



Datasheets



Photovoltaic Carport
System Kits

HERCULES **SOLAR CARPORT**

5kW / 10kW / 20kW / 50kW



Product Description

The Hercules 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



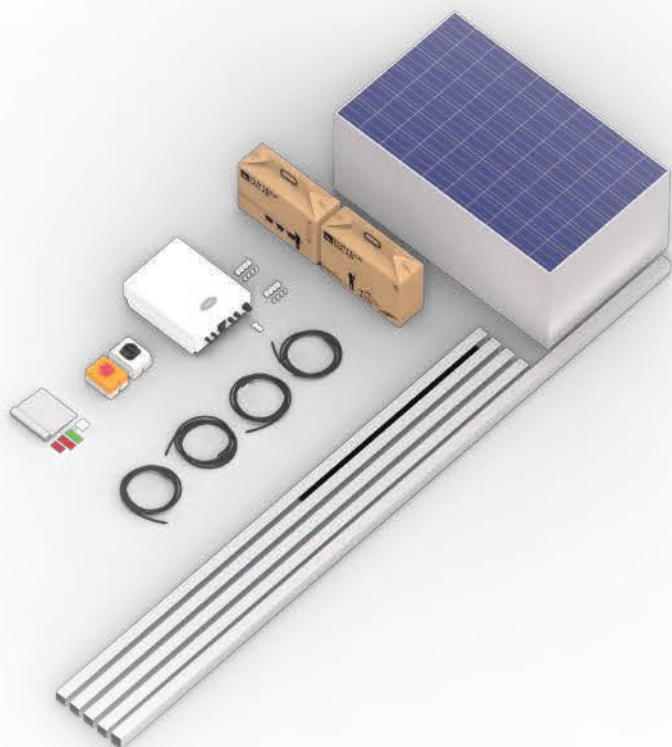
Weather resistant

Hercules kits 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

Hercules 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

Your Own Solar Power Plant

Hercules 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, Hercules solar carports are ready to install upon delivery. Manufactured & designed for simplicity, practicality, & peace of mind.

Product Benefits

- 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

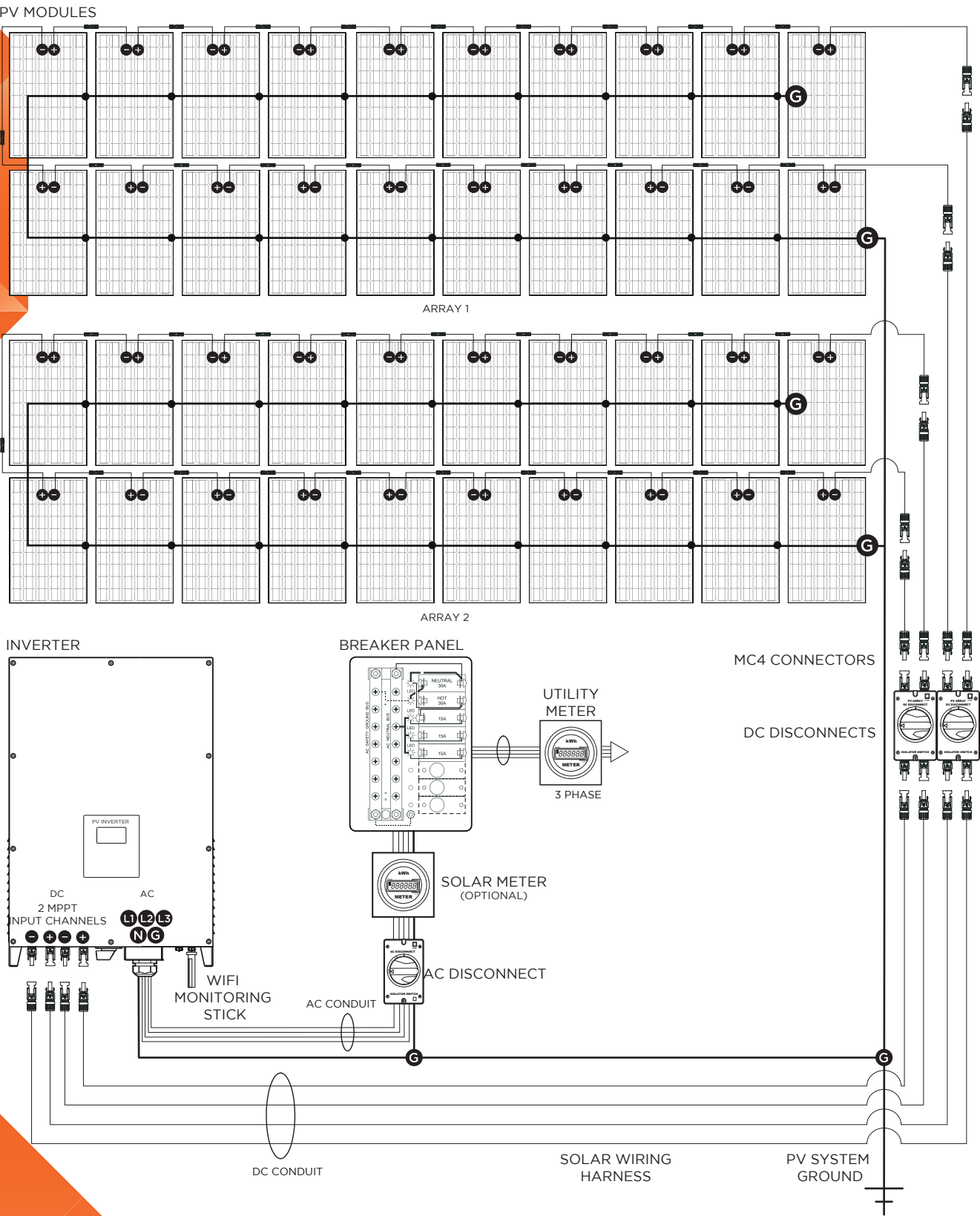
- Commercial centers
- Schools
- Residential homes
- Shopping centers and malls
- Housing developments
- Car charging stations



HERCULES Solar Carport Systems

PRODUCT NAME	Hercules - 5kW		Hercules - 10kW		Hercules - 20kW		Hercules - 50kW	
Product Series	Hercules Series							
System Size Nominal (kWp)	5.3		10.6		21.2		53	
Part #	HER-5		HER-10		HER-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 / W / H) (mm)	1638 x 982 x 35							
PV module weight (kg)	19.5							
Certifications	TUV (IE61215 & 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 (kW)	5800		11500		24000		55	
Max DC Voltage (V)	600		1000				1100	
MPPT Voltage range (V)	100-500		200-800				200 to 1000	
No. of MPPT'S/Max Strings	2 / 2		4 / 8				4 / 12	
Max AC Power (kW)	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 / W / H) (mm)	310 x 543 x 160		430 x 613 x 269		530 x 700 x 357		630 x 700 x 357	
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 available upon request								
BOS CONFIGURATION (1000VDC)								
AC / DC Disconnect	1 / 2		1 / 2		1 / 4		2 / 10	
*PV Wire - 4mm 1000V (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 String Configuration 600VDC – 1000VDC	No. of PV Modules / String		10		20			
	Total Strings		2		4		10	
	String Voc - Poly		382		764			
	String Vmp - Poly		311		622			
	String Imp		8.55					
PRODUCTION ESTIMATES (kWh AC)								
*Projected yearly output (kWh/y) at 1100kWh/year	4955.5		9911		19822		49555	
*Projected yearly output (kWh/y) at 1460kWh/year	6577.3		13154.6		26309.2		65773	
*Projected yearly output (kWh/y) 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 Horizontal Irradiance)								
SYSTEM OPTIONS								
Wi-Fi Monitor	Wi-Fi or GPRS							
PV Module Type	Monocrystalline or Polycrystalline - 60 or 72 Cell							
PV System Color	Silver or Black							
SHIPPING								
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	Symtech SymPack Wood Crates							Cardboard/Pallets

HERCULES Solar Carport Example Layout (10kW)





The all-in-one Box Solution

The difference is clear, get better results with our all in a box packaging solutions. Symtech Solar'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. Symtech Solar'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.

Hercules 5kW

1.7 x 0.7 x 1
1 kit per pallet

#HER-5

6 kits per 20'
12 kits per 40'



Hercules 10kW

1.7 x 0.9 x 1
1 kit per pallet

#HER-10

12 kits per 20'
24 kits per 40'



Hercules 20kW

1.7 x 1 x 1
1 kit per pallet

#HER-20

12 kits per 20'
24 kits per 40'



Hercules 50kW

1.7 x 1 x 1
1 kit per pallet

#HER-50

12 kits per 20'
24 kits per 40'





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