

Any home can make its own clean electricity with a complete solar electric power package from AstroPower. These packages are engineered to install quickly and provide years of automatic operation. You can reduce both global pollution and your electric bills while providing uninterrupted power for your house and family. And your electric meter can spin backwards!



- **Make your own clean electricity**
- **Become energy independent**
- **Reduce your utility bills**
- **Spin your meter backwards**
- **Have power during utility blackouts**

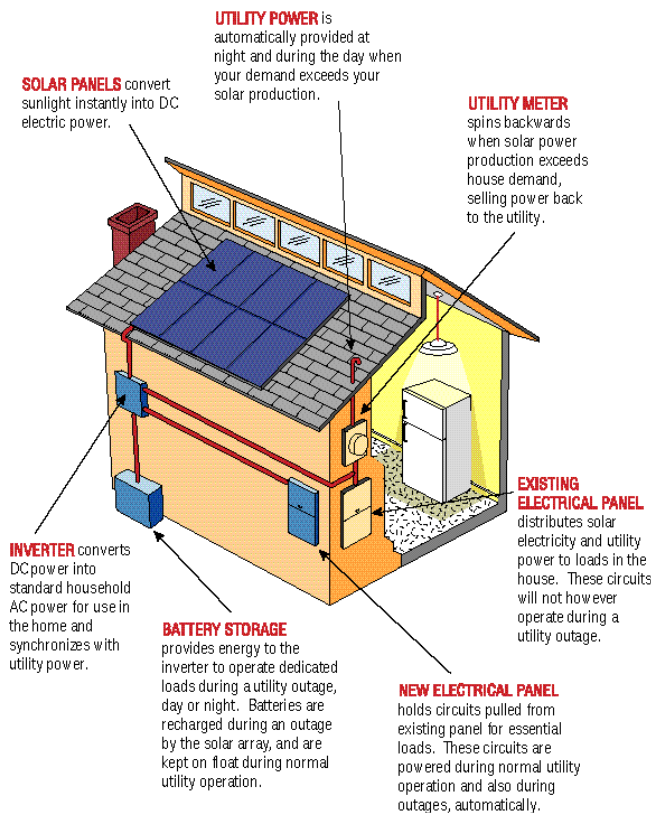


### EVERYTHING YOU NEED IN ONE EASILY INSTALLED PACKAGE

#### All Hardware

- Solar modules with pre-installed quick connects
- Complete rooftop mounting systems
- Pre-engineered panel wiring boxes
- Inverter with disconnects and protection devices pre-wired
- Maintenance-free batteries in enclosure
- Equipment meets applicable national standards

#### How It Works



#### Installation/Training Manual

- Detailed guidance throughout all phases of installation
- Step-by-step photos and illustrations
- Extensive appendices with schematics, rooftop layouts, and engineering calculations to facilitate the permitting process

#### All Types of Roofs

- Composite shingle, Spanish or other tile
- Post-and-flashing method for new construction or retrofits
- Engineered to withstand 125 mph wind (50 lbs/ft<sup>2</sup> equivalent)
- Tilt-up leg kit for angled mounting on flat roofs is available



#### Quick Connects

- Modules easily interconnect on the roof with quick connect plugs
- Eliminates the need to pre-assemble panels and do difficult under-module wiring
- Simplifies roof maintenance



#### Intelligent Wiring Design

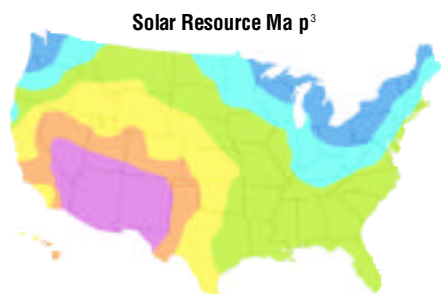
- Panel wiring boxes mount underneath modules for clean appearance
- All system wiring can be done before any modules are installed
- Makes working on rooftop easier, safer and more efficient



### System Specifications and Performance

Model	SunUPS-8	SunUPS-12	SunUPS-16	SunUPS-24	SunUPS-32	SunUPS-40
Solar Array Rating <sup>1</sup> (Watts)	880	1320	1760	2640	3520	4400
Number of Solar Modules	8	12	16	24	32	40
Roof Area Required (Sq. Ft.)	85	125	170	250	340	425
Percent of Residential Energy Use <sup>2</sup>	17%	26%	35%	52%	69%	87%

SunUPS® systems continue operating during a utility power outage. If you are not interested in having backup power, refer to our SunLine™ systems literature.



Average Monthly Energy Production<sup>4</sup> (kWh per month)

	SunUPS-8	SunUPS-12	SunUPS-16	SunUPS-24	SunUPS-32	SunUPS-40
Zone 1	65	100	135	200	265	335
Zone 2	80	115	155	235	310	395
Zone 3	90	130	175	265	350	445
Zone 4	95	145	190	290	385	485
Zone 5	105	160	210	315	420	535
Zone 6	115	170	230	340	455	575

1. Standard Test Conditions: Irradiance = 1000W/m<sup>2</sup>; Cell Temperature = 25 °C; Spectral Irradiance per ASTM E892. 2. Based on average annual California and New York state climate and residential electrical consumption. 3. PVGrid Computer Simulation. 4. Annual average output from inverter, 120 volt AC power, will vary ±25% depending on weather conditions. Assuming solar array faces due south, tilted to latitude angle, with no obstructions. Summer output will be greater, winter output will be less.

### Solar Module

Model	AstroPower AP-110
Rated Output Power <sup>1</sup>	110 Watts
Solar Cell Type	High Efficiency Single Crystal Silicon
Weight Bearing Potential	50 lbs/ft <sup>2</sup> (125 mph wind equivalent)
Hailstone Impact Resistance	1" @ 50 mph (24 mm @ 80 km/h)
Safety Certifications	UL Listed with Class C rating
Size	58.1 x 26.0 x 1.4 inches 1476 x 660 x 35 mm
Warranty	20 year limited



### Power Electronics

Inverter Model	Trace Engineering SW4048 (SW5548 for SunUPS-40)
Maximum Continuous Output	4,000 Watts (5500 Watts for SW5548)
Surge Capacity	9,000 Watts (13,000 for SW5548)
Peak Efficiency	96%
Warranty	2 year limited (optional 5 year available)
Safety Certifications	ETL Listed to UL1741
<b>Power Module Enclosure Design</b>	
Safety Certifications	UL Listed Rainproof Modular Enclosure
Safety Protections	NEC required Ground Fault Protection, all AC and DC overcurrent breakers pre-wired
Size	37 x 19 x 19 inches each section 940 x 482 x 482 mm
<b>Power Center Wall-Mount Design</b>	
Safety Certifications	UL Listed
Safety Protections	NEC required Ground Fault Protection, all AC and DC overcurrent breakers pre-wired
Size	40 x 25 x 9 inches 1016 x 635 x 230 mm



Power Module Enclosure Design  
(two stacked sections shown)



Power Center Wall-Mount Design



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