



SOLAR STIK®

Category: Power Generation

# Solar Venture 320W Kit

Hard Case Item # 19-1000012

Soft Case Item # 19-1000013

## Autonomous, Reliable Power Generation

The Solar Venture 320W PV array provides renewable power generation for applications where autonomous power generation is paramount, but rugged design, minimal footprint and ease of deployment are also critical.

The array consists of an aluminum accordion-style frame with ground-securing mesh and a carbon fiber laminated high-efficiency 320 W PV panel (non-glass) with solar cable that connects it to a system. Setup can be performed by one person in just a few minutes, and no tools are required. The frame design has two positions to allow for maximum exposure to direct sunlight.

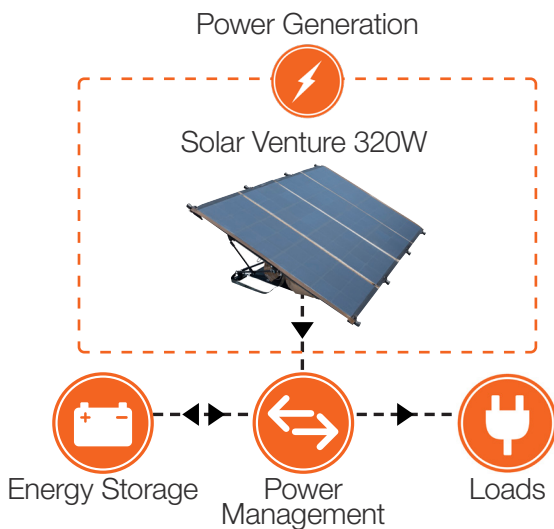
The Solar Venture 320 is a modular solution that can be scaled to meet power requirements for nearly any application. It transports in a man-portable rigid case that also stores ground securing gear, cables, and more.



## Features

- Selected as the solar array for multiple military programs
- ~1.6 kWh daily power generation\*
- Lightweight construction with accordion style stand for ease of deployment and storage
- Minimal deployment footprint
- Scalability and modularity features allow for seamless expansion and integration into multiple platforms
- Designed to MIL-STD-810H
- Built with non-glare, corrosion resistant and UV resistant materials
- Embedded bypass diodes minimize power loss when shaded
- Blocking diode allows multiple arrays to be connected in parallel without potential for reverse current flow
- Excellent power to weight ratio

\*Based on five hours of solar irradiance



Soft transport case



Hard transport case with open lid



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## General

Frame Construction	Stainless Steel / Aluminum / Carbon Fiber
Frame Adjustment Angles	30° and 60°
Solar Panel Construction	Tan Fabric and Carbon Fiber
Ground Securing	Sand bags
Setup/Stowage Time	3.5 minutes
Transport Case	<ul style="list-style-type: none"> <li>Hard Case: SKB iSeries 4719-8 Waterproof Utility Case w/ Wheels (Tan)</li> <li>Soft Case: Water resistant nylon fabric with carrying strap</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>Designed to UL 1703</li> <li>Designed to MIL-STD-810H</li> </ul>
Warranty	1-year materials and workmanship

## Solar Panel @ 77 °F (25 °C)

Max Power (Pmax)	320±2 W
Rated Voltage (Vmp)	58.75 V
Open Circuit Voltage (Voc)	68.45 V
Rated Current (Imp)	5.79 A
Short Circuit Current (Isc)	6.11 A
Cell Type	Monocrystalline
Cell Efficiency (%)	>24.1%

## Connections

Solar Panel	(1) MC4 male and (1) MC4 female
Solar Cable	16-0800102, Cable, Solar, MC4/Bayonet, 24VDC, 30', 6AWG (8 lb)

## Environmental

Operating Temperature	-40 °F to 194 °F (-40 °C to 90 °C)
Storage Temperature	-40 °F to 194 °F (-40 °C to 90 °C)
Maximum Wind Load	<ul style="list-style-type: none"> <li>30°: 65 mph (104 kph)</li> <li>60°: 60 mph (96 kph)</li> </ul>

## Weights and Dimensions (L x W x H)

Solar Panel Weight	12.9 lb (5.86 kg)
Assembled Weight	25.9 lb (11.68 kg)
Transport Weight	Hard case: <ul style="list-style-type: none"> <li>64 lb (29 kg)</li> </ul> Soft case: <ul style="list-style-type: none"> <li>40 lb (18.14 kg)</li> </ul>
Solar Panel Dimensions	<ul style="list-style-type: none"> <li>Assembled: 65.125 x 43.25 in (165 x 110 cm)</li> <li>Folded: 16.5 x 43.25 x 1.5 in (110 x 42 x 3.8 cm)</li> </ul>
Assembled Dimensions	<ul style="list-style-type: none"> <li>30°: 65.25 x 41.25 x 23.5 in (165.7 x 104.8 x 59.7 cm)</li> <li>60°: 65.25 x 26.5 x 39 in (165.7 x 67.3 x 99.1 cm)</li> </ul>
Transport Dimensions	Case External: 49.7 x 21.5 x 8.87 in (126 x 54.6 x 22.5 cm)

## Includes

- (1) 320W Foldable Solar Panel (PN: 14-1000037)
- (1) Solar Venture Array Stand (PN: 14-1000033)
- (1) 30' Solar Cable (PN: 16-0800102)\*
- (1) Ground Securing Kit (PN: 12-1000013)\*\*
- (1) Transport Case (hard or soft case)
  - Hard Case, Solar Venture (PN: 14-1000035)
  - Soft Case, Solar Venture (PN: 14-1000040)

\* Solar Cables in different lengths, sizes, and types also available

\*\* Includes (1) 30° mesh, (1) 60° Mesh, and (7) sandbags

## Recommended Components and Accessories



24VDC Power Hub 2500  
Item # 20-0302207



24VDC Li BOS 2000-120  
Item # 20-0205200



Solar Venture 320W with sandbags



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