



## Sunkits<sup>®</sup> Pre-Engineered (PE) solar electric system

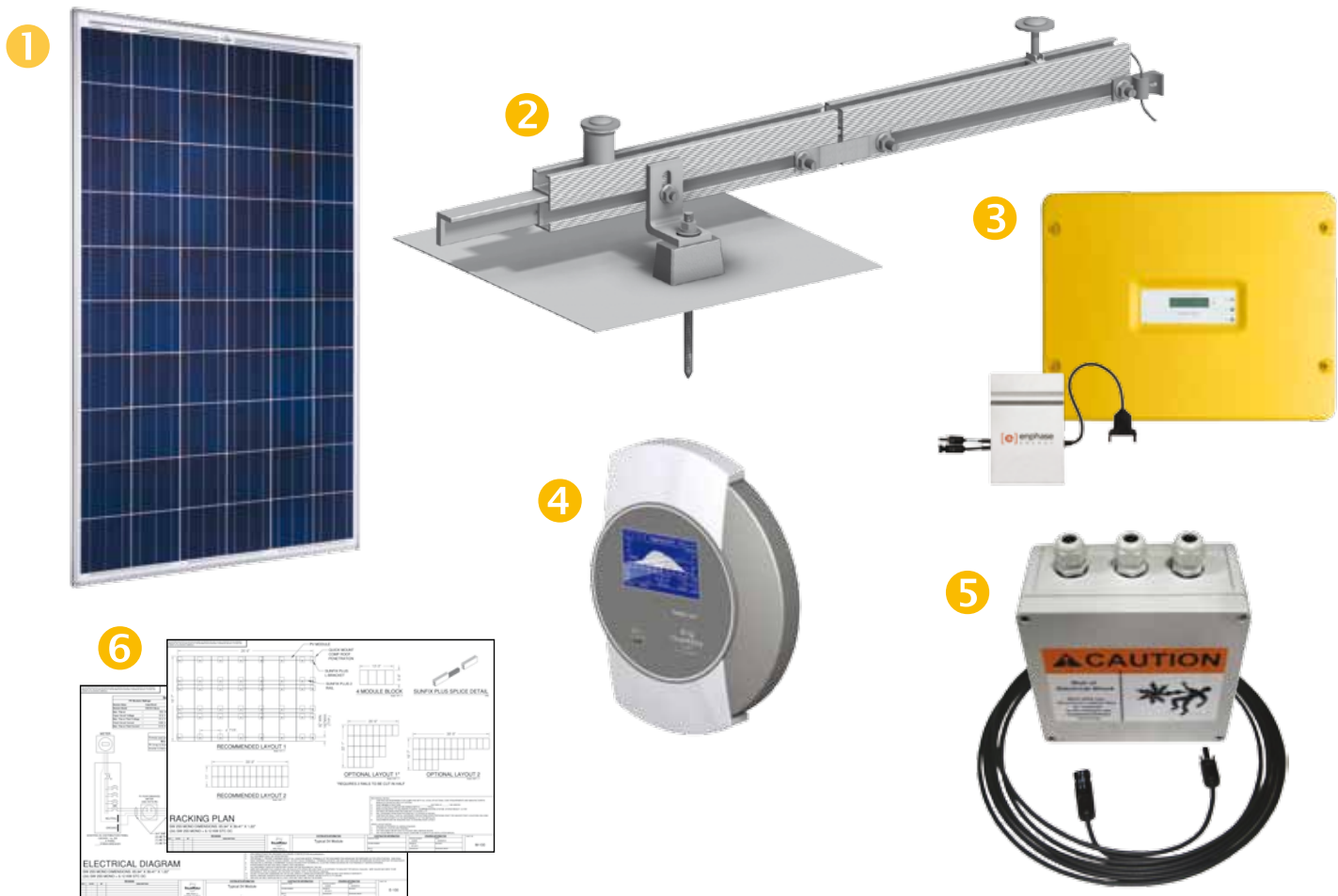
*The easiest way to design and install a high-performance SolarWorld system*

Available in the most commonly requested system sizes, a Sunkits PE system includes all the parts you will need to install a quality SolarWorld solar electric system. Adjustable and combinable, the 7 standard sizes allow for easy configuration for various site requirements.

- >> **Quality Components:** Incorporates high-demand, top-tier quality products at an affordable price.
- >> **Easily Scalable:** Easy to combine various combinations into a larger system or expand at a later date.
- >> **Simple Selection Process:** All you need is a current electric bill and roof dimensions to choose the right Sunkits PE system.

With a Sunkits PE system, it's never been easier to install quality American-made SolarWorld Sunmodules. Backed by more than 35 years of solar manufacturing experience, you can be confident that a Sunkits PE system will be producing maximum power for at least the next 25 years.





## FEATURES:

### 1 Module

SolarWorld Sunmodule™ solar panels provide efficient energy generation throughout the life of the system.

### 2 Racking

SolarWorld Sunfix® plus racking solutions are designed for easy installation on sloped roof applications.

### 3 Inverter

SolarWorld has teamed with the top inverter manufacturers in the world to offer you the best solutions of durability and performance.

### 4 Monitoring

Monitoring solutions are included with every Sunkit PE.

### 5 Electrical equipment

Components for electrical performance of the system is included with every package.

### 6 Drawing package and installation manuals

Standard electrical line and racking layout drawings are available with each system. Full installation manuals provided for the system and components.

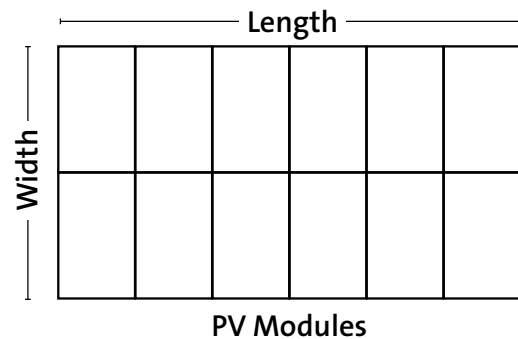
## SUNKITS – PRE-ENGINEERED

Steps to choosing the right system:

1. Determine the available roof area your site can handle
2. Determine the desired energy production
3. Schedule the installation

System item number	Micro inverter solutions					String inverter solutions	
	EC0713	EC0714	EC0715	EC0716	EC0717	EC0718	EC0719
Number of modules	4	6	8	12	20	12	24
Total DC Watts	1020	1530	2040	3060	5100	3060	6120

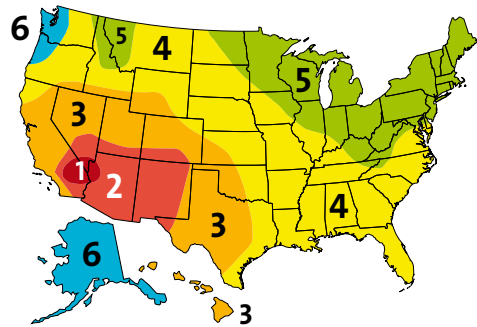
To appropriately choose the right system for an application, the first step is to determine how many modules can fit on the sunniest roof. Use the chart below to help determine what system sizes would fit best on your roof.



#### Approximate clear roof area required<sup>1</sup>

System item number	EC0713	EC0714	EC0715	EC0716	EC0717	EC0718	EC0719
Minimum clear roof area (ft <sup>2</sup> )	73	109	145	217	361	217	434
1 Row Length ( <b>W</b> = 66")	160"	240"	320"	480"	800"	480"	960"
2 Row Length ( <b>W</b> = 132")	NA	120"	160"	240"	400"	240"	480"
3 Row Length ( <b>W</b> = 198")	NA	NA	NA	160"	280"	160"	320"

Once the largest system size is determined based on available roof area, reference the latest electric bill for the location. Find or estimate the historical annual kWh (one month kWh x 12 months) used at the location in the past year and determine what portion of that energy can be self-generated. Find which zone the location is on the reference map and determine the best corresponding system kWh production desired.



#### Estimated annual kWh production<sup>2</sup>

System item number	EC0713	EC0714	EC0715	EC0716	EC0717	EC0718	EC0719
Zone 1	1880	2810	3750	5630	9380	5630	11260
Zone 2	1720	2580	3440	5160	8600	5160	10320
Zone 3	1560	2350	3130	4690	7820	4690	9380
Zone 4	1410	2110	2810	4220	7040	4220	8440
Zone 5	1310	1970	2630	3940	6570	3940	7880
Zone 6	1090	1640	2190	3280	5470	3280	6570

<sup>1</sup>Clear roof area

The chosen roof area should be free of obstructions such as skylights and vents and must be of sound construction.

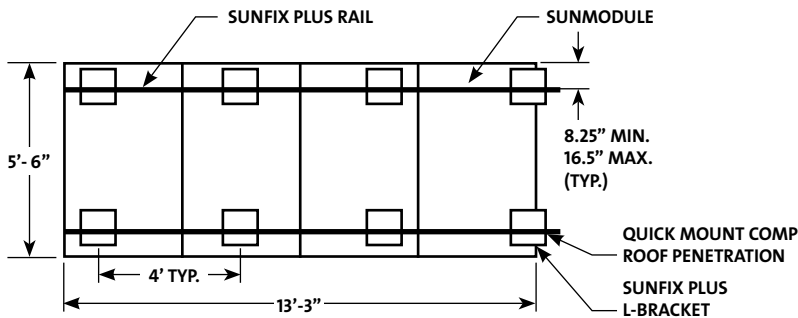
<sup>2</sup>System performance

The estimated system performance is based on full sun location with ideal tilt and orientation of the array. Orientations away from due south and tilts higher or lower than latitude angle may reduce annual production estimates. CEC Data is used for estimation purposes. More details and information regarding the California Energy Commission data can be found at [www.gosolarcalifornia.org](http://www.gosolarcalifornia.org). SolarWorld systems have consistently outperformed estimations.

# Included components

System item number	Micro inverter solutions					String inverter solutions	
	EC0713	EC0714	EC0715	EC0716	EC0717	EC0718	EC0719
Sunmodule 255 W Mono	4	6	8	12	20	12	24
Module warranty	5-year workmanship plus 25-year linear warranty						
Inverter	Micro inverters					String inverters	
Inverter accessories	AC trunk cables, sealing caps, terminators and inverter mounting					Included DC disconnect and rated PV cables	
Inverter warranty	25-year warranty					10-year warranty	
Performance monitoring	Envoy communications gateway					Suntrol Data Logger	
	Lifetime online monitoring						
Sunfix Plus mounting	Penetrations with included flashing, rails, module mounting, and all required hardware						
Sunfix Plus warranty	10-year limited warranty						
Electrical equipment	All equipment grounding and bonding components, cable management, and DC junction boxes						
Electrical drawing	3-line, with system labels					1-line with system labels	
Racking standard layout drawing	Full layout drawing with recommended optional layouts						
Installation guides	Sunmodule, Sunfix plus, inverter, and monitoring installation manuals						

Black module solutions and alternate Sunfix plus roof penetrations, including flat tile, curved tile, and new construction, are available with bronzed (black) anodized flashing as well as the standard mill finish.



The pre-engineered Sunkits are designed with 4 portrait module building blocks for maximum versatility with common components<sup>3</sup>. Due to the high versatility of the Sunfix plus mounting solution, alternate layouts are possible. The most common layout options are included in the standard racking layout provided.

## SITE RESTRICTIONS MAY APPLY

**Inverter operating temperature ranges** -40° C to 65° C (-40° F to 149° F) **Micro inverters**  
 -25° C to 45° C (-13° F to 113° F) **String inverters** (String inverters can be located in a temperature controlled environment; e.g., a garage)

**Sunfix plus loading guide:** Calculations based on sloped roofs 9 to 63 degrees, seismic design category E, basic wind exposure C (zone 1, 2, and 3)

Roof pitch (degrees)	Composition		Tile roof	
	Max ground snow load (lbs/ft <sup>2</sup> )	Max wind speed (MPH)	Max ground snow load (lbs/ft <sup>2</sup> )	Max wind speed (MPH)
9 - 27	50	110	50	110
27 - 45	40	120	40	120
45 - 63	50	130	50	140

Structural security and safety is ultimately the responsibility of the installing party. Installations should be performed by trained and licensed professionals.

<sup>3</sup>EC0714, the six-module system, is comprised of two 3-module building blocks.