

Sun Bandit[®] Solar Hybrid Energy System

Featuring best-in-class technology and construction to provide years of clean, quiet, dependable hot water from the free energy from the sun.



Sun Bandit[®] Solar Hybrid Energy System

Sun Bandit[®] AC Micro-Grid Inverter Specifications

Input Data (DC)	Per Module	Per Inverter
Recommended PV Module Power Range (STC)	180-310W	360-620W
MPPT Voltage Range	22-45V	22-45V
Operation Voltage Range	16-45V	16-45V
Maximum Input Voltage	55V	55V
Startup Voltage	22V	22V
Maximum Input Current	10.5A	21A

Output Data (AC)

Rated Output Power*	450W
Maximum Output Current (rms)	5A
Output Voltage/Range (rms)	20-150V
Output Frequency	60Hz
Load Resistance Range	18Ω - 22Ω
Power Factor	>0.99
Total Harmonic Distortion	<3%

Efficiency

Peak Efficiency	92.5%
Nominal MPP Tracking Efficiency	99.5%

Mechanical Data

Operating Temperature Range (Ambient)	-40°F to +149°F (-40°C to +65°C)
Operating Temperature Range (Internal)	-40°F to +185°F (-40°C to +85°C)
Storage Temperature Range	-40°F to +185°F (-40°C to +85°C)
Dimensions (WxHxD) inches	8.75" x 6.63" x 1.19"
Dimensions (WxHxD) mm	222 mm x 168 mm x 30 mm
Weight	5.5 lbs (2.5kg)
Enclosure Rating	NEMA 3R
Cooling	Natural Convection

Features & Compliance

Communication	Power line
Safety Class Compliance	UL 1741

*Can be configured with up to two inverters per circuit (one master, one subordinate).



Sun Bandit[®] Hybrid Water Heater Specifications

Model	Storage Gallons (L)	Number of Micro-grid Elements	Number of Grid Elements	Full First Hour Rating* Gallons (L)	First Hour Rating** Gallons (L)	Dimensions Inches (cm)					Shipping Weight LBS (kg)
						(A)	(B)	(C)	(D)	(E)	
30E	30 (113.56)	2	1	64 (242.26)	43 (162.77)	20 (50.80)	39-1/2 (100.33)	33 (83.82)	33 (83.82)	4-5/8 (11.74)	150 (68.03)
80E	78 (295.26)	2	1	104 (393.68)	63 (238.48)	24 (60.96)	64 (162.56)	57-1/8 (145.09)	57-1/8 (145.09)	5 (12.70)	250 (113.39)

*When entire Sun Bandit[®] Hybrid Water Heater has been heated to 160°F by the Sun Bandit[®] AC Micro-Grid Resistive Elements

** Recovery of the Standard Utility Powered Resistive Element

Warning: Installation should be in accordance with all national and/or local codes. In the absence of local codes, refer to NFPA 54 or ANSI Z21.10.1.

Caution: The recommended maximum hot water temperature setting for normal residential use is 120°F. Manufacturer recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding. Sun Bandit[®] Hybrid Water Heaters include a mixing valve that will prevent scalding when installed properly.

Pressures (all): Working pressure, 150 psi; testing pressure, 300 psi

Electrical Rating, Sun Bandit[®] Upper and Lower AC Micro-Grid Resistive Elements: 3.0 kW, 240V

Electrical Rating, Standard Utility Powered Resistive Element: 4.5 kW, 240V

These specifications are subject to change without notice

