## The all-in-one Box Solution

The difference is clear, get better results with our all in a box packaging solutions. Shinson's heavy duty ISPM15 compliant care design not only protects the contents during international shipping but also ensures that the solar kits arrive to their destination site undamaged and ready for installation.

Shinson's BOS toolboxes are included in all our solar kits and designed with the installer in mind. With years of installation experience, we understand the benefits of having a safe and well organized jobsite.



Packaging Specs

Designed to be warehouse friendly for distribution centers and local logistics companies, our kits are easily stacked, inventoried, and consolidated.

5kW

1.8 x 0.7 x 1  
1 kit per pallet

6 kits per 20'  
12 kits per 40'



10kW

1.8 x 0.9 x 1  
1 kit per pallet

12 kits per 20'  
24 kits per 40'



20kW

1.8 x 1 x 1  
1 kit per pallet

12 kits per 20'  
24 kits per 40'



50kW

1.8 x 1 x 1  
1 kit per pallet

12 kits per 20'  
24 kits per 40'

