

# Sunny Boy 2500U



*The leading grid-tied photovoltaic inverters in Europe and America*

UL 1741 Listed for grid interactive inverters

5-year comprehensive warranty standard

Rugged NEMA 4X stainless steel enclosure standard

Exceptional reliability and energy capture ratio

Easy to install three-point mounting system

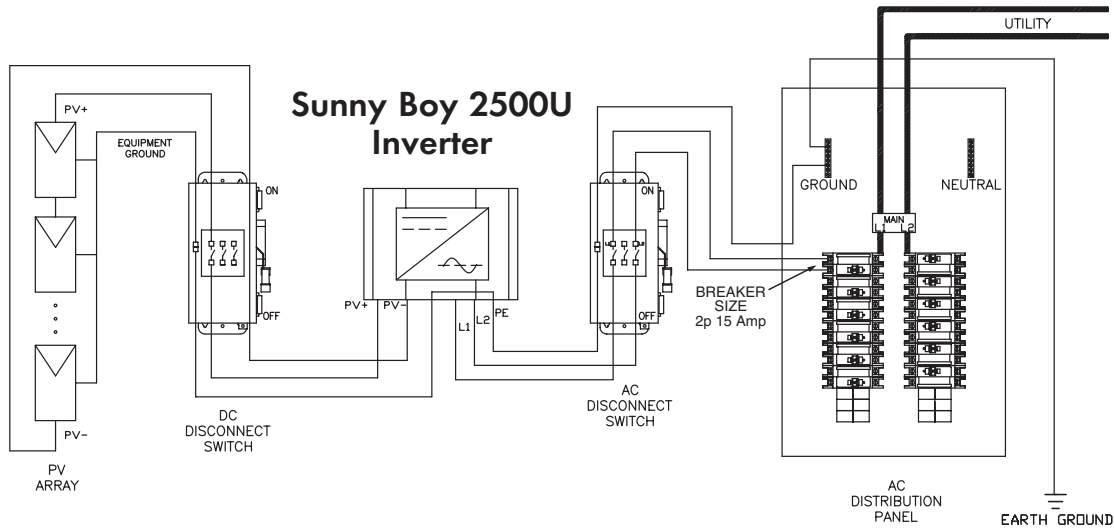
Comprehensive communications and data collection options

SMA's modular string inverter design is expandable to virtually any size system



The SMA Sunny Boy inverter, the most popular grid-tied photovoltaic inverter in Europe, is now UL 1741 Listed and available in North America. Sunny Boy's extensive track record in some of the world's most demanding markets has made it a favorite among PV professionals everywhere. Over 250,000 Sunny Boy inverters have been installed worldwide. Superior design, rock-solid German engineering and exceptional real-world efficiency have made Sunny Boy the top choice for American solar designers.





Sunny Boy's unsurpassed reliability and efficiency are the result of SMA's manufacturing philosophy that combines simple design with robust execution. SMA's state-of-the-art maximum power point tracking performance results in greater real-world energy capture than any other grid-tied inverter. Sunny Boy's safety and reliability record is also exceptional due, in part, to the inverter's redundant grid monitoring and built-in ground fault detection and interruption protection. The inverter's IGBT power stage generates a nearly perfect sine wave with the lowest harmonic distortion in the industry and meets ultra-strict FCC EMC standards. SMA's unique String Inverter technology makes future system expansion simple. SMA advanced communication options are available to satisfy almost any application.

## Specifications

Inverter Technology	Real sine-wave, current source, high frequency PWM	DC Voltage Ripple	< 5%
AC Input Voltage	213-262 (240V AC) or 183-229 (208V AC)	Power Consumption	0.25W nighttime < 7W standby
AC Input Frequency	59.3 - 60.5 (60Hz) (50Hz also available)	Ambient Temperature Rating	45°C
DC Input Voltage	250 - 600V DC	Enclosure	NEMA 4X (IP65) Stainless Steel
Peak Power Tracking Voltage	234 - 550V DC (at 240V AC)	Dimensions	17.10W x 11.60H x 8.40D in 434W x 295H x 214D mm
PV Start Voltage	300V DC	Weight	71 lbs (32 kg)
Minimum DC Input Voltage	207 - 256V DC	Compliance	United States UL 1741, E210376, UL 1998, IEEE 519, IEEE 929, ANSI C62.41 C1 & C3, FCC part 15 A & B International DIN EN50082 Part 1, 61000-32, 50081, 50014, 600055 Part 2 55011 Group 1 Class B, 50178, 60146 Part 1-1
Maximum Array Input Power	dependent on available line voltage 3000W (240V AC)(DC@STC) 2600W (208V AC)(DC@STC)		
Maximum AC Power Output	2500W (240V AC) 2100W (208V AC)		
Current THD	< 4%		
Power Factor	Unity		
Peak Inverter Efficiency	94.1%		
Cooling	* Convection cooling (no fan)		
Maximum AC Output Current	12A		
Maximum DC Input Current	12A		

Distributed by:

\* Optional external fan (Sunny Breeze) available

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